Evaluation of Dynamic Impact in Worcester County Public Schools

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Contents

EXECUTIVE SUMMARY:
Evaluation of Dynamic Impact in Worcester County Public Schools

The purpose of the present study was to evaluate the implementation of Dynamic Impact (DI) in Worcester County Public Schools (WCPS) by Johns Hopkins's Center for Technology in Education (CTE). As described by CTE, DI builds the capacity of school districts to form and sustain high-performing teams using several protocols to guide their work together as they implement school improvement plans.

This descriptive study collected and analyzed quantitative and qualitative data to document perceptions of DI as implemented in WCPS, including regarding the experience of being on a DI team, fidelity of implementation, and perceived impact. All members of DI teams were asked to complete a survey that included closed- and open-response questions, and a selection of teachers, school administrators, and district personnel participated in focus groups. Data collection took place during the spring semester of 2022.

DI Experience

In survey responses and focus groups, participants characterized the experience of being a DI team member as being defined by coordinated, purposeful efforts to set goals, identify root causes, analyze germane data, and continually monitor plans and progress, making adjustments to plans as appropriate. Guiding team members in these efforts are clear protocols that structure teams' work and help ensure that all team members are positioned to contribute to plans and implementation and are accountable for doing so. CTE staff provide materials, training, coaching, and assistance to support teams in their work, and DI team members seem to respect the CTE team's expertise and value their support. Participants generally reported a smooth experience, despite some frustrations around logistics and workload. While the expectations of DI team members are high, particularly given other demands on educators' time, team members for the most part reported strong investment in the DI process and high fidelity in implementing its protocols.

Perceived Impact of DI

Participants generally indicated that they believe DI protocols are effective and that DI is strengthening their schools. Benefits identified included effective teaming and collaboration; shared vision and coordinated activity around goals, informed by data and involving well-chosen interventions; and ongoing engagement with the SIP as a living document. The most common area for improvement that participants noted was to increase the engagement and investment of educators at their schools beyond those on the DI teams.

Conclusion

Overall, findings suggest that educators on DI teams were faithfully implementing DI and believed that DI was strengthening their school improvement efforts. They saw clear DI protocols giving focus to team members' work and ensuring attention to student outcomes, root causes, relevant data, evidence-based interventions, and continuous monitoring of activity and progress toward goals. Also essential, DI equipped schools to form and sustain teams that were high-performing, non-hierarchical, engaged, and accountable.

Input from DI team members suggests the following potential opportunities for further strengthening DI:

- Develop tools and practices for school-based teams to use to engage the broader school community in school improvement and the work of DI teams.
- Explore ways of streamlining the digital notebook and the interface for accessing files.
- Provide direct training to all teams or communicate the rationale for direct-training only selected participants in such a way that all participants feel efficacious in their work and included in the DI process.

Evaluation of Dynamic Impact in Worcester County Public Schools

The Center for Research and Reform in Education (CRRE) is a research center affiliated with the School of Education at Johns Hopkins University (JHU) specializing in K-12 education program evaluations. In 2021, the Center for Technology in Education (CTE) at JHU contracted with CRRE to conduct a study of CTE's implementation of Dynamic Impact (DI) in Worcester County Public Schools (WCPS) in Maryland.

CTE is part of the School of Education at JHU. According to its website, CTE "design[s], develop[s], and implement[s] technology-enhanced solutions" to address educational challenges.[1] As part of CTE's Professional Learning initiative, CTE developed and implements DI to engage educators in a "team-based continuous improvement process" involving root cause analysis, implementation of interventions, and monitoring of effectiveness. In brief, as described by CTE, DI builds the capacity of school districts to form and sustain high-performance teams using several protocols to guide their work together as they implement school improvement plans (SIPs). As shown in Figure 1, teams that engage in DI are expected to have improved collaboration and achieve goals, resulting in selected programs and practices being implemented with fidelity, with an ultimate goal of improving student outcomes. The elements of DI are further discussed below.

Figure 1
Expected Outcomes of Dynamic Impact
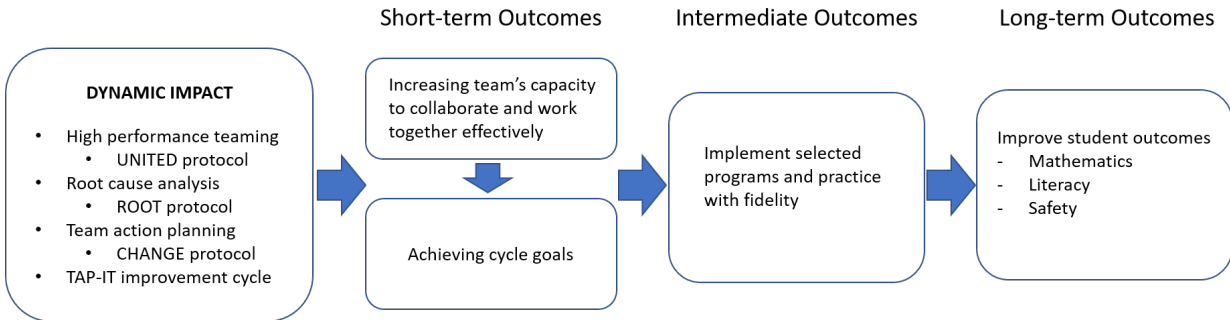
DI is a team-based continuous improvement approach that consists of (a) high performance teaming, (b) root cause analysis, (c) team action planning, and (d) the TAP-IT (Teams, Analyze, Plan, Implement, and Track) Improvement Cycle. Teams use three protocols to support these elements:

- **UNITED protocol.** The UNITED protocol is intended to foster effective teaming and collaboration so that teams reach shared goals and realize the team mission. A significant feature of UNITED is that team members rotate

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[1] Here and throughout, brackets indicate the editing of quotations (including changes to suffixes and omitted words indicated by ellipses) for flow or concision.

roles (e.g., facilitator, timekeeper, notetaker) at every meeting so that all team members are invested and all their voices are heard.

- **ROOT protocol.** The ROOT protocol incorporates well-defined, precise steps to examine various types of data, discover an underlying root cause of a problem, and identify appropriate, realistic strategies for improvement. It also includes a team-based resource, called the Triangle Technique, that is designed to help team members efficiently sift through "tangled data analysis" to verify the source of a problem and select specific strategies, such as evidence-based practices, that are predicted to address it.

- **CHANGE protocol.** CHANGE outlines team-based procedures for developing straightforward, year-long action plans, and it includes a chart for identifying data sources and tracking progress toward implementation and student outcome goals. The intent is for all team members to work together to delineate specific activities that provide teachers sufficient support to employ evidence-based practices (EBPs) successfully so that monthly targets and yearly goals are reached and substantial student progress is realized.

Using the DI process, most WCPS schools formed three DI teams: one focused on literacy, another on mathematics, and the third on safety. Each team developed a school improvement plan that included research-based intervention(s). CTE provided each team with written feedback and monthly support calls. The teams set goals for student outcomes, implementation fidelity, and team performance for the cycle (three months) and for the year. At the end of each cycle, teams evaluated whether or not the goals were achieved and what adjustments might need to be made to the action plan.

To support teams in using DI, CTE provided several ongoing professional learning resources and experiences:

- **Digital workbook.** A digital workbook provides guidance and templates to help structure teams' work together.

- **In-person professional development.** At several district-wide professional development sessions during the year, CTE trainers build participants' understanding of the purpose and usage of DI protocols and practices. In 2021-22, the in-person trainings were attended primarily by members of the literacy teams, with those attendees then training the members of the mathematics and safety teams at their schools.

- **Monthly coaching calls.** CTE coaches provide support on preparing for the upcoming team meetings in coaching calls with school administrators and the team members whose turn it is to serve as team facilitator.

We report on the results of an evaluation of the implementation of DI in WCPS during the 2021-22 school year, based on a survey of all participants and focus groups with selected teachers and administrators who were members of DI teams.

Research questions addressed by the study are:

1. How do WCPS participants in DI teams experience participating in DI?
2. What are DI teams' perceptions of professional learning and coaching provided by CTE?
3. How do WCPS participants in DI teams perceive the fidelity of implementation of DI?
4. How do WCPS participants in DI teams perceive the impact of DI on
   a. Increasing the team's capacity to collaborate and work effectively?
   b. Achieving cycle and annual goals?
   c. Implementation of the SIP and evidence-based practices, and
   d. Student outcomes?

Method

The initial plan for this study called for a two-wave survey of all participants in DI teams, with one survey administered mid-year and another at the end of the school year, and with focus groups of selected team members at the end of the school year. However, CTE noted that after Winter Break, educators in the district faced considerable challenges related to a COVID-19 surge and staffing shortages, and as a result CTE elected to forego the mid-year survey and use only an end-of-year survey and focus groups. All members of DI teams were asked to complete a survey that included closed- and open-response questions. In addition, a selection of teachers, school administrators, and district staff participated in focus groups. Data collection took place during the spring semester of 2022.

The research design for the current study is presented below, followed by descriptions of participants, measures, procedure, and analytic approach.

Research Design

This descriptive study used a survey with closed- and open-response items, distributed to all WCPS DI team members, and focus groups with a subsample of participants from all school levels (i.e., elementary, middle, high) and job types represented on DI teams (i.e., teacher, school administrator, district personnel).

Participants

During the 2021-22 school year, WCPS implemented DI across all 14 schools, including elementary schools, middle schools, and high schools. WCPS serves students

in Worcester County, in eastern Maryland. Worcester County has a population of about 52,000, according to Data USA. According to the National Center for Education Statistics (NCES), WCPS serves approximately 6,700 students, of whom 80% are white. NCES indicates that 11.9% of students come from families with income below the poverty level, while the median household income for those with children in public school is just under $75,000. According to the most recent Maryland State Report Card, WCPS met the annual target for the percent of students proficient in mathematics and English language arts and for the four-year graduation rate.

All 217 DI team members were invited to complete the survey, and a total of 102 responses were completed (47% response rate). While this response rate was lower than the goal, it may be that the ongoing impact of the COVID-19 pandemic and the related challenges made DI team members less willing to take on the additional task of completing a survey at the end of the school year. The tables below summarize the jobs, school contexts, and DI teams of survey respondents who provided that information.

Table 1
Participant Job Titles

Title	Percent	*N*
Teacher	38.46	35
Instructional coach	14.29	13
Other	10.99	10
Central office staff	9.89	9
Math/literacy interventionist	7.69	7
Curriculum resource teacher	7.69	7
Principal	6.59	6
School counselor	4.40	4
Total	100	91

Note. Other responses include Assistant Principal, Social Worker, Behavioral Health Consultant, School Psychologist.

Table 2
Dynamic Impact Team Focus by School Level

School Level	Percent	*N*
Elementary School	39.13	36
High School	29.35	27
Middle School	25.00	23
Other	6.52	6
Total	100	92

Note. Other includes SPED School, Intermediate, Upper Elementary and Middle, Technical High School, Central Office.

Table 3
Dynamic Impact Participant Team

Team	Percent	N
Literacy	46.67	42
Safety	27.78	25
Mathematics	25.56	23
Total	100	90

A subsample of DI team members were asked to participate in focus groups, and 12 teachers, five school administrators, and four district personnel participated in focus groups.

Measures

Data sources for the current study, including quantitative and qualitative measures, are described below.

DI team member survey. The DI team member survey (see Appendix A) included 18 Likert-type and seven open-ended items addressing participants' perceptions regarding such topics as: (a) satisfaction with the experience of participating in DI, including professional learning and coaching; (b) the effectiveness of the DI protocols (UNITED, ROOT, CHANGE, TAP-IT); (c) the ability of their team to collaborate effectively; (d) the extent of fidelity in implementation of DI; (e) the extent to which DI fosters effectiveness of teams; (f) the extent to which DI fosters effective needs analysis, data use, and root cause analysis; (g) the extent to which DI fosters effective implementation of the SIP, including setting goals and monitoring progress; (h) the extent to which DI supports fidelity of implementation of evidence-based practices; and (i) the extent to which DI improves student outcomes. Four multiple-choice items asked respondents to identify their school level (i.e., elementary, middle, high), their role (i.e., teacher, school-based administrator, etc.), the DI team they served on (i.e., literacy, mathematics, safety), and whether they served on one or more than one DI team. An additional open-ended item was presented to those who reported participation in more than one DI team asking them to compare their experiences across the teams.

The survey was administered to participants online at the close of the 2021-22 school year using the Qualtrics digital survey platform. As part of this process, the research team coordinated with CTE staff to obtain contact information for participants. CTE notified participants of the research study and recruited their participation, and the CRRE research team disseminated the survey link to them, as well as reminders as appropriate. CTE also coordinated with district representatives to keep them apprised of the distribution of the survey.

End-of-year focus groups. A subsample of DI team members participated in focus groups at the close of the 2021-22 school year. Focus group topics mirrored topics presented on the survey and allowed participants to further describe their

experiences and reactions to DI (see Appendix B for the focus group protocol). Five focus groups were conducted virtually and lasted roughly an hour each. The composition of the five focus groups was as follows:

- Six elementary school teachers
- Three middle school teachers
- Three high school teachers
- Two school administrators and two district personnel
- Three school administrators and two district personnel

Analytical Approach

Quantitative analysis of the survey data included descriptive statistics related to usage/fidelity and satisfaction/perceived impact. Qualitative survey data and focus group transcripts were analyzed using thematic and descriptive coding.

Results

The following sections present the findings derived from the data collection activities described above. First, we present WCPS DI participants' descriptions of and reflections about the experience of participating in DI. Next, we report their perceptions of professional learning and coaching provided by CTE. We then present their perceptions of the fidelity of the implementation of DI. Finally, we present their perceptions of the impact of DI. For each topic as applicable, quantitative and qualitative survey results are presented first, followed by focus group results. When similar themes emerged in qualitative survey responses and focus groups, these results are presented together.

Participants' Experience of Participating in DI

Most WCPS schools participating in DI formed three DI teams, one focused on literacy, another on mathematics, and the third on safety. A technical high school and a school serving students aged 3 to 21 with moderate to severe disabilities each formed teams in ways appropriate to their contexts and school improvement goals.

DI teams were composed of a variety of stakeholders, including teachers, principals and other school administrators, and district personnel. At most schools, teams were typically composed of five to seven people, with some schools having somewhat larger teams. A total of 217 people served on at least one DI team, with some people—particularly school administrators and district staff—serving on more than one team.

Participants communicated their experiences and attitudes about participating in DI through Likert-type and open-ended survey items. Focus group participants also discussed their experiences in that context. Survey items and focus group questions elicited participants' experiences overall and in relation to each of the DI protocols, described above: UNITED, for teaming; ROOT, for analyzing root causes and using data; and CHANGE, for developing and monitoring action plans; together with the TAP-IT cycle for using the protocols.

Overall satisfaction. Participants were asked to indicate, via a Likert-type item, their overall satisfaction with their school's experience implementing DI and, via an open-ended question, to expand on their reasons for that rating. Importantly, the vast majority of participants indicated that they were satisfied (44.9% satisfied; 40.8% very satisfied). Notably, levels of satisfaction were about the same for respondents identifying themselves as literacy team members, who were direct-trained by CTE (85.7% indicating they were satisfied or very satisfied), as for those identifying as mathematics and safety team members, who were not direct-trained (87.5%). However, several mathematics and literacy team members expressed overall dissatisfaction with DI (8.3%), and two were neutral (neither dissatisfied nor satisfied), while no literacy team members expressed dissatisfaction, and 14.1% indicated they were neutral. In response to the open-ended item on the survey, some participants (n = 48) indicated specific reasons for being satisfied with the experience. The most frequently mentioned reasons for satisfaction were the following:

- **Efficacious DI protocols.** The most common reasons given for satisfaction with DI (50% of those who identified specific reasons for satisfaction) focused on the DI protocols and principles. Respondents noted the impact of DI in "streamlin[ing]" efforts, structuring the process, and guiding participants to focus on goals. Some people contrasted DI with other school improvement processes, including one person who described DI as "the most organized and assessment driven" and another who appreciated its "detailed, concise method to follow which is much more effective than previous models used." One person observed, "The process really focuses on the needs of the school. Using the protocols provided by JHU we were able to manage our goals and met all for the first year." Another made the following comment:

  > The Dynamic Impact model has allowed us the time to really dig into data, determine root cause and have meaningful discussions around what our goals should be and what needs to be done to improve student outcomes. It has given us a framework for determining what our needs and areas of strengths and weaknesses are.

- **Effective teaming and leadership development.** Additional participants (20.8%) who gave specific reasons for satisfaction with the DI experience

commented on effective teaming. They noted the ways that DI engages the entire DI team in the process and creates experiences that contribute to their professional growth and leadership development. As one respondent explained, "Dynamic Impact helps a system build leaders, everyone has a role and provides valuable input. Teachers who are normally quiet and reserved are emerging as leaders on their teams." Another person commented, "I felt that I had a hand in decision making and setting up next steps for out team's plan."

Among the 10 people identifying specific areas that limited their overall satisfaction, the most common concerns, each expressed by five people, were the need for broader engagement and investment of school staff beyond the DI teams (a theme that also arose in response to other survey and focus group questions) and confusion and/or frustration at the process and/or added workload. For instance, one person wrote, "There are pros and cons. It could be much more user-friendly...this would allow us to focus on the work for students, not on the document logistics." Another acknowledged, "I felt like I was going through motions for the majority of the year. I don't really understand the process, but I went through it."

The Dynamic Impact Difference. Survey respondents were presented an open-ended item asking how the experience participating in a DI team differed from their experiences as an educator participating in other groups or teams. Although a couple of respondents did not see differences between their DI team experience and other team experiences, nearly all other participants ($n = 72$) named differences that were strengths of DI.

- ***Fidelity to and efficaciousness of the process.*** More than half (54.2%) of respondents naming a specific DI difference reported that, in contrast to other teaming experiences, their DI team did in fact consistently adhere to the DI process and/or that the process positively affected their experiences and effectiveness. As one person commented, "We developed true norms and actually review[ed] them. That rarely happens." Many respondents noted that the DI protocols streamlined and/or strengthened their teams' meetings and efforts. One person explained, "Using a consistent protocol has made the process and meetings extremely efficient." Another said, "Previous school improvement processes became extremely lengthy and we were not nearly as focused on specific, actionable items." Respondents also commented on the "structured" nature of the process and the focus on data use.

- ***Support for teaming and stakeholder engagement.*** More than half of respondents citing specific DI differences (52.8%) also described the distinctive ways that the DI protocols supported teamwork, communication, and stakeholder voice within and across schools, supported professional

growth of team members, and/or contributed to investment, equity, and accountability for team members. One person observed, "Rotating roles in regularly scheduled meetings provided a sense of responsibility and ownership of the process and investment in implementation." Another appreciated the "accountability to the process of school improvement. We all have a role and are expected to contribute to the improvement of our students['] education and school community."

- **JHU support.** A less frequent theme (6.9%) identified JHU's support, particularly through coaching, or "outside" support more generally, as distinguishing DI from other teaming experiences, a theme explored more fully below in relation to professional learning. For instance, one participant appreciated "the thoroughness of the workbook and PD to get started and checking in to maintain progress."

- **SIP as a "living document."** Fewer (5.6%) also appreciated that with DI the school improvement plan (SIP) was continually revisited and could be revised as needed, an experience that was contrasted with other school improvement systems wherein a SIP was created but rarely consulted or updated. One respondent valued "the approach that the SIP is a living document, and can be changed at any time has been encouraging to our team. It has allowed us to recognize mistakes, learn from them and decide how to make things better/right." Another commented, "The DI team experience allowed for constant reflection and assessment of the plan. It was looked at multiple times rather than beginning and end of a year."

Difficulties and Suggestions. The survey included an open-ended item asking about the difficulties and frustrations participants experienced. Another open-ended item invited suggestions and questions. Sixty-eight respondents identified difficulties and/or made suggestions. In addition, focus group participants were asked to provide insight into their experience with each of the DI protocols. While focus group participants' comments regarding professional learning, fidelity of implementation, and impact of the DI protocols are summarized in the respective sections of the report below, many of the difficulties and suggestions they expressed were similar to those noted in survey responses and are included below.

- **Scheduling and logistics.** Most difficulties identified by survey respondents pertained to scheduling and logistics (35.3% of responses), including numerous mentions of difficulties with finding meeting times, meeting attendance, and a desire for more time to meet, as well as limitations of or frustrations with Microsoft Teams for sharing files. Focus group participants expressed some concern with logistics as well, including

the issue of having multiple administrators "out of the building" for DI training at the same time.[2]

- ***Cumbersome or confusing aspects.*** Just over a quarter of survey respondents (26.5%) complained that aspects of DI were cumbersome, confusing, stressful, and/or that a considerable investment of time and effort was expected of DI team members. Some focus group participants also expressed this concern. One survey respondent was displeased by "too much emphasis on procedures, acronyms and process and not enough time to actually achieve anything. Unnecessarily long and cumbersome process." Another survey response read, "This was a difficult year for educators still dealing with the fall out of COVID and on going effects. Adding a new program on top of this was very overwhelming at first and added to stress of many involved"; however, this person noted that over time they found the process "helpful." When asked about using UNITED, focus group participants expressed few criticisms; however, some did indicate that it could be time-consuming and somewhat tedious at points, though worthwhile. For example, a middle school teacher commented, "It's a pretty tedious process. It's also easy to skip over and [just say] 'Oh, we don't have time to do that'….It forces you to stop and take the time to do it though, because it is valuable." Similarly, an elementary school teacher noted the following:

> *Time is always of the essence. [W]e are busy teachers and at the end of the school day, it's kind of hard to have your best thinking. You're not as sharp as you would be, you know, like at a nine o'clock meeting. So, definitely just trying to orchestrate everyone in their lives and their responsibilities and find some balance and time to meet. It's definitely a challenge.*

  In the focus group of high school teachers, concern with the additional work resulting from the CHANGE protocol was widely expressed, with the protocol as seeming to mean simply "more work" for teachers. Commenting on DI overall, some focus group participants suggested streamlining specific materials and procedures so that their teams could make more efficient use of their time, including by simplifying parts of the workbook and reducing duplicative data entry.

- ***Need for broader staff buy-in.*** Echoing a factor that limited some participants' sense of overall satisfaction with DI, when asked about difficulties or suggestions, roughly a quarter of survey respondents

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[2] Participant quotations from focus groups have been edited for narrative clarity as appropriate.

(22.1%) identified a need for fostering broader understanding of and investment in the efforts of DI teams, particularly among school staff not serving on a given DI team. Survey comments included the following:

> *I guess my only frustration is that we do not have more time as a whole school community to gather and work on improvement. We are so busy with meetings in other areas. I feel that if more time was spent as a whole we would have more buy in.*

The theme of staff buy-in also emerged in focus groups. Some focus group participants had mixed impressions with regard to whether most teachers thought of the DI teams' goals as part of a coherent school-wide plan or an "add-on." Elementary teachers and administrators expressed the most confidence in school-wide understanding and buy-in, particularly later in the year, and high school educators expressed the least. An elementary teacher described increasing understanding of the alignment of DI goals over the course of the year:

> *I think initially, they [teachers] did think it was just another thing to do, because that's how we always presented it in the past. I think as we met more and more, and they saw that the action steps were a part of what they've been doing with me in a coaching cycle, that they saw that connection [to school-wide goals] more.*

- **Desire for all participants to be direct-trained.** A small number of respondents (8.8%) reported that they would have preferred all team members to receive direct training from CTE and participate in the county-wide meetings in order to foster investment in and understanding of DI and a sense of inclusivity, or that the lack of direct training proved limiting for the safety and mathematics teams. This theme was also noted by focus group participants. One survey respondent reflected, "I think it would have been more valuable to have all teams receive the same full training that the literacy team received." Another made the following comment:

  > *One main difficulty that the Safety Team faced this year, was their overall understanding of the process and approach of the meeting structure and Cycle closing/beginning. Since Safety Teams were not invited to work directly with Johns Hopkins employees at the quarterly cycle meetings, the momentum and understanding of the process was sometimes lacking. I*

*think it would greatly benefit Safety Teams if they were
able to attend meetings with Johns Hopkins employees
and truly see the excitement and momentum from other
schools and Board of Education members.*

- ***Compliance mindset.*** Several survey respondents expressed concern with a compliance or "box-checking" mindset, and another said there was a need for accountability for "gathering accurate data" and "implementing real change."

Although opinions about the first year of experience implementing DI appeared to vary somewhat, the general consensus across the focus groups was that the program became easier to implement over the course of the year. Participants stressed that they felt that this was a "learning year" in relation to DI, a phrase that was used by some survey respondents as well. Even with implementation that was seen as largely successful, focus group participants reported, not unexpectedly, hitting some "speedbumps" along the way. Some participants noted that implementation was not "hard" per se, but that it could be time-consuming and effort-intensive work. Many participants did highlight, however, the program features that aided with implementation, particularly the workbook and the provision of all the materials, agendas, and forms in advance.

Overall, in survey responses and focus groups, participants evoked a generally smooth experience implementing DI, with DI team members demonstrating engagement and confidence in implementing the program and anticipating positive impact on their schools.

Perceptions of Professional Learning and Coaching

CTE offered professional learning and support primarily through a digital workbook to guide teams' work, in-person professional development, monthly coaching calls with team members serving as facilitator for the upcoming meeting, and ad hoc assistance. In the focus groups, some participants commented on their perceptions of professional learning and support provided by CTE. Participants commented on supports that contributed to their learning, including the workbook and templates, coaching calls, in-person training, and ad hoc assistance. As described above, all these supports were also mentioned in response to survey questions about the DI difference and/or the reason for the perceived effectiveness of DI. Participants also spoke very highly of the CTE team and saw them as available, helpful, and kind. Several focus group participants, again like some survey respondents as noted above, made reference to the Johns Hopkins affiliation and seemed to see CTE as a credible source of guidance. One person appreciated the "guidance from Johns Hopkins" and felt "excited to see something research-based." Another commented:

> *It was really nice to meet with [CTE facilitators]….It was almost like a warm-up to the [DI team] meeting….The facilitator knew exactly what needed to be done every single time. So that to me, during this process the first year, was huge.*

A couple of focus group participants noted that direct-training by CTE contributed to knowledge of DI practices and strong teams.

Perceptions of Fidelity of Implementation

In this study of the first year of broad implementation of DI in WCPS, a major focus is fidelity of implementation. While the impact of DI would be expected to increase as implementation continues, faithfulness of implementation of DI *now* could indicate participants' understanding of and investment in DI and its promise for strengthening school improvement efforts over time.

Participants reported on their fidelity of implementation of key DI components through Likert-type survey items and through the focus groups.

Usage scale. Participants were prompted to rate the frequency that employed each of the components of DI (see Figure 2).

Figure 2
Survey Respondents' Self-Reported Usage of DI Practices
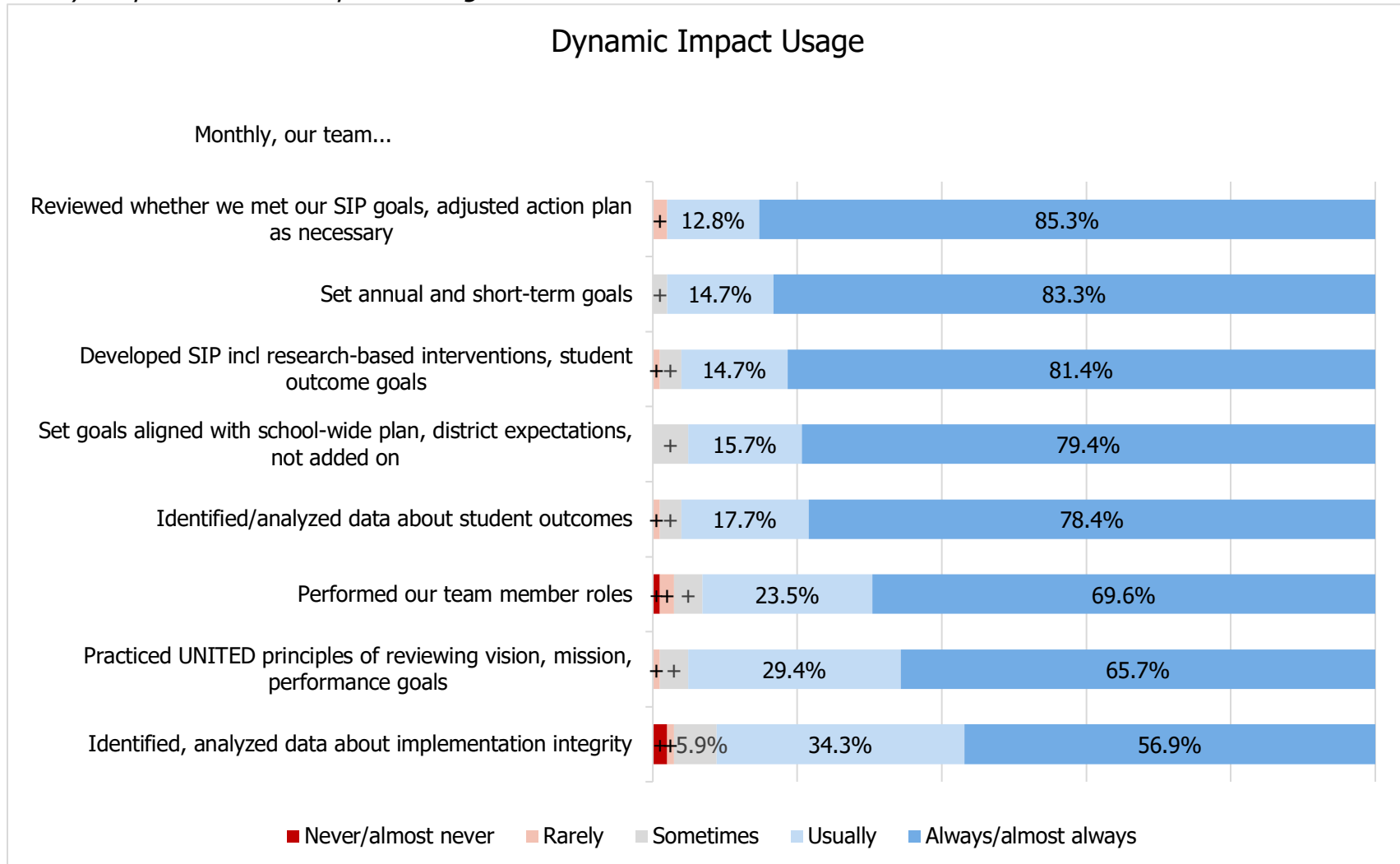
As shown above, more than half of survey respondents reported "always or almost always" using every protocol component listed, and more than 90% reported using each component at least "usually." Respondents reported the highest adherence to reviewing whether the school met goals in the SIP and adjusting action plans as needed (98% "usually" or higher). Analyzing implementation data received the least adherence, though still with 91% of respondents reporting adherence "usually" or higher. A usage scale was created, with scale scores calculated by averaging the participant's response to each item on the scale. The average usage scale score was 4.69 (5-point scale), with a standard deviation of .39, indicating a high level of self-reported fidelity of implementation.

Focus group participants likewise reported faithful implementation of UNITED, ROOT, and CHANGE, and some participants expressed pride in this fidelity. Participants made most frequent mention of reviewing the team's mission, vision, and goals and rotating roles among team members. In some cases, teams' internalization of and investment in the protocols increased over the course of the year. Some focus group participants also noted that they became better able to adhere to the protocols with efficiency:

> The importance of stating the mission, stating the vision, you know, it's like you do kind of take it for granted. And then as time moves forward…both of those items really act as anchors, I think, around the work that you're doing. You can get really lost in the weeds of data and action steps and all of that. But I think if you have something simple and concise, like the vision and the mission, as long as everything goes back to that, and upholds what we state at the very beginning, then, you can do an audit for your thinking and say, okay, that aligns.

> Part of the process is learning how you can rock and roll through that process. Not skip it, but how you can really move yourself through it so that you can maintain the integrity of the process and still…get the job done.

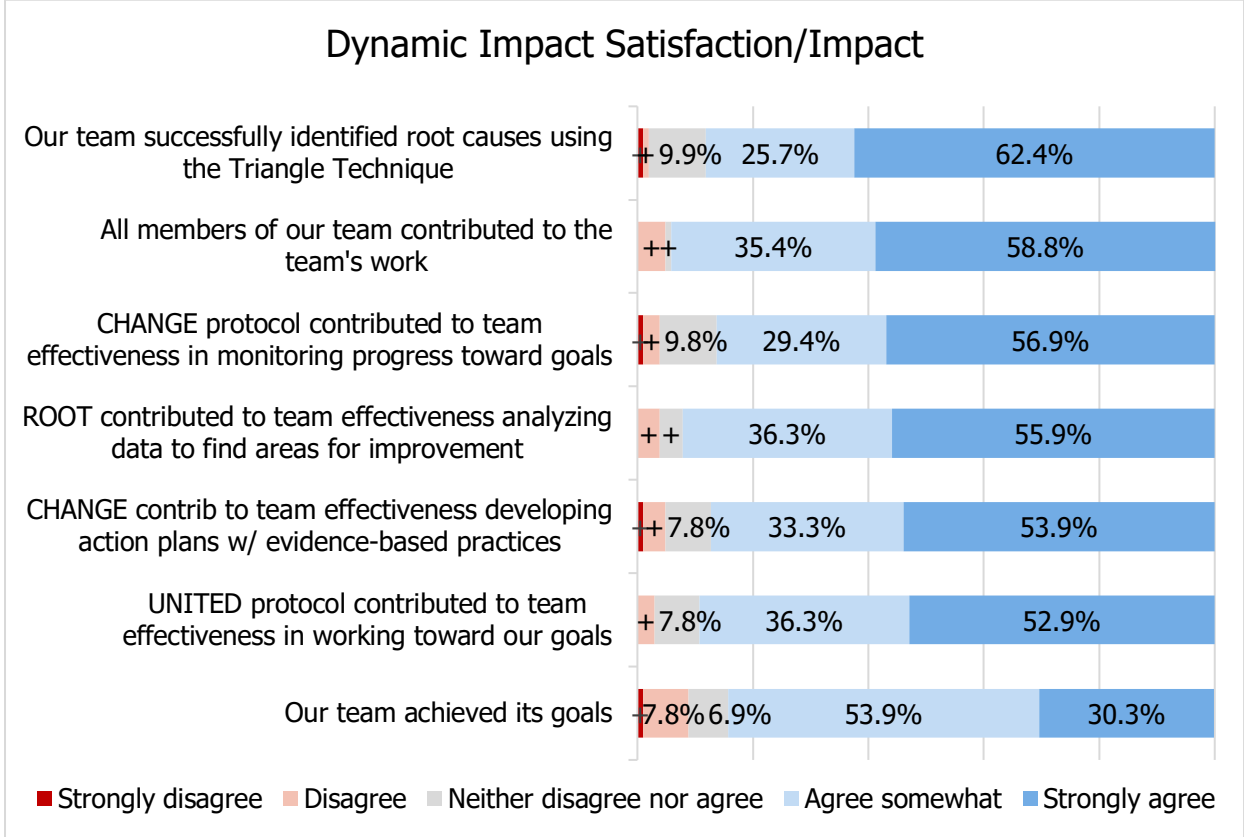Despite any increases in confidence and efficiency with the protocols over time, some focus group participants noted that time constraints and competing responsibilities sometimes made consistent and deep adherence to protocols more difficult.

Perception of the Impact of DI

Participants reported on their perception of the impact of DI through Likert-type and open-ended survey items and through the focus groups.

Satisfaction and impact scale. Survey respondents were presented with a series of survey items that prompted them to rate their levels of agreement to statements regarding various DI components and activities (see Figure 3).

Figure 3
Survey Respondents' Satisfaction with and Perception of the Impact of DI Practices

Dynamic Impact Satisfaction/Impact

Statement	Strongly disagree	Disagree	Neither disagree nor agree	Agree somewhat	Strongly agree
Our team successfully identified root causes using the Triangle Technique	+	9.9%		25.7%	62.4%
All members of our team contributed to the team's work		++		35.4%	58.8%
CHANGE protocol contributed to team effectiveness in monitoring progress toward goals	+	9.8%		29.4%	56.9%
ROOT contributed to team effectiveness analyzing data to find areas for improvement		++		36.3%	55.9%
CHANGE contrib to team effectiveness developing action plans w/ evidence-based practices	+	7.8%		33.3%	53.9%
UNITED protocol contributed to team effectiveness in working toward our goals		+7.8%		36.3%	52.9%
Our team achieved its goals	+7.8%	6.9%		53.9%	30.3%

■ Strongly disagree   ■ Disagree   ■ Neither disagree nor agree   ■ Agree somewhat   ■ Strongly agree

Note. + < 5.0%.

As shown above, the vast majority of survey respondents (94.2%) indicated agreement (58.8% strongly agreed) that all members of their team contributed to their team's work, and a comparable amount (89.2%) agreed that the UNITED protocol contributed to their team's effectiveness Further, the vast majority (88.1%) indicated agreement that their team successfully identified root causes, and even more (92.2%) agreed that the ROOT protocol contributed to team effectiveness with data analysis. Respondents were generally positive in their self-assessment of achieving their goals: the majority (84.2%) agreed that they had met their goals, and more than 85% agreed at least somewhat that the CHANGE protocol had contributed to their team's effectiveness in developing evidence-based plans and monitoring progress.

The survey also asked overall effectiveness of their team. Again, responses were favorable overall. Nearly 90% of survey respondents reported that their team was "effective" (28.7%) or "very effective" (59.4%). An open-ended item invited survey

respondents to elaborate on their reason for rating their team as effective, and 55 participants offered a response. Prominent themes included:

- **Shared purpose.** The most frequent explanation (69.1% of participants providing a reason for effectiveness) was a shared goal, purpose, focus, or plan, or a shared commitment to student outcomes. One person explained, "We have worked together to increase the number of students taking and passing technical skills assessments in the trades courses. We evaluated our progress and adjusted our approach and activities based upon the data."

- **Investment, accountability, and collaboration.** The second most common explanation for team effectiveness among survey respondents related to the broad participation, varied expertise, accountability, and/or collaboration on their team (61.8%). One person expressed appreciation that "everyone participates and we rotate roles each meeting," and observed, "Our team represents the stake holders in the school which helps support the work in the classrooms." Another asserted, "Everyone is invested in the process because it contributes to the success of our students."

- **Data use.** Fewer (18.2%) credited their team's effectiveness to their use of data, including eight respondents who had also noted their shared purpose (as described above). As one person explained, "By using current data, we were able to determine a problem and develop and implement a plan. We would then re-evaluate and adjust the plan as needed in order to meet the needs of our students."

- **Additional DI influence.** Teaming, shared purpose, and data use—described above—were essential parts of the DI process. In addition to survey responses that referred to those aspects of the DI process as a reason for rating their teams as effective, some respondents (7.3%) referred to other aspects of DI as sources of effectiveness, specifically the support from JHU and the provision of protocols and templates. One person commented, "DI gave us a process to follow that helped us narrow our focus so that we could be more effective and target specific needs." Another valued the support from CTE: "The process and leadership of JHU has help[ed] our team become effective.…The agendas and constant check ins helped with accountability." Another respondent echoed previous comparisons of DI to other school improvement processes: "In comparison to other S.I.P. efforts, our team was much more 'on point' and complying with the group norms and undertaking tasks (as assigned)."

Limitations to team effectiveness. Fifteen survey respondents identified limitations to team effectiveness; however, nine of those respondents who pointed out limitations still rated their team as "effective." Difficulty coordinating schedules or

inadequate meeting time and the need for broader staff buy-in, each noted by five people, were the most commonly mentioned limitations. One person observed, "The team works well, but it is isolated from the rest of the school. The school feels like this is another thing to do rather than engaging the entire staff and moving the school forward." Another made the following comment: "I believe we could do a better job at sharing and creating buy-in with the staff.…I think this process is missing the 'whole staff is responsible' piece." Two respondents noted concerns with a compliance mindset on some teams, making reference to a "smoke and mirrors approach" or "going through the motions," although one of these respondents described DI as "incredible" when "implemented correctly." Another expressed concerns about accountability for data integrity.

Perceived impact of DI on student outcomes. When survey respondents were asked the extent to which they believed DI was improving student outcomes, responses were mostly favorable, with 80% of respondents indicating that it was "effective" or "very effective," and an additional 14% seeing it as "somewhat effective." Some survey respondents ($n = 47$) provided the following specific explanations for their perceptions of DI as effective for improving student outcomes:

- **Focus on goals and data.** The most common reasons (91.5% of respondents providing specific explanations) given for seeing DI as effective related to its focus on goals, strategic problem-solving, and/or analysis of root causes and data. One person appreciated the goal-directed structure of DI: "The Dynamic Impact is helping to improve student outcomes at our school because it has given us the structure to help us set clear goals, collect data, analyze data and develop action steps." Others appreciated the focus on analyzing root causes and developing solutions, including a person who appreciated that DI "allows time to deep dive into data and problem solve." Relatedly, one respondent reported that DI kept "the focus on making effective changes in our practices to help children in a more objective way." Another person appreciated DI's approach of "doing fewer things well [as] opposed to creating a laundry list of initiatives that are impossible to do all of it well."

- **Effective collaboration and investment.** The next most common theme (19.1%) was effective collaboration among DI team members and/or investment by the school staff more broadly in the significant impact of DI. One person felt the "focus" and protocol "assist[] in staying focused on goals and allow[] team members to share responsibilities." Another noted the impact of "common language" and appreciated that DI "is focused on growth and allows everyone to take ownership." Another person attributed its impact to "creating a structured environment where all had accountability [so that] we were able to be more effective in communicating needs and solutions to issues that arose."

Less perception of impact. A small number ($n = 7$) of respondents identified specific limitations to an impact on student outcomes (although all but two of these people nevertheless rated the impact as "effective" or "somewhat effective"). Reasons included cumbersome or time-consuming demands, limited staff buy-in, and difficulty identifying root causes or delineating goals. In addition to respondents who cited specific limitations to impact, other respondents felt that DI was not meaningfully different from other school improvement methods or expressed that they thought DI would have a bigger impact in future years. One person commented, "Regardless of the protocol we use with School Improvement, we work hard to meet student outcomes. Truthfully, this protocol seemed no more or less effective for student outcomes."

Perceived benefits. Survey respondents were presented an open-ended item about their perception of the benefits of implementing DI at their school, including its impact on staff collaboration, SIP implementation, and student outcomes. The following benefits were offered by participants ($n = 72$):

- *Focus on goals.* Of the 72 survey respondents who identified a specific benefit, the most common benefit, mentioned by about half of them (51.4%), related to the focus on setting and monitoring clearly defined, important goals and plans, including attention to root causes, relevant data, and strategic problem-solving. One person appreciated that DI "helped us focus on key areas to work on that will impact our students." Similarly, another reported, "This SIP really helped our school narrow our focus and not get in the weeds of ALL the data." Another commented, "Implementing Dynamic Impact is more than just checking off boxes, it allows us to really get to the root cause and put activities in place to better our school and student success." Another noted the following strength:

  > The Dynamic Impact process has allowed us to streamline action steps and focus on activities that will lead to greater student success. Previous school improvement processes became extremely lengthy and we were not nearly as focused on specific, actionable items.

  A number of the people who identified setting and monitoring goals as a benefit emphasized the value of maintaining focus on the goals and plans throughout the year and making adjustments as needed based on data and other learnings. One person valued that DI "keeps us 'circling back' to watch data and how it changes. It allows us to make academic changes to accommodate student needs." Another appreciated that unlike other school improvement processes, "Dynamic Impact pulls more stakeholders into the process" and that the SIP "is purposefully revisited and updated as data is gathered."

- ***Investment and alignment.*** Almost as many survey respondents (50% of those identifying a specific benefit) noted benefits related to teamwork, communication, investment, and alignment among staff. One person asserted, "Implementing Dynamic Impact helped unite teachers. We had a common language and the data was not a mystery." Another commented, "SIP has become a driving force behind our PD and team meetings. Focusing on clear desired outcomes throughout the school year was beneficial." One survey respondent summed up the benefits by saying simply, "The process works." Another observed the following benefit:

> *Teachers and staff are learning how to collaborate on an effective team. By utilizing everyone's strengths we are able to accomplish more. Our schools are narrowing their focus based on data and creating action steps to work towards common goals.*

Perceived impact of each protocol. Focus group participants were asked to comment on each DI protocol, including its impact. Like survey respondents, focus group participants overwhelmingly reported that DI was positively influencing their schools. Their comments about each protocol and its impact are summarized below.

UNITED. Across all five focus groups, participants strongly agreed that using the UNITED protocol was a positive and beneficial experience, particularly for forming teams at the beginning of the year. Consistently, participants expressed that the protocol helped their teams work together more effectively and productively, provided a strong structure that fostered team buy-in and accountability, and thereby enabled their teams to increase instructional productivity. Specific comments included the following:

> *It really formalized the meeting process. Instead of being all over the place, we had a structure and we follow the structure. And then the outcomes were more impactful….We got more done, rather than "going off on a birdwalk." It's nice that people are empowered to get the team "back on track."*

> *I found that this year was much more productive than in the past with our school improvement plan. [I]n the past…, you get together, you just looked at the plan, and you would update it. There wasn't really a lot of discussion, whereas this year…our team was very strong. And we had great discussions, really looking at root causes of things, and really having some good conversations. I think that having a smaller team and that "shared leadership" really helped us to move forward in our planning.*

ROOT. Focus group participants expressed positive, if somewhat more mixed, perspectives on the ROOT Protocol. The vast majority of participants across groups indicated that ROOT played a useful role in helping their team analyze implementation and student outcome data to identify needed actions. Several users expressed that ROOT was the "heaviest lift" of the DI protocols and that the process of reviewing data, particularly that which reflected low performance, could be difficult and uncomfortable. Over time, though, ROOT helped teachers to look at data objectively, rather than take personally performance that was lower than they hoped for. The majority of participants across focus groups indicated that they felt the protocol helped identify and spark discussions of needed changes and forced their teams to "dig deeper" to find the true causes of problems in student outcomes. Participants noted that the exercise provided their teams an outlet to more openly discuss issues, prompted them to explore data closely so that they understand the "different layers" of the problems they faced, and served as a useful tool from cycle to cycle. One person appreciated that ROOT "made us focus on what we could control" and thereby "puts the power back in our hands to help kids and make decisions for kids." Other comments included the following:

> *Being able to make the connection between what is happening, why it might be happening, and then actually having the data to support that why [was valuable]. This avoids the tendency in many groups to start throwing solutions at problems and seeing which ones stick. ROOT forces a more rigorous approach, a more research-oriented approach.*

> *It allowed us to be more open.…I think the structures in place really held us accountable to looking at the data and keeping up with the data…The action steps we put in place each cycle, holding us accountable to really completing those action steps, and seeing a change.*

CHANGE. Focus group participants expressed largely positive impressions concerning the CHANGE protocol. In terms of its impact on their team's goal-setting and progress-monitoring, participants frequently highlighted the ways that the protocol enabled them to better leverage data and more clearly focus on their school's specific goals. Participants praised the way that the protocol provided them with both structure and flexibility, and how it could be used to create action steps aimed at improving instruction. Overall, the consensus in four of the five participant groups was that the protocol was useful in tracking performance relative to goals and monthly targets. Of those who expressed agreement, several expressed that the protocol helped them leverage data in ways that fostered change and open up more "honest" forms of discussion, and that the action steps and "smaller cycle" goals were having a

particularly important impact. As one person explained, "It just felt that we were able to spell things out, how we were going to achieve that goal through those steps."

TAP-IT. The general consensus among focus group participants was that the Teams, Analyze, Plan, Implement, and Track (TAP-IT) Improvement Cycle was useful in shaping their teams' work for the better, although some high school participants mentioned that the timing of the three cycles did not fit with the high school calendar. Participants expressed that this continuous cycle of teaming, analyzing data, planning, implementing changes, and tracking has become "embedded in everything" they do since adopting DI. Participants stressed that the cycle has reinforced for them the importance of tracking and leveraging data, shown ways that their teams can communicate more effectively, and served as a useful "living document" that allows them to be adaptive and flexible in how they approach decision-making. As one person explained, "I think the process helped to make us realize that we need to do a better job of tracking that data, so that we can form an opinion about if we're moving or not."

Overall impact. Across all school levels, teachers and administrators who participated in focus groups expressed consistently positive impressions of the impact DI is having at their schools. Participants noted that the program has greatly helped their schools in setting goals and vision, has provided them with a common language and framework to review data and conduct meetings, and has had a significant positive impact on creating school-wide buy-in among teachers and creating a better mechanism for helping teachers work together to advance student learning. One participant said of DI, "It creates a cohesive vision, a cohesive point to what we're all doing. I think it gives everybody focus. It gets the whole staff on the same page." Another commented, "It kept us on track and kept us working as a team and it kept the discussions open."

Discussion

The present study explored team members' perceptions of the implementation of DI in their schools. This study used a survey with Likert-type and open-ended items and focus groups to explore how teachers, school administrators, and central office personnel participating on the DI teams saw fidelity of implementation of DI, the experience of participating in DI, and the impact of DI, together with the distinguishing features of DI and recommendations for improvement. In the section below, we synthesize and interpret the results of the study.

DI Experience

Participants described the experience of being a DI team member as characterized by coordinated, purposeful efforts to set goals, identify root causes, analyze germane data, and continually monitor plans and progress, making adjustments to plans as appropriate. Clear protocols guide and structure teams' work and help

ensure that all team members are positioned to contribute to plans and implementation, and CTE staff provide materials, training, coaching, and assistance to support teams in their work. While the expectations of DI team members are high, particularly given the other demands on educators' time, team members overall reported strong investment in the DI process and high fidelity to its protocols. Participants generally reported a smooth experience, despite some frustrations around logistics and workload associated with their service on DI teams.

Perceived Impact of DI

Participants generally reported that they believe DI protocols are effective and that DI is strengthening their schools. Benefits identified include effective teaming and collaboration; shared vision and coordinated activity around goals, informed by data and involving well-chosen interventions; and ongoing engagement with the SIP as a living document. The most common opportunity area identified was in engaging the school communities more broadly to get investment from educators beyond those on the DI teams.

Conclusion

Taken together, these findings suggest that educators on Dynamic Impact teams are faithfully implementing DI and believe that DI is strengthening their school improvement efforts. They see clear DI protocols giving focus to team members' work and ensuring attention to student outcomes, root causes, relevant data, evidence-based interventions, and continuous monitoring of activity and progress toward goals. Also essential to DI's perceived effectiveness is its formation and maintenance of high-performing, non-hierarchical teams characterized by shared responsibility and broad engagement.

Based on input from DI team members, the following recommendations for further refinement of DI could be considered:

- Develop tools and practices for school-based teams to use to engage the broader school community in school improvement and the work of DI teams.
- Explore ways of streamlining the digital notebook and the interface for accessing files.
- Provide direct training to all teams, or communicate the rationale for direct-training some participants in such a way that all participants feel efficacious in their work and included in the process.

Appendix A: Participant Survey

Dynamic Impact survey

You are being asked to participate in a research study about the implementation of Dynamic Impact in Worcester County Public Schools by Johns Hopkins' Center for Technology in Education (CTE). CTE has engaged Johns Hopkins' Center for Research and Reform in Education (CRRE) to conduct this study. The purpose of this survey is to document the experiences and perceptions of participants in DI teams regarding the implementation of DI in WCPS thus far in the 2021-2022 school year. You have been asked to complete this survey because you are part of a Dynamic Impact team. Your responses will be treated confidentially. This survey will take approximately 20-30 minutes to complete. By completing this survey, you are consenting to be in this research study. Your participation is voluntary and you can stop at any time.

Questions: If you have any questions about this study, please contact Dr. Jennifer Morrison (jrmorrison@jhu.edu).

Are you part of more than one Dynamic Impact team?

○   Yes

○   No

Please focus on *one* of the teams you are a part of as you answer the questions below.

Please consider your team's usage of the Dynamic Impact protocols (UNITED, ROOT, and CHANGE) as you respond to the statements below.

	Never or almost never	Rarely	Sometimes	Usually	Always or almost always
At our monthly meetings, our team practiced the UNITED principles of reviewing our vision, mission, and performance goals.	○	○	○	○	○
At our monthly meetings, our team performed our team member roles.	○	○	○	○	○
Our team identified and analyzed data about student outcomes.	○	○	○	○	○
Our team identified and analyzed data about integrity of implementation or teachers' perceptions of implementation.	○	○	○	○	○
Our team set annual and short-term goals.	○	○	○	○	○
Our team set goals aligned with a coherent school-wide plan and district expectations, not something extra or added on.	○	○	○	○	○
Our team developed a school improvement plan (SIP) including research-based interventions and goals for student outcomes.	○	○	○	○	○
Our team reviewed whether we met the goals in our SIP and adjusted the action plan as necessary.	○	○	○	○	○

Please consider your team's experiences with the Dynamic Impact protocol, and indicate how much you agree with the statements below.

	Strongly disagree	Disagree somewhat	Neither disagree nor agree	Agree somewhat	Strongly agree
All members of our team contributed to the team's work.	○	○	○	○	○
The UNITED protocol contributed to our team's effectiveness in working toward our goals.	○	○	○	○	○
Our team successfully identified root causes using the Triangle Technique.	○	○	○	○	○
The ROOT protocol contributed to our team's effectiveness in analyzing data to identify areas of focus for improvement.	○	○	○	○	○
Our team achieved its goals.	○	○	○	○	○
The CHANGE protocol contributed to our team's effectiveness in developing action plans including the implementation of evidence-based programs and practices.	○	○	○	○	○
The CHANGE protocol contributed to our team's effectiveness in monitoring progress toward our goals.	○	○	○	○	○

Overall, how effective is **your team** in working together to benefit your school?

○　　　Not at all effective

○　　　Not very effective

○　　　Somewhat effective

○　　　Effective

○　　　Very effective

Please explain your response to the question above.

_____
_____
_____
_____

To what extent do you believe Dynamic Impact is improving **student outcomes** at your school?

○　　　Not at all effective

○　　　Not very effective

○　　　Somewhat effective

○　　　Effective

○　　　Very effective

Please explain your response to the question above.

_____
_____
_____
_____
_____

Overall, how satisfied are you with your school's experience implementing **Dynamic Impact** as the school improvement model?

○   Very dissatisfied

○   Dissatisfied

○   Neither dissatisfied nor satisfied

○   Satisfied

○   Very satisfied

Please explain your response to the question above.

_____
_____
_____

Overall, what do you see as the **benefits** of implementing Dynamic Impact at your school? Specifically, please describe any impact on the extent and effectiveness of collaboration among school staff, on the implementation of the school improvement plan (SIP), and/or on student outcomes.

_____
_____
_____
_____
_____

As an educator, you have participated in varying groups and teams. What, if anything, do you see as **different** in the DI team experience?

_____
_____
_____
_____
_____

What, if any, **difficulties or frustrations** have you experienced from your participation in Dynamic Impact?

_____
_____
_____

_____

_____

What **suggestions or questions** do you have regarding the continued implementation of Dynamic Impact?

_____

_____

What is your job title?

- ○ Teacher
- ○ Principal
- ○ Math or literacy interventionist
- ○ School counselor
- ○ Instructional coach
- ○ Central office staff
- ○ Curriculum resource teacher (CRT)
- ○ Other, please specify.

_____

Which best describes the school your DI team focuses on?

- ○ Elementary school
- ○ Middle school
- ○ High school
- ○ Other, please specify.

_____

Which Dynamic Impact team are you part of?

○ Mathematics

○ Literacy

○ Safety

You indicated that you were part of more than one Dynamic Impact team, and you responded to the items above about *one* of those teams.

Now consider the *other* Dynamic Impact team(s) you are part of with. How do they compare with the one that you have answered questions about so far?

_____
_____
_____
_____
_____

Appendix B: End-of-Year Focus Group Protocol

Focus Group Protocol about the Implementation of Dynamic Impact in Worcester County Public Schools

Oral Consent
We would like to invite you to participate in the research project described in the material you received and to participate in a focus group. You do not have to participate if you don't want to, and if you choose to participate, you can stop your participation at any time.

Do you agree to participate in this focus group?

Do you agree to be audio recorded?

Introduction
Thank you for participating in a focus group about the Dynamic Impact Implementation in WCPS. The purpose of this survey is to document the experiences and perceptions of participants in DI teams regarding the implementation of DI in WCPS. You have been asked to participate in a focus group because you are part of a Dynamic Impact team at your school.

The focus group will last approximately 45 minutes to an hour.

Background
1. Would you each please identify your job title, your school, and the DI team or teams you were part of?
    a. If not specified, is your school an elementary school, a middle school, or a high school?

Implementation and Perceived Impact of Each Protocol
Dynamic Impact involves the UNITED, ROOT, and CHANGE protocols and the Teams, Analyze, Plan, Implement, Track (TAP-IT) cycle. I'll to ask you about your team's *use* of each of these protocols. Then I'll ask about what you think the *impact* was.

UNITED
2. What was it like for your team to use the UNITED protocol for teaming at the beginning of the year and at the beginning of this cycle?
3. In your monthly meetings, how consistently did your team practice the UNITED principles of reviewing your vision, mission, and performance goals before each meeting and performing your assigned team member roles for that meeting?
4. Do you believe the UNITED protocol has helped your team to work together more effectively?
5. Overall, how effectively does your team work together? [If not answered in

relation to #4]

ROOT
6. What was it like for your team to use the ROOT protocol to identify and analyze implementation data and student outcome data?
7. How effectively was your team able to identify root causes? Can you give an example of a root cause you identified?
8. Do you think that the ROOT protocol helped you use data and identify root causes more effectively? *If you were at your school before DI was implemented, how does your team's current use of data compare to your use of data before DI and the ROOT protocol were introduced?* [If not answered in relation to #7]

CHANGE
9. What was it like to use the CHANGE protocol to track performance relative to goals and monthly targets?
10. Would you say most teachers think of the goals as part of a coherent school-wide plan aligned with district expectations? Or something added on?
11. How do you think the CHANGE protocol affected your team's goal-setting and progress-monitoring?

TAP-IT
12. What about the Teams, Analyze, Plan, Implement, and Track-- TAP-IT Improvement Cycle? Could you describe how this cycle shaped your team's work?

Implementation ease/difficulty
13. How easy or difficult was it to implement the UNITED, ROOT, and CHANGE protocols and the Teams, Analyze, Plan, Implement, and Track cycle?

Overall impact
14. Overall, what impact do you believe Dynamic Impact is having on your school, including student outcomes, collaboration among school staff, and/or the implementation of the SIP?
15. What suggestions, questions, or concerns do you have regarding the continued implementation of Dynamic Impact?

Appendix C: Survey Distribution of Responses

DI Team Members' Self-Reported Usage of DI Protocols and Practices

	Never/ Almost never	Rarely	Sometimes	Usually	Always/ Almost always	N
Reviewed mission, vision, goals	0%	1.0%	3.9%	29.4%	65.7%	102
Performed team member roles	1.0%	2.0%	3.9%	23.5%	69.6%	102
Identified and analyzed student outcome data	0%	1.0%	2.9%	17.6%	78.4%	102
Identified and analyzed implementation data	2.0%	1.0%	5.9%	34.3%	56.9%	102
Set annual and short-term goals	0%	0%	2.0%	14.7%	83.3%	102
Set goals aligned with school-wide plan and district expectations	0%	0%	4.9%	15.7%	79.4%	102
SIP included research-based interventions and goals for student outcomes	0%	1.0%	2.9%	14.7%	81.4%	102
Reviewed SIP goals and adjusted plan as necessary	0%	2.0%	0%	12.7%	85.3%	102

DI Team Members' Satisfaction with and Perceived Impact of DI

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	N
All team members contributed	0%	4.9%	1.0%	35.3%	58.8%	102
UNITED contributed to team's effectiveness with goals	0%	2.9%	7.8%	36.3%	52.9%	102
Team identified root causes using Triangle Technique	1.0%	1.0%	9.9%	25.7%	62.4%	102
ROOT contributed to team's effectiveness in data analysis, identifying focus areas for improvement	0%	3.9%	3.9%	36.3%	55.9%	102
Our team achieved its goals	1.0%	7.8%	6.9%	53.9%	30.4%	102
CHANGE contributed to team's effectiveness in action planning	1.0%	3.9%	7.8%	33.3%	53.9%	102
CHANGE contributed to team's effectiveness in monitoring progress	1.0%	2.9%	9.8%	29.4%	56.9%	102

DI Team Members' Perception of Overall Effectiveness

	Not at all effective	Not very effective	Somewhat effective	Effective	Very effective	N
How effective is your team in working together to benefit school?	1.0%	0%	10.9%	28.7%	59.4%	101
To what extent is DI improving student outcomes at your school?	1.0%	5.1%	14.3%	45.9%	33.7%	98

DI Team Members' Overall Satisfaction

	Very dissatisfied	Dissatisfied	Neither dissatisfied nor satisfied	Satisfied	Very satisfied	N
How satisfied with school's experience implementing DI?	1.0%	3.1%	10.2%	44.9%	40.8%	98