**Supporting Mathematics Coaches to Identify Productive Instructional Improvement Goals for Teachers**

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**Research Questions:**

1. Did coaches learn to identify productive instructional improvement goals?
2. If so, what was the process of coaches’ learning?
3. How was the coaches’ learning supported?

**Findings:**

***Learning to Identify Productive Goals***

As shown in Table 1, some (but not all) of the coaches learned to identify productive instructional improvement goals for their partner teachers. The results suggest that it is feasible to support coaches in learning to identify productive goals.

***Process of Coaches’ Learning***

We identified three ways in which coaches identified instructional improvement goals: (1) proposing instructional changes that aligned with the district improvement initiatives (*focused on district initiative*) or accepted unproductive goals proposed by their partner teachers (*accepted teacher’s goal*); (2) analyzing the teacher’s instruction to discern strengths on which to build and weaknesses to rectify (*focused only on instruction*); and (3) analyzing the teacher’s instruction in relation to students’ learning to propose an instructional change that would enhance students’ learning (*connected instruction to student learning*).

* First development: coaches who had previously either focused on the district initiative or accepted the teacher’s goal began to identify goals by analyzing the teacher’s instruction.
* Second development: coaches who had previously accepted the teacher’s goal or focused only on the teacher’s instruction when identifying goals began to consider how instruction had supported or delimited students’ learning.

***Supporting Coaches’ Learning***

Two things appeared to contribute to the coaches’ development:

1. *Case study activities* – Coaches were asked to identify a goal for a teacher based on data from a lesson (e.g., field notes, students’ work). During these case study activities, the PD facilitator consistently pressed the coaches to prioritize a single goal for the teacher and to articulate what the teacher’s attainment of the goal would accomplish. This appeared to support several coaches in moving from a process focused on the teacher’s or the district’s priorities to one based on the coach’s analysis of data from a lesson.
2. Goal-setting tool (i.e., “root causes” tool) – Coaches were introduced to a flow-chart intended to guide coaches through a process for identifying productive goals that involves first determining where in a lesson students’ learning initially broke down and then pinpointing the aspect of instruction that caused the breakdown.

**Table 1. Coaches’ Progress in Identifying Productive Goals**

| *Coach* | *Session 1: Partnering with a Teacher* | *Session 2: Identifying Productive Goals* | *Session 3: Negotiating Goals* | *Session 4: Selecting Coaching Activities* | *Session 5: Using Student Survey Data in Coaching* | *Session 6: Facilitating Debriefs* |
| --- | --- | --- | --- | --- | --- | --- |
| Coach 1 | **Unproductive**  (Accepted teacher’s goal) |  | **Unproductive**  (Focused only on instruction) |  | **Unproductive**  (Focused only on instruction) | **Unproductive**  (Focused only on instruction) |
| Coach 2 | **Unproductive**  (Focused only on instruction) | **Unproductive**  (Focused only on instruction) | **Productive**  (Connected instruction to student learning) | **Productive**  (Connected instruction to student learning) |  | **Productive**  (Connected instruction to student learning) |
| Coach 3 |  |  |  | **Productive**  (Connected instruction to student learning) |  | **Productive**  (Connected instruction to student learning) |
| Coach 4 |  | **Unproductive**  (Pushed district initiative) | **Unproductive**  (Pushed district initiative) |  | **Unproductive**  (Focused only on instruction) |  |
| Coach 5 | **Productive**  (Connected instruction to student learning) | **Productive**  (Connected instruction to student learning) |  |  | **Productive**  (Connected instruction to student learning) | **Productive**  (Connected instruction to student learning) |
| Coach 6 |  | **Unproductive**  (Accepted teacher’s goal) | **Unproductive**  (Focused only on instruction) | **Productive**  (Connected instruction to student learning) | **Productive**  (Connected instruction to student learning) | **Productive**  (Connected instruction to student learning) |
| Coach 7 | **Unproductive**  (Focused only on instruction) |  | **Unproductive**  (Focused only on instruction) |  | **Productive**  (Connected instruction to student learning) |  |