CST Systems Thinking

Explorers: IF-Then + Alignment + Progression

2026-2027 Plan

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Background

The Explorer Tools (If-Then, Alignment, and Progression) and accompanying discussions are three ways to think about the CST role in supporting district/school improvement. The **If-Then** view provides perspective on the CST role by asking "*What happens if we do this*?" The **Alignment** view helps CSTs consider how the content and data in our DCI and DCI-MTSS toolboxes are well-aligned and can be used as part of a solution when they are matched to the district/school's needs. The **Progression** view provides perspective on district and school trajectories in implementing DCI and DCI-MTSS by asking "*What needs to be in place or be true before something else can work*?" When used together, these tools can help CSTs better determine the following.

- "*What does the school improvement system look like?*"
- "*What are the district needs*?"
- "*Is the solution grounded in fidelity and/or coherence*?"
- "*How do I use my toolbox effectively to support a solution*?"

Because the If-Then, Alignment, and Progression discussions are interwoven, we will be threading them throughout the program meetings for 2026-2027.

How is this approach supported by research?

Systems Thinking. The If-Then, Alignment, and Progression discussions are not three separate topics. Rather, the Explorer Tools and associated discussions are different views of how the CSTs approach district work together as a system for school improvement. A system is more than a checklist of parts. A system is a set of elements (i.e., people, programs, data, practices) held together by interconnections (i.e., relationships, communication, decision-making structures) that work toward a shared purpose.[1,2] Understanding a system means looking past any single element to see how the pieces relate to each other and to the whole. In other words, a system's behavior is shaped not only by its individual parts, but also by how those parts interact with one another.[3] Systems thinking is useful in educational situations where the context is complex, large amounts of information are constantly being shared, and priorities sometimes shift. Often, school improvement initiatives fall short of their vision for impact because they target singular pieces of the system at a time instead of accounting for how the pieces interact.[3]

Professional Judgement and Decision Making. Coaching support teams do their best work when they pair clear implementation guidance with feedback, which both require informed professional judgement and decision making. Decision making refers to the selection of action



steps that the coach/trainer decides to take or not take.[2,4] Professional judgement informs decision making.[2] Theorists and researchers describe the combination of professional judgement, decision-making competence, and knowledge/content competence as cognitive competence, which is critical for bridging research to practice.[1,2] Furthermore, Hammond suggests that content expertise does not presume decision-making competence.[5]

Intuition and Analysis. Additionally, research has shown that a combination of intuition and analysis is used to inform professional judgement and drive decision making.[6,7] Intuition and analysis exist along a continuum ranging from pure intuition at one end and pure analysis at the other end.[1,8] Most professional judgement and decision making require a mix of intuition and analysis, and depending on the context, the balance can fluctuate for a person.

Coaching. Research shows that coaching can improve both instruction and student outcomes.[9–11] However, research has also shown that coaching is more expensive than training[12] and taking coaching models to scale is challenging.[10] There is no simple formula for how much coaching is needed to yield positive results. Coaches are constantly drawing on their professional judgement to make on-the-spot decisions. Additionally, it is difficult to prescribe a coaching dosage and decision tree. Coaches are faced with many variations in education contexts that require on-the-spot decision making, meaning they will draw from their professional judgement as well as being informed by the context.

Benefits for CSTs

The Explorer Tools and accompanying discussions are intended to benefit CSTs as follows:

1. Strengthen conceptual knowledge of module content, school improvement systems, and data elements
2. Provide opportunities for collective knowledge building across CSTs
3. Deepen understanding of how the modules, data, and elements of the system are interconnected
4. Strengthen CST capacity to identify strengths, needs, and solutions for improving fidelity and coherence
5. Support the growth of coaching proficiency across the content and data elements, resulting in increased confidence for coaching in varying contexts

Proficient CSTs can…

1. Demonstrate systems thinking across varying district and building contexts.
2. Identify effective and efficient solutions to address district and building gaps.
3. Use data effectively for identifying district/building strengths, needs, and next steps.

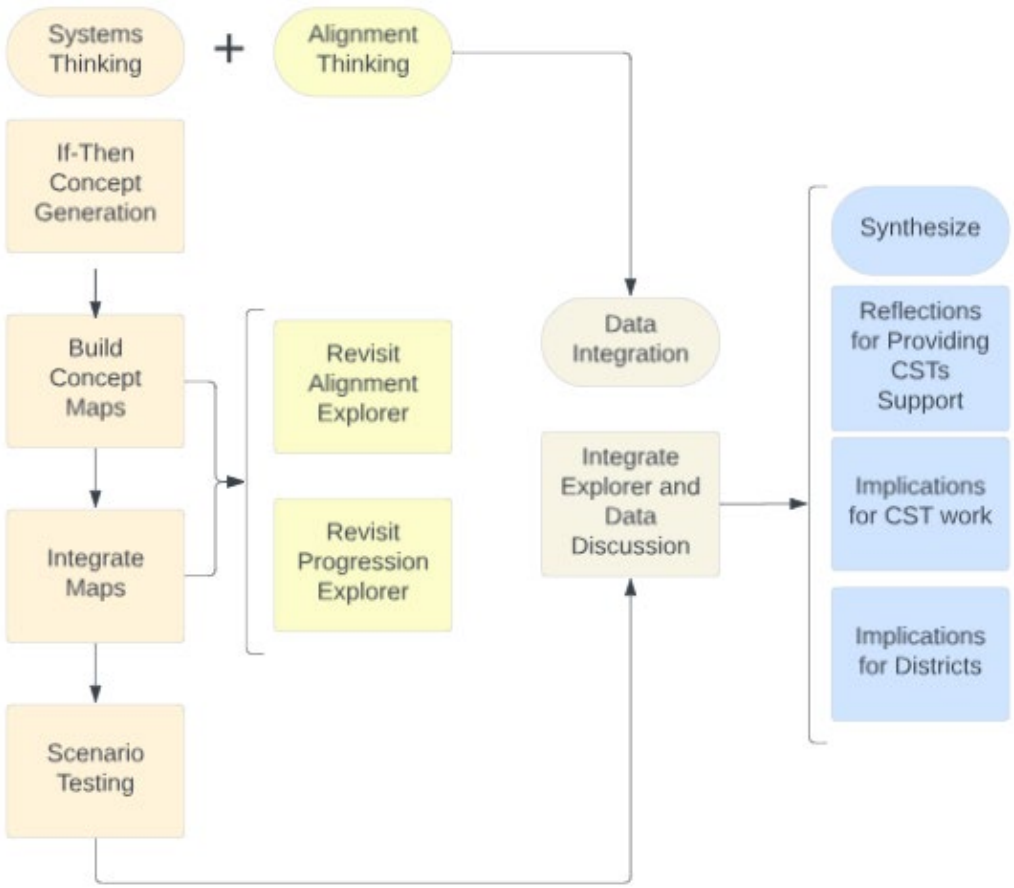
4. Use module content effectively for addressing district/building implementation needs.
5. Collaborate among CST members to support ongoing coaching skill development and knowledge.

Interweaving the Explorers into Program Meetings

During the program meetings over the 2026-2027 year, we will build on previous discussions and introductions to the Explorer Tools. We plan to provide space for ongoing discussion, reflection, and collaborative learning, while also balancing other priorities that need to be addressed during monthly program meetings. We will also consider, where possible, the overlap in attending both the DCI-MTSS program meeting and the DCI program meeting. Consultants will have opportunities to repeat material or go deeper.

The following figure shows the flow of how the systems thinking (If-Then Explorer) and alignment thinking (Alignment and Progression Explorers) will be interwoven over this year.

Figure 1. Mapping the Explorers to Practice



References

1. Dhami, M. K., & Thomson, M. E. (2012). On the relevance of Cognitive Continuum Theory and quasirationality for understanding management judgment and decision making. *European Management Journal*, *30*(4), 316-326.
2. Bucknall, T. (2007). A gaze through the lens of decision theory toward knowledge translation science. *Nursing Research*, *56*(4), 560-566.
3. Ndaruhutse, S., Jones, C., & Riggall, A. (2019). Why systems thinking is important for the education sector. *Education Development Trust*.
4. Morelli, M., Casagrande, M., & Forte, G. (2022). Decision making: A theoretical review. *Integrative Psychological and Behavioral Science*, *56*(3), 609-629.
5. Hammond, K. R. (2000). *Judgments under stress*. Oxford University Press, xii, 242.
6. Gagliardi, A. R., Brouwers, M. C., Palda, V. A., Lemieux-Charles, L., & Grimshaw, J. M. (2011). How can we improve guideline use? A conceptual framework of implementability. *Implementation Science*, *6*(1), 26.
7. Santos, L. R., & Rosati, A. G. (2015). The evolutionary roots of human decision making. *Annual Review of Psychology*, *66*(1), 321-347.
8. Parker-Tomlin, M., Boschen, M., Morrissey, S., & Glendon, I. (2017). Cognitive continuum theory in interprofessional healthcare: A critical analysis. *Journal of Interprofessional Care*, *31*(4), 446-454.
9. Glover, T. A., Reddy, L. A., & Crouse, K. (2023). Instructional coaching actions that predict teacher classroom practices and student achievement. *Journal of School Psychology*, *96*, 1-11.
10. Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, *88*(4), 547-588.
11. Knight, J. (2019). Instructional coaching for implementing visible learning: A model for translating research into practice. *Education Sciences*, *9*(2), 101.
12. Knight, D. S. (2012). Assessing the cost of instructional coaching. *Journal of Education Finance*, *38*(1), 52-80.

