Clock Hours Survey

| Name: Hortensia S. West | Date: 8/15/2018 |
|-------------------------|-----------------|
| Name of Event: CASTL    |                 |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |     |   | gly<br>ree |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|-----|---|------------|---|
|                                                                                                  | NA | 1                 | 2   | 3 | 4          | 5 |
| Today was productive and helpful                                                                 | NA | 1                 | 2   | 3 | 4          | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1                 | (2) | 3 | 4          | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | NA (1) 2          |     |   | 4          | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2   | 3 | 4          | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2   | 3 | 4          | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 2   | 3 | 4          | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2   | 3 | 4          | 5 |

2. Share your most important learning from today: The most important learning today was the way scorffolding happen and the linking of all the events.

questioning, Modeling and elicit talks will be part of my instructional practice. I found that what I learned, helped me understand the importance of soffolding with activities that are link to The objective Everything came to gether from all three days and I found growth in my knowledge and vocabulary through the Support of others 4. What supported your learning the most today? discussion, and hands on activities

3. How will you incorporate your learning from today in your instructional practice?

Clock Hours Survey

|                                                                                                                                                                                                                |                                    | Stron<br>Agree | - '       |         | Stron<br>Disag |           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------|-----------|---------|----------------|-----------|
|                                                                                                                                                                                                                | NA                                 | 1              | 1         | 3       | 4              | 5         |
| Today was productive and helpful                                                                                                                                                                               | NA                                 | ·1             | 2         | 3       | 4              | 5         |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching                                                                                                                            | NA                                 | 1/             | 2         | 3       | 4              | 5         |
| Today helped me understand more about how to assess student thinking when I analyze student work                                                                                                               | NA                                 | 1              | 2         | 3       | 4              | 5         |
| Today helped me develop more ways to elicit and support student discourse                                                                                                                                      | NA                                 | iV             | 2         | 3       | 4              | 5         |
| Today helped me develop more ways to support students' in modeling science explanations                                                                                                                        | ≅NA                                | 1              | 1         | 3       | 4              | 5         |
| Today helped me develop more ways to scaffold student sense-making opportunities                                                                                                                               | NA                                 | 1              | 2         | 3       | 4              | 5         |
| Today helped me develop more ways to support students in developing evidence-based explanations                                                                                                                | NA                                 | 1              | 2         | 3       | 4              | 5         |
| Share your most important learning from today:  The idea of finding a pher  your planning and instruction  how to judge the value of a p                                                                       | nor<br>n,<br>ilier                 | und            | ers<br>un | to      | gu             | ide       |
| The idea of finding a pher your planning and instruction how to judge the value of a pher how will you incorporate your learning from today in your instruction I plan to find a few and practice the planning | ruction                            | al prac        | tico?     |         | gu             | ide<br>of |
|                                                                                                                                                                                                                | ruction<br>pa<br>pr<br>sion<br>mpl | al prace       | ab        | ont ped | L O            | *         |

Clock Hours Survey

| Please rate the following statements:                                                            |    |                   |     |     |                |       |
|--------------------------------------------------------------------------------------------------|----|-------------------|-----|-----|----------------|-------|
|                                                                                                  |    | Strongly<br>Agree |     |     | Stror<br>Disag |       |
|                                                                                                  | NA | 1                 | 2   | 3   | 4              | 5     |
| Today was productive and helpful                                                                 | NA | 1                 | (2) | 3   | 4              | 5     |
| Today added to my growing set of practices related to Ambitious Science Teaching                 | NA | 1                 | 2   | 3   | 4              | 5     |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1                 | 2   | 3   | 4              | 5     |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2   | 3   | 4              | 5     |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2   | 3   | 4              | 5     |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | (2) | 3   | 4              | 5     |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2   | 3   | 4              | 5     |
| Share your most important learning from today: Weath a structure for developing                  | Ø2 | Still             | NEE | 861 | (mè            | e lee |
| How will you incorporate your learning from today in your instr<br>the eurneulum will be built w |    |                   |     | s a | S              | nic   |

5. What supported your learning the least today?

facilitator input

the 3 days ended up being long There was so much to share I don't know how you would schedule fewer days.

Clock Hours Survey

| Name: 3        | ian MacNevin | Date: 8/15/2018 |  |
|----------------|--------------|-----------------|--|
| Name of Event: | CASTL        |                 |  |

#### 1. Please rate the following statements:

|                                                                                                  |    | Stron<br>Agree |   |   | Stror<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|----------------|---|---|----------------|---|
|                                                                                                  | NA | 1              | 2 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | (1)            | 2 | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1              | 2 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | (1)            | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1              | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1              | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1              | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1              | 2 | 3 | 4              | 5 |

| 2. | Share your most important learning from today: |
|----|------------------------------------------------|
|    | Woup Collaboration                             |
|    | 8,0 1 2 3 0                                    |

3. How will you incorporate your learning from today in your instructional practice?

Pickery one Small piece

4. What supported your learning the most today?
Groups 4 time to Hick!

5. What supported your learning the least today?

Planning Time

| Clock Hours           | Survey | 1 | E     |  |
|-----------------------|--------|---|-------|--|
| Name: Barbara Bramley | Date:  | 8 | 15/18 |  |
| Name of Frank () ASTI |        | 1 | 1     |  |

1. Please rate the following statements:

|                                                                                                  |    | Stron      |   |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|------------|---|---|----------------|---|
|                                                                                                  | NA | 1          | 2 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 0          | 2 | 3 | 4              | 5 |
| Today added to my growing set of practices related to Ambitious Science Teaching                 | NA | (1)        | 2 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1          | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | (A)        | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | (I)        | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | <b>(1)</b> | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1          | 2 | 3 | 4              | 5 |

2. Share your most important learning from today:
• the entire process. How we walked through each comparet

3. How will you incorporate your learning from today in your instructional practice?

5 tart by incorporating student talk mares, collaboration with 2 other 5th grade trackers, implementation of a AST unit this caning year

4. What supported your learning the most today?

· working closely with the instructors

5. What supported your learning the least today?



| /10              |        | Clock Hours Survey |  |
|------------------|--------|--------------------|--|
| Name: Zam        | Tarson | Date: 8/15/18      |  |
| Name of Events ( | CASTL  |                    |  |

#### 1. Please rate the following statements:

|                                                                                                  |    | Stror<br>Agre | • . |   | Stror<br>Disag | • . |
|--------------------------------------------------------------------------------------------------|----|---------------|-----|---|----------------|-----|
|                                                                                                  | NA | 1             | 2   | 3 | 4              | 5   |
| Today was productive and helpful                                                                 | NA | 1             | 2   | 3 | 4              | (5) |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1             | 2   | 3 | 4              | (3) |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1             | 2   | 3 | 0              | 5   |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1             | 2   | 3 | 4              | 3   |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1             | 2   | 3 | 4              | (3) |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1             | 2   | 3 | 4              | (5) |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1             | 2   | 3 | 4              | (5) |

2. Share your most important learning from today:

Capless explanations

3. How will you incorporate your learning from today in your instructional practice?

Using the model to redesign living carth

4. What supported your learning the most today?

Examples of lessons

5. What supported your learning the least today?

Varying grade level relevance, note that in Gode (GobJect bands would be great.

Clock Hours Survey

8/13/2018-

|       | 11 | - 1 | 1   | 12   | ١   |
|-------|----|-----|-----|------|-----|
| Name: | H  | eat | her | beas | ley |
|       |    |     |     |      |     |

Date: 8/15/2018

Name of Event: AST - Anacortes

#### 1. Please rate the following statements:

|                                                                                                  |    | Stror<br>Agre |   |   | Stror<br>Disag |          |
|--------------------------------------------------------------------------------------------------|----|---------------|---|---|----------------|----------|
|                                                                                                  | NA | 1             | 2 | 3 | 4              | 0        |
| Today was productive and helpful                                                                 | NA | 1             | 2 | 3 | 4              | 3        |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1             | 2 | 3 | 4              | <b>6</b> |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1             | 2 | 3 | 4              | 5        |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1             | 2 | 3 | 4              | (5)      |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1             | 2 | 3 | <b>(4)</b>     | 5        |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1             | 2 | 3 | 4              | 5        |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1             | 6 | 3 | 4              | 5        |

2. Share your most important learning from today:

· Practicing and preteaching student discourse.

- · Tools for facilitating Student talk.
- · Why to allow student misconceptions.
- 3. How will you incorporate your learning from today in your instructional practice?

I have a goal to plan the following additions to my science instruction.

to my science instruction:

Questioning (Planning a BPQ)

Adding more modeling (before, after) activities

- · Hand-outs about discourse and modeling
- · Making charts on Must Haves on a model.
- 5. What supported your learning the least today?

You all were a great teaching team, I have concrete tools to implement right away as well as a lot to Strive for in the future.

| Name: Tennifer Petter Clock Hours Survey                                                                                                          | Date:  | 81       | 15/   | 18   |       |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|-------|------|-------|------------|
| Name: OF THE                                                                                                                                      | Date   | 0 1      |       | 1.0  |       |            |
| Name of Event:                                                                                                                                    |        |          |       |      |       |            |
| 1. Please rate the following statements:                                                                                                          |        |          |       |      |       |            |
|                                                                                                                                                   |        | Stron    |       |      | Stron | • .        |
|                                                                                                                                                   |        | Agree    |       |      | Disag |            |
| Today was productive and helpful                                                                                                                  | NA (   | 10       | 2     | 3    | 4     | 5          |
| Today added to my growing set of practices related to                                                                                             | NA     |          |       |      | Ė     |            |
| Ambitious Science Teaching                                                                                                                        |        | 9        | 2     | 3    | 4     | 5          |
| Today helped me understand more about how to assess                                                                                               | NA     | 1        | (2)   | 3    | 4     | 5          |
| student thinking when I analyze student work                                                                                                      | ļ      |          |       |      |       |            |
| Today helped me develop more ways to elicit and support                                                                                           | NA     | (12)     | 2     | 3    | 4     | 5          |
| student discourse  Today helped me develop more ways to support students' in                                                                      | NA     |          |       |      |       | <u> </u>   |
| modeling science explanations                                                                                                                     | ,      | (1)      | 2     | 3    | 4     | 5          |
| Today helped me develop more ways to scaffold student                                                                                             | NA     |          | 2     | 3    | 4     | 5          |
| sense-making opportunities                                                                                                                        | 110    | - CN     | -     |      |       |            |
| Today helped me develop more ways to support students in developing evidence-based explanations                                                   | NA     | (1)      | 2     | 3    | 4     | 5          |
| developing evidence-based explanations                                                                                                            | 1      |          |       |      |       | 1          |
|                                                                                                                                                   |        |          |       |      |       |            |
| 2. Share your most important learning from today:                                                                                                 |        | 4        |       |      |       |            |
| The importance of model<br>Model is essential in sens                                                                                             | ing    | à/       | re    | VISI | 06    | 3 A        |
| Model is essential in sens                                                                                                                        | sem    | rocki    | 15.   |      |       |            |
| 3. How will you incorporate your learning from today in your inst                                                                                 | ructio | nal prac | tice? |      |       |            |
| Sx incorporate modeling in 1                                                                                                                      | My     | M        | 71.75 | >    |       |            |
| St in corporate modeling in the Back pocket questions  & Back pocket questions  & summary tables  4. What supported your learning the most today? |        |          |       |      |       |            |
| & Summary Tables                                                                                                                                  |        |          |       |      |       |            |
| 4. What supported your learning the most today?                                                                                                   |        |          |       |      |       |            |
| - Dactner discussion                                                                                                                              |        |          |       |      |       |            |
| - Planning time<br>- access to facilitators                                                                                                       |        |          |       |      |       |            |
| - access to tacilitators                                                                                                                          |        |          |       |      |       |            |
| 5. What supported your learning the least today?                                                                                                  |        |          |       |      |       | $\wedge$   |
| Gotta have Checkist h                                                                                                                             | 2000   | U        | ncl   | ea.r | -//   | rustrating |
| (but t                                                                                                                                            | hat    | 21       | OK    | ).)  | ,     | 0          |

Clock Hours Survey Name: Janet Heatvest Name of Event: 1. Please rate the following statements: Strongly Strongly Agree Disagree NA 1 5 3 5 NA Today was productive and helpful Today added to my growing set of practices related to NA 3 5 1 4 **Ambitious Science Teaching** Today helped me understand more about how to assess NA 5 1 student thinking when I analyze student work Today helped me develop more ways to elicit and support NA 4 5 1 student discourse NA Today helped me develop more ways to support students' in 5 1 modeling science explanations Today helped me develop more ways to scaffold student NA 3 5 4 1 sense-making opportunities Today helped me develop more ways to support students in NA 5 developing evidence-based explanations 2. Share your most important learning from today: I liked the format of the Summary Table 3. How will you incorporate your learning from today in your instructional practice? I plan to make "Back Pocket" ?'s so I am not wondering where to go next in my lesson.

4. What supported your learning the most today? The Big Idea / Phenomenon will direct my Unit Planning 5. What supported your learning the least today? I would like less Whole Group share out when the small group was already effective

Clock Hours Survey

| Name: | Kyle | Niekamp |  |
|-------|------|---------|--|
| _     | -    |         |  |

Date: 8/15/18

Name of Event: Ambiticas Science Training

#### 1. Please rate the following statements:

|                                                                                                  |    | Stror<br>Agre |     |   | Stror<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|---------------|-----|---|----------------|---|
|                                                                                                  | NA | 1             | (2) | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1             | 2   | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1             | (3) | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1             | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1             | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1             | (2) | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1             | 3   | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1             | 2   | 3 | 4              | 5 |

2. Share your most important learning from today:

strategies to help support student schence talk and discussion

3. How will you incorporate your learning from today in your instructional practice?

Planning our science units using ideas and strategies from 157

4. What supported your learning the most today?

Time to start planning an AST unit

5. What supported your learning the least today?

whole group share-onts following small oroup Share-cuts ... (we hear the same ideas multiple times)

Clock Hours Survey

| Clock Hours Survey          |       | 1    |      |
|-----------------------------|-------|------|------|
| Name: Boss Herndon-Schepper | Date: | 8/19 | 3/18 |
| Name of Event: AST          |       | 15   |      |

#### 1. Please rate the following statements:

|                                                                                                  | Stror<br>Agre |   |     |   | Stror<br>Disag | • . |
|--------------------------------------------------------------------------------------------------|---------------|---|-----|---|----------------|-----|
|                                                                                                  | NA            | 1 | 2   | 3 | 4              | 5   |
| Today was productive and helpful                                                                 | NA            | 1 | 2   | 3 | 4              | 5   |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA            | 1 | 2   | 3 | 4              | 5   |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA            | 1 | 2   | 3 | 4              | 5   |
| Today helped me develop more ways to elicit and support student discourse                        | NA            | 1 | (2) | 3 | 4              | 5   |
| Today helped me develop more ways to support students' in modeling science explanations          | NA            | 1 | 2   | 3 | 4              | 5   |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA            | 1 | 2   | 3 | 4              | 5   |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA            | 1 | 2   | 3 | 4              | 5   |

2. Share your most important learning from today:

Overall, building a unit around an anchoring event,

Pre-writing questions, building an explanation to the all

engagement to has increased my understanding.

3. How will you incorporate your learning from today in your instructional practice?

- Questingly improvements - teaching listening strategies - tying engagements to an event

4. What supported your learning the most today?

Modeled best practices

Good collaboration-from setting up positive culture

5. What supported your learning the least today?

My own fatigue, fragmented tunking

| Name: Shamely Sherwing Clock Hours Survey | Date: 8/15/18 |
|-------------------------------------------|---------------|
| Name of Event: CASTC                      | 5 P           |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |   |   | Strongly<br>Disagree |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|---|----------------------|---|
|                                                                                                  | NA | 1                 | 2 | 3 | 4                    | 5 |
| Today was productive and helpful                                                                 | NA | M                 | 2 | 3 | 4                    | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | (B)               | 2 | 3 | 4                    | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 0                 | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 0                 | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | (1)               | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA |                   | 2 | 3 | 4                    | 5 |

2. Share your most important learning from today:

your collabs

3. How will you incorporate your learning from today in your instructional practice? Fuch one fluence

4. What supported your learning the most today?

5. What supported your learning the least today?

Clock Hours Survey

|                  | L. Wauert      | Date: 8-15-2018 |
|------------------|----------------|-----------------|
| Name of Event: _ | CASTL training |                 |

#### 1. Please rate the following statements:

|                                                                                                  |                      | Stron |     |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----------------------|-------|-----|---|----------------|---|
|                                                                                                  | NA<br>NA<br>NA<br>NA | 1     | 2   | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA                   | 1     | (2) | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA                   | 1     | 2   | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA                   | 1     | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA                   | 1     | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA                   | 1     | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA                   | 1     | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA                   | 1     | (2) | 3 | 4              | 5 |

2. Share your most important learning from today:
We need to be patient with ourselves.

3. How will you incorporate your learning from today in your instructional practice?

I suspect I will mostly use it in 9th grade science, which

I'm not teaching this year. But I do think I can CASTLize

one or two units in my College Physics course.

4. What supported your learning the most today?

Time to work.

5. What supported your learning the least today?

The "Must Have" list activity was not adequately explained and really needed the full collection of unit activities, several of which we had skipped.

Clock Hours Survey

Date: 8/15/18

|                                                                                                                                                                             | Date: _              | ۶              | 3/19         | 5/18      | 5           |               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------|--------------|-----------|-------------|---------------|
| Name of Event: CASTL -> 3 Lays                                                                                                                                              |                      |                |              |           |             |               |
| 1. Please rate the following statements:                                                                                                                                    |                      |                |              |           |             |               |
|                                                                                                                                                                             |                      | Stron<br>Agree |              |           | Stron       |               |
|                                                                                                                                                                             | NA                   | 1              | 2            | 3         | 4           | 5             |
| Today was productive and helpful                                                                                                                                            | NA                   | 1              | 2            | 3         | 4           | 5             |
| Today added to my growing set of practices related to                                                                                                                       | NA                   |                | 2            | 3         | 4           | 5             |
| Ambitious Science Teaching                                                                                                                                                  |                      | (1)            | 2            | 3         | 4           | 3             |
| Today helped me understand more about how to assess student thinking when I analyze student work                                                                            | NA                   | 1              | 2            | 3         | 4           | 5             |
| Today helped me develop more ways to elicit and support student discourse                                                                                                   | NA                   | 1              | 2            | 3         | 4           | 5             |
| Today helped me develop more ways to support students' in modeling science explanations                                                                                     | NA                   | 1              | 2            | 3         | 4           | 5             |
| Today helped me develop more ways to scaffold student sense-making opportunities                                                                                            | NA                   | 1              | 2            | 3         | 4           | 5             |
| Today helped me develop more ways to support students in developing evidence-based explanations                                                                             | NA                   | 1              | 2            | 3         | 4           | 5             |
| Share your most important learning from today:  I faal much more comformation for a comformation from today:  Science Teaching from today:  Over whalmed because I realized | and                  | I              | fa           | al        | 14          | ss<br>startsn |
|                                                                                                                                                                             | record on the second | an Procession  |              |           |             |               |
| Many ways - primarily discourse that is productive improving student thin.  4. What supported your learning the most today?                                                 | ey<br>Ew             | nd<br>nd       | he           | lp G      | q -         | N             |
| 4. What supported your learning the most today?                                                                                                                             | J                    | 1              |              |           | 7           | 7             |
| What supported your learning the most today?  The wall-thought out of workshop and the extremal halfful facilitators                                                        | 100                  | Kno            | 55 I<br>W (a | on<br>dga | ot<br>abole | the an        |
| I can't think of any                                                                                                                                                        | as                   | pac            | 4 4          | tha       | tw          | asnt          |
| axtramal halaful:                                                                                                                                                           |                      |                |              |           |             |               |

Clock Hours Survey Name of Event: 1. Please rate the following statements: Strongly Strongly Disagree Agree 3 NA (5) 2 3 NA 1 Today was productive and helpful Today added to my growing set of practices related to NA (5) 1 2 3 **Ambitious Science Teaching** Today helped me understand more about how to assess NA (5) 1 2 3 4 student thinking when I analyze student work Today helped me develop more ways to elicit and support NA 5 1 student discourse Today helped me develop more ways to support students' in NA 5 4 1 2 3 modeling science explanations Today helped me develop more ways to scaffold student NA 1 2 4 3 sense-making opportunities Today helped me develop more ways to support students in NA 1 2 3 developing evidence-based explanations The importance of student talk to develop their sense-making thinking about science 2. Share your most important learning from today Con cepty processes 3. How will you incorporate your learning from today in your instructional practice? I fan to develop a unit based

AST model. In particular,

The supported your learning the most today? Collaboration w m

5. What supported your learning the least today?

Everything was greed

Collaboration for Ambitious Science Teaching and Learning Clock Hours Survey Name: Lawrence Lewis Date: Aug. 15,2018 Name of Event: CASTL 1. Please rate the following statements: Strongly Strongly Disagree Agree (1)NA 3 0 5 NA 2 3 Today was productive and helpful Today added to my growing set of practices related to NA (1)2 3 5 Ambitious Science Teaching NA Today helped me understand more about how to assess T 5 4 student thinking when I analyze student work Today helped me develop more ways to elicit and support NA (T) 5 2 3 student discourse Today helped me develop more ways to support students' in NA 1 2 3 4 5 modeling science explanations Today helped me develop more ways to scaffold student NA 2 4 5 3 sense-making opportunities Today helped me develop more ways to support students in NA 2 5 3 developing evidence-based explanations 2. Share your most important learning from today: Learning more about modeling, such using it for assessment purposes. 3. How will you incorporate your learning from today in your instructional practice? I'm going to try modeling for my first unit. I'm going to try to keep/maintain a Summany table, too.

4. What supported your learning the most today? The options of the different breakout sessions as well as the work time. The lunches helped a lot, too!

5. What supported your learning the least today? I suppose the "wagic bean" reading. I understand
The significance, but I would be liked to see
something from a Secondary perspective and/or
cultural experiences of Hispanic students since they are a large
percentage.

Clock Hours Survey

| Name: USa      | Hapel |        | Date: _   | august | 13-15 | 2018 |
|----------------|-------|--------|-----------|--------|-------|------|
| Name of Event: | CASTL | Summer | Bust Camp |        |       |      |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |   |   | Stror<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|---|----------------|---|
|                                                                                                  | NA | 1                 | 2 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | (1)               | 2 | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | Q                 | 2 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 0                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | (1)               | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 0                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | (1)               | 2 | 3 | 4              | 5 |

2. Share your most important learning from today:

I'm exacted about the summary Chart for unt planning.

Each of the whomas help me to cas on important ideas.

3. How will you incorporate your learning from today in your instructional practice?

I'm already planning changes in my first unit of instruction, using a midd for developing understanding.

4. What supported your learning the most today?

I appreciated the example: from chas room talk, class unit, and on O.A. unit.

5. What supported your learning the least today?

Clock Hours Survey

| Name: Gina Westich                     | Date: 8 (15) 18 |
|----------------------------------------|-----------------|
| Name of Event: CASTL - 3 Day Immersion | 12 <b>14</b>    |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |   |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|---|----------------|---|
|                                                                                                  | NA | 1                 | 2 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1                 | 2 | 3 | 4              | 5 |
| Today added to my growing set of practices related to Ambitious Science Teaching                 | NA | 0                 | 2 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | <b>(1)</b>        | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 0                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2 | 3 | 4              | 5 |

# 2. Share your most important learning from today:

How to start the planning process for a unit; then are the pieces fit together; Dont need entire unit to implement aspects-can do it about a lesson

- 3. How will you incorporate your learning from today in your instructional practice?
- · Will implement an orca unit in Biology designed with Scotts Muke Iteo
- o will implement mini unit on student talk lesson to set the classroom.

  4. What supported your learning the most today?

  Looking at examples, discussing with colleagues

  the year.
- 5. What supported your learning the least today?

All was helpful. Thank you everyone for this wonder ful experience

Clock Hours Survey

| Name: | Mar | lene | C | rossman |
|-------|-----|------|---|---------|
| -     |     |      |   |         |

Name of Event: Castle

1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |   |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|---|----------------|---|
|                                                                                                  | NA | 1*                | 2 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1                 | 2 | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA |                   | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA |                   | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2 | 3 | 4              | 5 |

2. Share your most important learning from today:

3. How will you incorporate your learning from today in your instructional practice?

There is so much to Choose from But 1 will try and prix 1 thing to implement.

4. What supported your learning the most today? Teacher - presenters sharing how they started to apply them learning is

5. What supported your learning the least today?

will try and price 1 thing to implement,

at supported your learning the most today?

eacher - presenters sharing how they started to

apply their learning:

there was nothing that detracted from my

learning. Everything was helpful - including

breaks, wonderful food at lunch time

and often teachers sharing their explemes!

|                                                                                                                                                                                                                                                                     | Clock Hours Survey                                                                              |     |       | 1     | /          | 5835  |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----|-------|-------|------------|-------|-----|
| Name: Anne McGreeuy Date: 8/15/18  Name of Event: CASTL                                                                                                                                                                                                             |                                                                                                 |     |       |       |            |       |     |
| Name. 1-Time Technology                                                                                                                                                                                                                                             |                                                                                                 |     |       |       |            |       |     |
| Nan                                                                                                                                                                                                                                                                 | ne of Event:                                                                                    |     |       |       |            |       |     |
| 1.                                                                                                                                                                                                                                                                  | Please rate the following statements:                                                           |     |       |       |            |       |     |
|                                                                                                                                                                                                                                                                     |                                                                                                 |     | Stror | gly   |            | Stron | gly |
|                                                                                                                                                                                                                                                                     |                                                                                                 |     | Agre  |       |            | Disag | ree |
|                                                                                                                                                                                                                                                                     |                                                                                                 | NA  | 1     | 2     | 3          | 4     | 5   |
|                                                                                                                                                                                                                                                                     | Today was productive and helpful                                                                | NA  | (1)   | 2     | 3          | 4     | 5   |
|                                                                                                                                                                                                                                                                     | Today added to my growing set of practices related to                                           | NA  | 1     | (2)   | 3          | 4     | 5   |
|                                                                                                                                                                                                                                                                     | Ambitious Science Teaching                                                                      |     | 1     | 6     |            |       |     |
|                                                                                                                                                                                                                                                                     | Today helped me understand more about how to assess                                             | NA  | (1)   | 2     | 3          | 4     | 5   |
|                                                                                                                                                                                                                                                                     | student thinking when I analyze student work                                                    | NA  | _     |       |            |       |     |
|                                                                                                                                                                                                                                                                     | Today helped me develop more ways to elicit and support student discourse                       | IVA | 1     | (2)   | 3          | 4     | 5   |
|                                                                                                                                                                                                                                                                     | Today helped me develop more ways to support students' in                                       | NA  | 1     | 2     | ,          | 4     | _   |
|                                                                                                                                                                                                                                                                     | modeling science explanations                                                                   |     | 1     | 2     | 3          | 4     | 5   |
|                                                                                                                                                                                                                                                                     | Today helped me develop more ways to scaffold student                                           | NA  | 1     | (2)   | 3          | 4     | 5   |
|                                                                                                                                                                                                                                                                     | sense-making opportunities                                                                      | NA  |       |       |            |       |     |
|                                                                                                                                                                                                                                                                     | Today helped me develop more ways to support students in developing evidence-based explanations | IVA | 1     | 2     | (3)        | 4     | 5   |
|                                                                                                                                                                                                                                                                     | geveloping evidence based explanations                                                          |     | U     |       |            |       |     |
|                                                                                                                                                                                                                                                                     | Tearning the modeling p                                                                         | roc | ess   | er er |            |       |     |
| 3. How will you incorporate your learning from today in your instructional practice?  I instend to start by identifying the Biz Ideas and then creating and implementing some modeling activities into my classes.  4. What supported your learning the most today? |                                                                                                 |     |       |       |            |       |     |
|                                                                                                                                                                                                                                                                     | imodeling activities and in                                                                     | yc  | LO.   | yes   | <b>=</b> , |       |     |
| 4.                                                                                                                                                                                                                                                                  | What supported your learning the most today?                                                    | +   | 1     | 1     |            | 4     |     |
| Seeing examples of other teacher's tools and modeling assignments.                                                                                                                                                                                                  |                                                                                                 |     |       |       |            |       |     |
| 5.                                                                                                                                                                                                                                                                  | What supported your learning the least today?                                                   |     |       |       |            |       |     |
|                                                                                                                                                                                                                                                                     | A little too much down time                                                                     | ci  | the   | af    | Heri       | Wor   | lon |
|                                                                                                                                                                                                                                                                     | 8/15.                                                                                           |     |       | U     |            |       |     |

Clock Hours Survey

| Name: Shannan Fath                       | Date: 9-15-18 |
|------------------------------------------|---------------|
| Name of Event: <u>CASTL</u>              |               |
| 1. Please rate the following statements: |               |

|                                                                                                  |    | Strongly<br>Agree |   |   | Strongly<br>Disagree |       |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|---|----------------------|-------|
|                                                                                                  | NA | (1)               | 2 | 3 | 4                    | (A)   |
| Today was productive and helpful                                                                 | NA | (1)               | 2 | 3 | 4                    | (III) |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA |                   | 2 | 3 | 4                    |       |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1                 | 2 | 3 | 4                    |       |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2 | 3 | 4                    |       |
| Today helped me develop more ways to support students' in modeling science explanations          | NA |                   | 2 | 3 | 4                    |       |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA |                   | 2 | 3 | 4                    |       |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2 | 3 | 4                    |       |

2. Share your most important learning from today: I learned a 10t from experiencing the AST process and making sure I make student learning equitable and visible.

3. How will you incorporate your learning from today in your instructional practice? I am planning to use AST science created materials for our second grade science units.

4. What supported your learning the most today?

All of the visuals and hards on purhcipation were very benefical

5. What supported your learning the least today?

I felt very engaged

Clock Hours Survey

| Name: Hannah Smith          | Date: 8/13-15 |
|-----------------------------|---------------|
| Name of Event: <u>CASTL</u> |               |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |   | Stror<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|----------------|---|
|                                                                                                  | NA | (1)92             | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | P 2               | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1 2               | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1 (2)             | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1 (2)             | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1 2               | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1 2               | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1 (2)             | 3 | 4              | 5 |

2. Share your most important learning from today:

Phenomena & equity ideas

3. How will you incorporate your learning from today in your instructional practice?

REVENDING OUT FIRST UNIT WITH SUMMERY

TODGE, discussions, Student talk.

4. What supported your learning the most today?
Having time to hear how AST looks in the
Classroomm (specific-summary table). Having time
to collaborate allowed me to really fush out ideas

5. What supported your learning the least today?
Not having much time to collaborate
on monday.

Clock Hours Survey

| Name: Grea Bachwaier Clock Hours Survey Date: 8/5/2018                                                        |                                                                                                  |         |          |       |   |       |   |     |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------|----------|-------|---|-------|---|-----|
| Nam                                                                                                           | Name: Greg Bachweier Date: 8/15/2019  Name of Event: CASTL Summer Institute                      |         |          |       |   |       |   |     |
| rvani                                                                                                         | Please rate the following statements:                                                            |         |          |       |   |       |   |     |
|                                                                                                               |                                                                                                  |         | Stron    |       |   | Stron |   |     |
|                                                                                                               |                                                                                                  | NA      | 1        | 2     | 3 | 4     | 5 | -   |
|                                                                                                               | Today was productive and helpful                                                                 | NA      | 1        | 2     | 3 | 4     | 5 |     |
|                                                                                                               | Today added to my growing set of practices related to Ambitious Science Teaching                 | NA      | 1        | 2     | 3 | 4     | 5 |     |
|                                                                                                               | Today helped me understand more about how to assess student thinking when I analyze student work | NA      | 1        | 2     | 3 | 4     | 5 |     |
|                                                                                                               | Today helped me develop more ways to elicit and support student discourse                        | NA      | 1        | (2)   | 3 | 4     | 5 |     |
|                                                                                                               | Today helped me develop more ways to support students' in modeling science explanations          | NA      | 1        | (2)   | 3 | 4     | 5 | ST. |
|                                                                                                               | Today helped me develop more ways to scaffold student sense-making opportunities                 | NA      |          | 2     | 3 | 4     | 5 |     |
|                                                                                                               | Today helped me develop more ways to support students in developing evidence-based explanations  | NA      | 1        | 2     | 3 | 4     | 5 |     |
| 2. Share your most important learning from today: We are not expected to have entire unit planned right away. |                                                                                                  |         |          |       |   |       | _ |     |
| 3.                                                                                                            | How will you incorporate your learning from today in your instr                                  | ruction | nal prac | tice? |   |       |   |     |
| Work with my colleanges in a mor<br>informed manner as we develop &                                           |                                                                                                  |         |          |       |   |       |   |     |
| (                                                                                                             | What supported your learning the most today?                                                     |         |          |       |   |       |   | •   |
| Seeing the unit come to a close                                                                               |                                                                                                  |         |          |       |   |       |   |     |
| (Japles explanation example, Summay table) 5. What supported your learning the least today?                   |                                                                                                  |         |          |       |   |       |   |     |
|                                                                                                               | MBCommunicated/Unstructured afternoon fine                                                       |         |          |       |   |       |   |     |

Clock Hours Survey

| Name: Kye Swanson    | Date: 8-15-18 |
|----------------------|---------------|
| Name of Event: CASTL |               |

#### 1. Please rate the following statements:

|                                                                                                  |    | Stror<br>Agre |   |   | Stror<br>Disag | • . |
|--------------------------------------------------------------------------------------------------|----|---------------|---|---|----------------|-----|
|                                                                                                  | NA | 1             | 2 | 3 | 4              | 5   |
| Today was productive and helpful                                                                 | NA | 1             | 2 | 3 | 4              | 5,  |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1             | 2 | 3 | 4              | 5   |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1             | 2 | 3 | 4              | 5   |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1             | 2 | 3 | 4 (            | 5   |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1             | 2 | 3 | 4              | 5   |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1             | 2 | 3 | 4              | 5   |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1             | 2 | 3 | 4 (            | 5   |

2. Share your most important learning from today:

So many ways to support student thinking. Modeling sticks with me the most

3. How will you incorporate your learning from today in your instructional practice?

Modeling Student talk

4. What supported your learning the most today?

Time to think and work with press.

5. What supported your learning the least today?

A maybe unstructured time

| Clock Hours Survey                                                                               |         |       | •      |          | /              |         |
|--------------------------------------------------------------------------------------------------|---------|-------|--------|----------|----------------|---------|
| Name: PANL PIHL                                                                                  | Date: _ |       | 8/1    | 5/       | 20             | 18      |
| Name: PANL PIHL  Name of Event: AMBITIOUS SciEnce 7                                              | FA      | cHq   | ~ G    | _(       | CP             | STL)    |
| 1. Please rate the following statements:                                                         |         |       |        |          |                |         |
|                                                                                                  |         | Stron |        |          | Stron<br>Disag | - 1     |
|                                                                                                  | NA      | 1     | 2      | 3        | 4              | 5       |
| Today was productive and helpful                                                                 | NA      | 0     | 2      | 3        | 4              | 5       |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA      | 1     | 2      | 3        | 4              | 5       |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA      | 1     | 2      | 3        | 4              | 5       |
| Today helped me develop more ways to elicit and support student discourse                        | NA      |       | E)     | 3        | 4              | 5       |
| Today helped me develop more ways to support students' in modeling science explanations          | NA      | 1     | 2      | 3        | 4              | 5       |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA      | 0     | 2      | 3        | 4              | 5       |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA      | 1     | 2      | 3        | 4              | 5       |
| 2. Share your most important learning from today:  STRUCTURING UNITS T  LEARNING USING AST       | ·o      | Sup   | porte. | t<br>ctu | R              | -       |
| 3. How will you incorporate your learning from today in your inst                                |         |       |        |          |                |         |
| 1 will use -ce 1                                                                                 |         |       |        |          |                | ST      |
| IN LESSON & UNIT                                                                                 | PCP     | m~/   | ~6     | 1        | ~              |         |
| MY CRASSES                                                                                       |         |       |        |          |                |         |
| 4. What supported your learning the most today?                                                  |         |       |        | _        | , 1            | _       |
| EXAMPLES & ACTIVITI                                                                              | 22      | 4     | 1AT    | S        | Hou            | - eD    |
| HOW CEARNING CAN BE                                                                              | 2       | itru  | 1 CT   | · Re     | Ŋ              |         |
| 5. What supported your learning the least today?                                                 | ND (    | lm    | 10     | He       | $\sim$ on      | elach ! |
| 5. What supported your learning the least today?                                                 |         | •     | / "    | 12       |                |         |

Clock Hours Survey

| Name: Jennifer Selng                     | Date: 8/15/18 |
|------------------------------------------|---------------|
| Name of Event:CAST_L                     | /             |
| 1. Please rate the following statements: | whoops.       |

|                                                                                                  |    | Stror<br>Agre | · . |   | · Stron<br>Disag |            |
|--------------------------------------------------------------------------------------------------|----|---------------|-----|---|------------------|------------|
|                                                                                                  | NA | 1             | 21/ | 3 | 4                | 5          |
| Today was productive and helpful                                                                 | NA | 1             | (2) | 3 |                  | 5          |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1             | 2   | 3 | <b>X</b>         | 5          |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1             | 2   | 3 | Ø                | 5          |
| Today helped me develop more ways to elicit and support student discourse                        | NA | (1)           | 2   | 3 | 4                | <b>(S)</b> |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1             | (3) | 3 | 4                | 5          |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1             | 2   | 3 | 4                | 5          |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1             | 0   | 3 | 4                | 5          |

2. Share your most important learning from today: Collaboration is paramount. It makes you a better teacher; and relieves stress.

3. How will you incorporate your learning from today in your instructional practice? -models (pre/post); discource

4. What supported your learning the most today? - collaboration! Notice a theme?

5. What supported your learning the least today?

Fatigue. i

Clock Hours Survey

| Name: CARLY BOYD            | Date: 15 August 2018 |
|-----------------------------|----------------------|
| Name of Event: <u>CASTL</u> |                      |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |     |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|-----|---|----------------|---|
|                                                                                                  | NA | 1                 | (2) | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1                 | 2   | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1                 | 2   | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1                 | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2   | 3 | 4              | 5 |

2. Share your most important learning from today: How to accurately put together a summary table of the use of the sticky-note protocol

3. How will you incorporate your learning from today in your instructional practice

By intential intentionally planning activities to have my students get the most out of a curit it to check myself to be sure lim not doing activities just to do them.

4. What supported your learning the most today?

Breakout Sessions.

5. What supported your learning the least today?

not enough thinking time for some of the pair shares

| Name: Chad Palmiter  | Clock Hours Survey Date: 8/15/18 |
|----------------------|----------------------------------|
| Name of Event: CASTL |                                  |

#### 1. Please rate the following statements:

|                                                                                                  | Strong<br>Agree |   |     |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|-----------------|---|-----|---|----------------|---|
|                                                                                                  | NA              | 1 | 2   | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA              | 1 | (2) | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA              | 0 | 2   | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA              | 1 | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA              | 0 | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA              | 1 | 3   | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA              | 1 | 0   | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA              | 1 | (2) | 3 | 4              | 5 |

2. Share your most important learning from today: I learned about / thought about / planned a number of species helpful strategier and techniques for students to talk about their

3. How will you incorporate your learning from today in your instructional practice?

I will use at least 4 new talk stratefies findleding sentence stems talk techniques, and teacher facilitator strategies)

4. What supported your learning the most today?

Handouts with ideas, STEM Teaching page, AST veb page

5. What supported your learning the least today?

It felt slow at times. I teach physics, so more examples in my area would be nize to see.

Clock Hours Survey

| Name: Margaret A. Mrosla | Date: Avz 13-15 |
|--------------------------|-----------------|
| Name of Event:CASTL      |                 |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |                  |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|------------------|---|----------------|---|
|                                                                                                  | NA | 1                 | 2                | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1                 | 2                | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1                 | 2                | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1,                | 2                | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2                | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2                | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 2                | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | $\left(2\right)$ | 3 | 4              | 5 |

2. Share your most important learning from today:

Remembering to pause and Mink about all contributions from students to check for valueate. And working an artific or find my 15th unit!

3. How will you incorporate your learning from today in your instructional practice?

In prepared to start planing my 1st unt cutered around a phenomenan and I will go use the resources found here to help with student - student discourse.

4. What supported your learning the most today?

The resources parided + the time to collaborate of peers.

5. What supported your learning the least today?

Nothing in particular.

Clock Hours Survey

| Name: Scott Coulan             | Date: <u>8/15/LR</u> |
|--------------------------------|----------------------|
| Name of Event: CASTL Boot Coup |                      |

#### 1. Please rate the following statements:

|                                                                                                  |    | Stron<br>Agree | - • |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|----------------|-----|---|----------------|---|
|                                                                                                  | NA | 1              | 2   | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | (1)            | 2   | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | (1)            | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | <b>(1)</b>     | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1              | 2   | 3 | 4              | 5 |

2. Share your most important learning from today:

I gained a deeper understanding of the for AFT practices

3. How will you incorporate your learning from today in your instructional practice?

I will develop units of study armal phenomena and provide opportunitoes for students to enjoye in modeling

4. What supported your learning the most today?

The to reflect, plan and collaborate of collegues

5. What supported your learning the least today?

It was great!

Clock Hours Survey

| Name: Frieda Fuhrmann        | Date: 08/05/18 |
|------------------------------|----------------|
| Name of Event: CASTL - NWESP |                |

#### 1. Please rate the following statements:

|                                                                                                  |    | 1 | Strongly<br>Agree |   |   | Strongly<br>Disagree |  |
|--------------------------------------------------------------------------------------------------|----|---|-------------------|---|---|----------------------|--|
|                                                                                                  | NA |   | 2                 | 3 | 4 | 5                    |  |
| Today was productive and helpful                                                                 | NA | 1 | 2                 | 3 | 4 | 5                    |  |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1 | 2                 | 3 | 4 | 5                    |  |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1 | 2                 | 3 | 4 | 5                    |  |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1 | 2                 | 3 | 4 | 5                    |  |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1 | 2                 | 3 | 4 | 5                    |  |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1 | <b>(2)</b>        | 3 | 4 | 5                    |  |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1 | 2                 | 3 | 4 | 5                    |  |

Modeling is a process used to show your learning over time > not a static, one time "build a model." Thanks Jamie!

3. How will you incorporate your learning from today in your instructional practice?

We're working together to connect our activities to phenomenon - using this as a metric for whether our activities will be

4. What supported your learning the most today?

Breakout sessions combined helpful, engaging, relevant W/ team planning time.

5. What supported your learning the least today?

story would be a waste of time, but it led a great discussion about seating charts/

Name: Chelsie Webb Date: 8/15/18

Name of Event: AST / CASTL

#### 1. Please rate the following statements:

|                                                                                                  |    | Stron<br>Agree |   |   | Strongly<br>Disagree |   |
|--------------------------------------------------------------------------------------------------|----|----------------|---|---|----------------------|---|
|                                                                                                  | NA | 1              | 2 | 3 | 4                    | 5 |
| Today was productive and helpful                                                                 | NA | (1)            | 2 | 3 | 4                    | 5 |
| Today added to my growing set of practices related to Ambitious Science Teaching                 | NA | 1              | 2 | 3 | 4                    | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1              | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1              | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to support students in modeling science explanations           | NA | 1              | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA |                | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1              | 2 | 3 | 4                    | 5 |

| 2. | Share your most important learning from                  | today |     | 4    |
|----|----------------------------------------------------------|-------|-----|------|
|    | Share your most important learning from Student Houseung | 5     | the | must |
|    | 510100 G G G G G                                         |       |     |      |
|    | important!                                               |       |     |      |
|    | Criq C                                                   |       |     |      |

3. How will you incorporate your learning from today in your instructional practice?

Starting small- summary table for one little phenomenon.

4. What supported your learning the most today?

Talking wy others & seeing examples

5. What supported your learning the least today?

Not-having the AST book to rufer to was frustrating. Also the "gotta have its" was confusing.

Clock Hours Survey

|                |       | Clock Hours Survey |                |             |
|----------------|-------|--------------------|----------------|-------------|
| Name: Aluxis   | MacNe | Nin                | Date: Quq. 15- | - 2018      |
| Name of Event: | CASTL | Bootcamp           |                | <del></del> |

1. Please rate the following statements:

|                                                                                                  |    | Stron<br>Agree | ~ · |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|----------------|-----|---|----------------|---|
|                                                                                                  | NA | 1              | 2   | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | (1)            | 2   | 3 | 4              | 5 |
| Today added to my growing set of practices related to Ambitious Science Teaching                 | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1              | (2) | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1              | 2   | 3 | 4              | 5 |

| 2. | Share your most impo | rtant learning fro | m <sub>,</sub> toda | y:          |
|----|----------------------|--------------------|---------------------|-------------|
|    | helpiner             | others             | to                  | collaborate |

3. How will you incorporate your learning from today in your instructional practice?

I will continue to develop unit scaffolds

4. What supported your learning the most today?



5. What supported your learning the least today?



|     | Clock Hours Survey                                                                                      |                       |                   |                      |      |                |      |     |
|-----|---------------------------------------------------------------------------------------------------------|-----------------------|-------------------|----------------------|------|----------------|------|-----|
| Nam |                                                                                                         |                       |                   |                      | ,# J | 8              |      |     |
| Nam | ne of Event: Ambitions Science Teaching                                                                 | 1-                    | CA                | STL                  |      |                |      |     |
| 1.  | Please rate the following statements:                                                                   |                       |                   |                      |      |                |      |     |
|     |                                                                                                         |                       | Stron<br>Agree    |                      |      | Stron<br>Disag | 1    |     |
|     |                                                                                                         | NA                    | 1                 | 2                    | 3    | 4              | 5    |     |
|     | Today was productive and helpful                                                                        | NA                    | (1)               | 2                    | 3    | 4              | 5    |     |
|     | Today added to my growing set of practices related to Ambitious Science Teaching                        | NA                    | 1                 | 2                    | 3    | 4              | 5    |     |
|     | Today helped me understand more about how to assess student thinking when I analyze student work        | NA                    | 1                 | 2                    | 3    | 4              | 5    |     |
|     | Today helped me develop more ways to elicit and support student discourse                               | NA                    | 1                 | 2                    | 3    | 4              | 5    |     |
|     | Today helped me develop more ways to support students' in modeling science explanations                 | NA                    | 1                 | 2                    | 3    | 4              | 5    |     |
|     | Today helped me develop more ways to scaffold student sense-making opportunities                        | NA                    | 1                 | 2                    | 3    | 4              | 5    |     |
|     | Today helped me develop more ways to support students in developing evidence-based explanations         | NA                    | 1                 | (2)                  | 3    | 4              | 5    |     |
| 2.  | Share your most important learning from today: Thinking through a phenomenon we took to practice of AST | th c                  | ollege            | gnes                 | s d  | ap             | plyn | rz, |
| 3.  | How will you incorporate your learning from today in your instr<br>SD Way ways tal                      | ruction<br>K /<br>C ( | ass<br>ass<br>las | tice?<br>?CSS<br>(VX | mei  | ex             | per  | tre |
| 4.  | What supported your learning the most today?  dww.ping Models                                           |                       |                   |                      |      |                |      |     |

5. What supported your learning the least today?

15 minutes to process eguity with

Clock Hours Survey Book Camp Name: James yous Name of Event: \_\_\_\_ C AST L

1. Please rate the following statements:

|                                                                                                  |    | Stron |    |   | Stror<br>Disag | • |
|--------------------------------------------------------------------------------------------------|----|-------|----|---|----------------|---|
|                                                                                                  | NA | 1     | 2  | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | X     | 2  | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | ×     | 2  | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | de.   | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1     | 30 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | *     | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1     | X  | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1>>   | 2  | 3 | 4              | 5 |

2. Share your most important learning from today:

butstinding exportanity for collaboration with Deers!

3. How will you incorporate your learning from today in your instructional practice?

I plan on watinizing my work with AST practice in my classroom.

4. What supported your learning the most today?

Time

5. What supported your learning the least today?

Breaks- needer, but didn't necessor. G Expant my learning.

Clock Hours Survey

| Name: Julie Ross     | Date: 8-15-2018 |
|----------------------|-----------------|
| Name of Event: CASTL |                 |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |   |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|---|----------------|---|
|                                                                                                  | NA | 1                 | 2 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1                 | 2 | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 13                | 2 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1)                | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2 | 3 | 4              | 5 |

- 2. Share your most important learning from today:
  - planning ahead specific questions to elicit evidence based responses
  - identifying meaningful anchor phenomena
- 3. How will you incorporate your learning from today in your instructional practice?
  - planned ahead questions
  - ilentify phenomena for visits
- 4. What supported your learning the most today?
  - scatfolded learning examples to walk through as a student

  - planning time with collaboration
- 5. What supported your learning the least today?

no complaints

Clock Hours Survey

| Name: JOCELYN ZOGER | Date: 8.15.18 |
|---------------------|---------------|
| Name of Event:      |               |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |    |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|----|---|----------------|---|
|                                                                                                  | NA | 红                 | 2  | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | (1)               | 2  | 3 | 4              | 5 |
| Today added to my growing set of practices related to Ambitious Science Teaching                 | NA | 1                 | 2  | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1                 | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1 (               | 2) | 3 | 4              | 5 |

|    |       |      |      |           |          | _    |        |
|----|-------|------|------|-----------|----------|------|--------|
| 2. | Share | vour | most | important | learning | from | today: |

| • | lesson planning | 5 teps |
|---|-----------------|--------|
|   | modeling.       | V      |

3. How will you incorporate your learning from today in your instructional practice?

with be vine sca folding porter to illicit students' precarceptions and

4. What supported your learning the most today?

facilitators

5. What supported your learning the least today?

book

Clock Hours Survey

| e of Event: CASTL                                                                                                                                                                                                 |      |       |            |     |                |              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|------------|-----|----------------|--------------|
| Please rate the following statements:                                                                                                                                                                             |      | Stron |            |     | Stron<br>Disag | 1            |
|                                                                                                                                                                                                                   | NA   | (1)   | 2          | 3   | 4              | (3)          |
| Today was productive and helpful                                                                                                                                                                                  | NA   | (1)   | 2          | 3   | 4              | 5            |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching                                                                                                                               | NA   |       | 2          | 3   | 4              | 5            |
| Today helped me understand more about how to assess student thinking when I analyze student work                                                                                                                  | NA   | 1     | 2          | (3) | 4              | 5            |
| Today helped me develop more ways to elicit and support student discourse                                                                                                                                         | NA   | 1     | (2)        | 3   | 4              | 5            |
| Today helped me develop more ways to support students' in modeling science explanations                                                                                                                           | NA   | (1)   | 2          | 3   | 4              | 5            |
| Today helped me develop more ways to scaffold student sense-making opportunities                                                                                                                                  | NA   |       | 2          | 3   | 4              | 5            |
| Today helped me develop more ways to support students in developing evidence-based explanations                                                                                                                   | NA   | (1)   | 2          | 3   | 4              | 5            |
| Using phenomenon & summer multiple lessons together of make more complex connec                                                                                                                                   | Pi   | Wh.   | Str        | der | 215            | 10           |
|                                                                                                                                                                                                                   |      |       |            |     |                |              |
| a phenomena based unit  Summary table to Comments  What supported your learning from today in your institution to a phenomena based unit  Summary table to Comments  What supported your learning the most today? | ve C | + -   | the        | le  | NOV            | w.           |
| Time to work with my co-workers!                                                                                                                                                                                  | te   | 'am   | 10         | on+ | ent            | - UI         |
|                                                                                                                                                                                                                   |      |       |            |     |                |              |
| What supported your learning the least today?  Jallery Walk of posters  was hard to see how                                                                                                                       | mit  | JW    | tea<br>all | ach | ers.           | . It<br>Lonr |

| Name: Lane Hoback Clock Hours Survey                                                                                                                                                                               | ate: _ | 2              | 15 | 1  | '8             |   |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------|----|----|----------------|---|--|--|
| Name of Event: CASTI                                                                                                                                                                                               |        |                |    |    |                |   |  |  |
| 1. Please rate the following statements:                                                                                                                                                                           |        |                |    |    |                |   |  |  |
|                                                                                                                                                                                                                    |        | Stron<br>Agree |    |    | Stron<br>Disag |   |  |  |
|                                                                                                                                                                                                                    | NA     | 1              | 2  | 3  | 4              | 5 |  |  |
| Today was productive and helpful                                                                                                                                                                                   | NA     | *              | 2  | 3  | 4              | 5 |  |  |
| Today added to my growing set of practices related to Ambitious Science Teaching                                                                                                                                   | NA     | ×              | 2  | 3  | 4              | 5 |  |  |
| Today helped me understand more about how to assess student thinking when I analyze student work                                                                                                                   | NA     | ×              | 2  | 3  | 4              | 5 |  |  |
| Today helped me develop more ways to elicit and support student discourse                                                                                                                                          | NA     | X              | 2  | 3  | 4              | 5 |  |  |
| Today helped me develop more ways to support students' in modeling science explanations                                                                                                                            | NA     | 1              | X  | 3  | 4              | 5 |  |  |
| Today helped me develop more ways to scaffold student sense-making opportunities                                                                                                                                   | NA     | 1              | 2  | 13 | 4              | 5 |  |  |
| Today helped me develop more ways to support students in developing evidence-based explanations                                                                                                                    | NA     | 1              | ×  | 3  | 4              | 5 |  |  |
| 2. Share your most important learning from today:  Tempeters to thansfer responsibility  test question in class to students.  3. How will you incorporate your learning from today in your instructional practice? |        |                |    |    |                |   |  |  |
| More formative assessing the most today?  1. What supported your learning the most today?  Discussion w/other                                                                                                      |        |                |    |    |                |   |  |  |
|                                                                                                                                                                                                                    |        |                |    |    |                |   |  |  |

| <b>Collaboration for Ambitious Scien</b> | nce Teaching and Learning |
|------------------------------------------|---------------------------|
|------------------------------------------|---------------------------|

| land the total        | Clock Hours Survey |       | 8/15/2018 |
|-----------------------|--------------------|-------|-----------|
| Name:                 | <del></del>        | Date: | 1/10/2018 |
| Name of Event: CAST 2 |                    | _     |           |

1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |   |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|---|----------------|---|
|                                                                                                  | NA | 1                 | 2 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1                 | 2 | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 0                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | D                 | 2 | 3 | 4              | 5 |

2. Share your most important learning from today:
TO wark it cut through Small Chunks and work what
is managable.

3. How will you incorporate your learning from today in your instructional practice?

I'm Starting 5 may with Sentence Stems and models

4. What supported your learning the most today?

Time to talkit and work without were

Clock Hours Survey Name: \_\_\_\_\_ Name of Event:

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |   |   | Stror<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|---|----------------|---|
|                                                                                                  | NA | 1                 | 2 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1                 | 2 | 3 | 4              | 8 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA |                   | 2 | 3 | 4              | 9 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA |                   | 2 | 3 | 4              | 0 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 2 | 3 | 4              | 3 |
| Today helped me develop more ways to support students in modeling science explanations           | NA | 1                 | 2 | 3 | 4              | 0 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | î                 | 2 | 3 | 4              | 9 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2 | 3 | 4              |   |

2. Share your most important learning from today: How important it is to coach students on discourse when discussing in small and whole group settings.

3. How will you incorporate your learning from today in your instructional practice?

I am planning on working with my teather partner to use summary thanks to go along with my science activities in our 1st grade class rooms.

4. What supported your learning the most today?

Having time to work w/ my teaching partner and start initial unit planning

Clock Hours Survey

| ame: Nark DeRew                                                                                  | Date: _ | 8        | 115/1       | 8   |                |   |
|--------------------------------------------------------------------------------------------------|---------|----------|-------------|-----|----------------|---|
| me of Event:CA5¬L                                                                                |         |          |             |     |                |   |
| Please rate the following statements:                                                            |         |          |             |     |                |   |
|                                                                                                  |         | Stron    |             |     | Stron<br>Disag |   |
|                                                                                                  | NA      | 1        | 2           | 3   | 4              | 5 |
| Today was productive and helpful                                                                 | NA      | 1        | (2)         | 3   | A              | 5 |
| Today added to my growing set of practices related to Ambitious Science Teaching                 | NA      | 1        | <b>7</b> 2) | 3   | 8              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA      | 1        | 2           | 3   | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA      | 1        | 2           | 3   | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA      | 1        | 2           | 3   | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA      | Đ        | 2           | 3   | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA      | 1        | 2           | 3   | 4              | 5 |
| Share your most important learning from today:  Use of models and the                            | יר אי   | n6 or    | tare        | - 4 |                |   |
| How will you incorporate your learning from today in your instr                                  | uction  | ial prad | ctice?      |     |                |   |
| Begin to Create concepts and prouds                                                              | ೬ು      | 4Ld      | m           | who | ret            |   |
| What supported your learning the most today?                                                     |         |          |             |     |                |   |
| Convisations with poers for                                                                      | ~       | rtle     | d           | Jak | i de           |   |
| . What supported your learning the least today?                                                  |         |          |             |     |                |   |

| Name: Colleen Burrows Date: August 15, 20 |                                                                                                  |        |          |       |      |     |     |  |  |
|-------------------------------------------|--------------------------------------------------------------------------------------------------|--------|----------|-------|------|-----|-----|--|--|
| Name of Event: CAST Training.             |                                                                                                  |        |          |       |      |     |     |  |  |
| 1. Please rate the following statements:  |                                                                                                  |        |          |       |      |     |     |  |  |
|                                           | Strongly Strong<br>Agree Disagre                                                                 |        |          |       |      |     |     |  |  |
|                                           |                                                                                                  | NA     | 1        | 2     | 3    | 4   | 5   |  |  |
|                                           | Today was productive and helpful                                                                 | NA     | (1)      | 2     | 3    | 4   | 5   |  |  |
|                                           | Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA     | 1        | 2     | 3    | 4   | 5   |  |  |
|                                           | Today helped me understand more about how to assess student thinking when I analyze student work | NA     | 1        | 2     | 3    | 4   | 5   |  |  |
| 21                                        | Today helped me develop more ways to elicit and support student discourse                        | NA     | 1        | 2     | 3    | 4   | 5   |  |  |
|                                           | Today helped me develop more ways to support students' in modeling science explanations          | NA     | 1        | 2     | 3    | 4   | 5   |  |  |
|                                           | Today helped me develop more ways to scaffold student sense-making opportunities                 | NA     | 1        | 2     | 3    | 4   | 5   |  |  |
|                                           | Today helped me develop more ways to support students in developing evidence-based explanations  | NA     | 1        | 2     | 3    | 4   | 5   |  |  |
| 2.                                        | Share your most important learning from today: Using the summary charks in Student reflection:   | ρl     | unniv    | 19    | an   | d 1 | ۲   |  |  |
| 3.                                        | How will you incorporate your learning from today in your instr                                  | uction | nal prac | tice? |      |     |     |  |  |
|                                           | - Discussion tools                                                                               |        |          |       |      |     |     |  |  |
|                                           | - modeling + sunnery cl                                                                          | 100    | 13       |       |      |     |     |  |  |
| 4.                                        | What supported your learning the most today?                                                     |        |          |       |      |     |     |  |  |
|                                           | - break-out sessions with                                                                        | SP     | elai f   | ر کر  | ex c | and | وما |  |  |
|                                           | from teacher work                                                                                |        |          |       |      |     | _   |  |  |
| 5.                                        | What supported your learning the least today?                                                    |        |          |       |      |     |     |  |  |
|                                           | Planny to he                                                                                     |        |          |       |      |     |     |  |  |

Clock Hours Survey

| Name: tony Helgeson  | Date: 8 (15/18 |
|----------------------|----------------|
| Name of Event: CASTL |                |

#### 1. Please rate the following statements:

|                                                                                                  |    | Stror<br>Agre |     |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|---------------|-----|---|----------------|---|
|                                                                                                  | NA | 1             | 2   | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1             | (2) | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1             | 2   | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1             | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1             | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1             | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1             | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | (1)           | 2   | 3 | 4              | 5 |

2. Share your most important learning from today:

Learning how to start the planning process to create units to align w/ NGSS

3. How will you incorporate your learning from today in your instructional practice?

Begins by creating models

4. What supported your learning the most today?

Interactions among teamhers & lecturers

5. What supported your learning the least today?

reading articles

| Clock Hours Survey                                                        |         | <i>(</i> 2) |       | ,  |       |         |
|---------------------------------------------------------------------------|---------|-------------|-------|----|-------|---------|
|                                                                           | Date: _ | 8/          | 13/   | 18 | 8     | 3/15/16 |
| Name of Event: CASTL                                                      |         |             |       |    |       |         |
| 1. Please rate the following statements:                                  |         |             |       |    |       |         |
|                                                                           |         | Stron       | gly   |    | Stron |         |
|                                                                           |         | Agree       |       |    | Disag |         |
|                                                                           | NA      | 1           | 2     | 3  | 4     | 5       |
| Today was productive and helpful                                          | NA      | (1)         | 2     | 3  | 4     | 5       |
| Today added to my growing set of practices related to                     | NA      | 1           | 2     | 3  | 4     | 5       |
| Ambitious Science Teaching                                                |         |             |       |    |       |         |
| Today helped me understand more about how to assess                       | NA      |             | 2     | 3  | 4     | 5       |
| student thinking when I analyze student work                              | BLA     | 2           |       |    |       |         |
| Today helped me develop more ways to elicit and support student discourse | NA      |             | 2     | 3  | 4     | 5       |
| Today helped me develop more ways to support students' in                 | NA      | 0           |       |    |       | _       |
| modeling science explanations                                             |         |             | 2     | 3  | 4     | 5       |
| Today helped me develop more ways to scaffold student                     | NA      | 1           | 2     | ,  | 4     | _       |
| sense-making opportunities                                                |         |             | 2     | 3  | 4     | 5       |
| Today helped me develop more ways to support students in                  | NA      | (1)         | 2     | 3  | 4     | 5       |
| developing evidence-based explanations                                    |         | <u> </u>    |       |    |       |         |
| 3. How will you incorporate your learning from today in your institution. | ruction | nal nrac    | tice? |    |       |         |
| I om booking forward modeling.                                            |         |             |       | 7  |       |         |
| 4. What supported your learning the most today?                           |         |             |       |    |       |         |
| The AST overview woo                                                      | e       | de it       | my    | 0  | in l  |         |
| I opposed the tree                                                        | ·_ 1    | enc         | Ue    | R  | S-+   | k       |
| Dut in the entre  5. What supported your learning the least today?        | سە      | whe         | she   | P  |       |         |
| J. Willat supported your learning the least today.                        | L       | out         | 1)    | _  |       |         |
| the previous were got                                                     | 70 ^-   | ,           |       |    |       |         |
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                                                                                                                                                                                              | a<br>-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                             |
|             | NA N | NA 1 | Strongly Agree  NA 1 2  NA 1 C  NA NA 1 C  NA 1 C  NA NA 1 C  NA 1 C  NA NA 1 C  NA NA 1 C  NA 1 C  NA NA 1 C | Strongly   Agree   NA   1   2   3   NA | Strongly   Agree   Disag   NA   1   2   3   4   N | Strongly Agree Disagree  NA 1 2 3 4 5  NA 1 2 3 4 5 |

|                  | Clock Hours Survey |         | Λ   | 13 10 |
|------------------|--------------------|---------|-----|-------|
| Name: Deca poser |                    | Date: _ | Hug | (3-1) |
| Name of Event:   |                    |         |     |       |

#### 1. Please rate the following statements:

|                                                                                                  |    | Stroi<br>Agre | • . |            | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|---------------|-----|------------|----------------|---|
|                                                                                                  | NA | 1             | 2   | 3          | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1             | (2) | 3          | 4              | 5 |
| Today added to my growing set of practices related to Ambitious Science Teaching                 | NA | 1             |     | 3          | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1             | (2) | <b>614</b> | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1             | (2) |            | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1             | 2   | 3          | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1             | 2   | 3          | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1             | (2) | 3          | 4              | 5 |

| 2. | Share vo | our most im | portant lea | rning fron | n today: |
|----|----------|-------------|-------------|------------|----------|

Add modeling first.

3. How will you incorporate your learning from today in your instructional practice?

Adding Modeling and creating units that are phenomenon based

4. What supported your learning the most today?

Dony the Ocean acidity activities helped me understand the AST Process from a statent perspective.

Clock Hours Survey

| Name: <u>Carrana Gischer</u> Name of Event: <u>CA57L</u> | Date: <u>8-15-1</u> | 8        |
|----------------------------------------------------------|---------------------|----------|
| 1. Please rate the following statements:                 |                     | Churnalu |
|                                                          | Strongly            | Strongly |

|                                                                                                  |    | Stron<br>Agree | · . |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|----------------|-----|---|----------------|---|
|                                                                                                  | NA |                | 2   | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | (1)            | 2   | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA |                | 2   | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1              | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1              | 2   | 3 | 4              | 5 |

| 2. | Share your most impo | ortant lea | rning from today: | ,  |           |       | 12 P     |
|----|----------------------|------------|-------------------|----|-----------|-------|----------|
|    | Allowing             | the        | students          | 10 | recignize | their | Changing |
|    | thinking is          | the        | learning.         |    |           |       |          |

3. How will you incorporate your learning from today in your instructional practice? Have developed my first phenomena , model. Wist tackle it!

4. What supported your learning the most today?

Examples today were very helpful. summy tables

5. What supported your learning the least today?

Not having work time day one.

Clock Hours Survey Name: Heather Farren Date: 8-15-18 Name of Event: <u>CAST</u> 1. Please rate the following statements: Strongly Strongly Agree Disagree NA 1 2 5 (1 2 3 5 NA Today was productive and helpful Today added to my growing set of practices related to NA (1) 5 2 4 3 **Ambitious Science Teaching** Today helped me understand more about how to assess NA 1 (3) 5 4 2 student thinking when I analyze student work Today helped me develop more ways to elicit and support NA 1 3 4 5 student discourse Today helped me develop more ways to support students' in NA 2 5 3 4 1 modeling science explanations Today helped me develop more ways to scaffold student NA 2 1 3 4 5 sense-making opportunities Today helped me develop more ways to support students in NA 1 3 5 developing evidence-based explanations 2. Share your most important learning from today: - Summary tables - El an activity doesn't support big idea of that Unit - why is it there? We are already working on restructional practice? It to include a phenomena. I really like this having a big pitture frame work thing 3. How will you incorporate your learning from today in your instructional practice 4. What supported your learning the most today? Time to work with my group and apply what we The whole Summary trulk turns - do all the activities Support the main idea? If not, why are we doing it ? 5. What supported your learning the least today? The beginning reading was too long (too much the Spent on discussion)

Clock Hours Survey

|     | CIOCK HOURS Salvey                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                     | 0,    | 15  | - 1      | 0              |   |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------|-----|----------|----------------|---|
| Nan | ne: <u>Brooke Jillian</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Date: _             | 8     | 175 |          | <u> </u>       |   |
| Nar | ne of Event:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |       |     |          |                |   |
|     | Please rate the following statements:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     |       |     |          |                |   |
|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     | Stron | 1   |          | Stron<br>Disag |   |
|     | · ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | NA                  | 1     | 2   | 3        | 4              | 5 |
|     | Today was productive and helpful                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | NA                  | (1)   | 2   | 3        | AF)            | 5 |
|     | Today added to my growing set of practices related to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | NA                  | (1)   | 2   | 3        | 4              | 5 |
|     | Ambitious Science Teaching                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     | 1     | 2   | 3        | 4              | 3 |
|     | Today helped me understand more about how to assess                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | NA                  | (1)   | 2   | 3        | 4              | 5 |
|     | student thinking when I analyze student work                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |       | 2   | 5        | 4              | 5 |
|     | Today helped me develop more ways to elicit and support                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NA                  | 1     | (2) | 3        | 4              | 5 |
|     | student discourse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                     | 1     | (2) | 3        | 4              |   |
|     | Today helped me develop more ways to support students' in modeling science explanations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NA                  | 1     | 2   | 3        | 4              | 5 |
|     | Today helped me develop more ways to scaffold student                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | NA                  | (1)   | 2   | 3        | 4              | 5 |
|     | sense-making opportunities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     | (1)   |     | 3        |                | J |
|     | Today helped me develop more ways to support students in                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | NA                  | (1)   | 2   | 3        | 4              | 5 |
|     | developing evidence-based explanations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     |       |     |          |                |   |
| 2.  | Share your most important learning from today:  Sharing resources and know  to access them                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | )W -                | hou   | ) 0 | m        | So             | W |
| 3.  | lots of changes in practice talk moves, to specific que                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ruction<br>L<br>Ata | for   | n \ | at       | 1              |   |
| 4.  | what supported your learning the most today?  the faculitators - Can't awesome/ supportive/ pnewledge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | bele<br>za b        | we    | Sh  | ow<br>ey | -              |   |
| 5.  | What supported your learning the least today?  Moving from places to place | lales               | S 0   | des | rot      | ted            | / |

Clock Hours Survey

| Name: TERE A. CARLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Date:       | 9/1      | 5     |        |                |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|-------|--------|----------------|-------|
| Name of Event: Ambitious Science Teaching                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ~           |          |       |        |                |       |
| 1. Please rate the following statements:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | )           |          |       |        |                |       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             | Stron    | ٠. ا  |        | Stron<br>Disag |       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NA          | 1        | 2     | 3      | 4              | 5     |
| Today was productive and helpful                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NA          | (1)      | 2     | 3      | 4              | 5     |
| Today added to my growing set of practices related to Ambitious Science Teaching                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NA          | 1        | (2)   | 3      | 4              | 5     |
| Today helped me understand more about how to assess student thinking when I analyze student work                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NA          | 1        | 2     | 3      | 4              | 5     |
| Today helped me develop more ways to elicit and support student discourse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | NA          | (1)      | 2     | 3      | 4              | 5     |
| Today helped me develop more ways to support students' in modeling science explanations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | NA          | 1        | (2)   | 3      | 4              | 5     |
| Today helped me develop more ways to scaffold student sense-making opportunities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | NA          | 1        | (2)   | 3      | 4              | 5     |
| Today helped me develop more ways to support students in developing evidence-based explanations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NA          | 1 (      | 2     | 3      | 4              | 5     |
| 2. Share your most important learning from today:  Take Things slow   SMAIL steps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |          |       |        |                |       |
| 3. How will you incorporate your learning from today in your inst                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ruction     | nal prac | tice? |        | 1 .            | 9     |
| I'm going to start with incorporate four learning from today in your institution of the start with incorporate for the second of | asin<br>ate | g n      | ny    | 7 4 Se | est 10         | ative |

4. What supported your learning the most today?

The idea of not trying to do too much at once

| Collaboration for Amb                      | itious Science Tea | acning a | inu Lea           | arming | •   |                |   |
|--------------------------------------------|--------------------|----------|-------------------|--------|-----|----------------|---|
| Name: Michael Bloom  Name of Event: CAST L | Clock Hours Survey | Date: _  | 8                 | /15    | 1,8 | )              |   |
| 1. Please rate the following statements:   |                    |          |                   |        |     |                |   |
|                                            |                    |          | Strongly<br>Agree |        |     | Stror<br>Disag | - |
|                                            |                    | NA       |                   | 2      | 3   | 4              | 5 |
| Today was productive and helpful           |                    | NA       | (1)               | 2      | 3   | 4              | 5 |

NA

NA

NA

NA

NA

NA

(1)

2

2

2

2

2

3

3

3

3

3

4

4

5

5

5

5

5

5

| 2. | Share your most important learning from today: |
|----|------------------------------------------------|

developing evidence-based explanations

Today added to my growing set of practices related to

student thinking when I analyze student work

Today helped me understand more about how to assess

Today helped me develop more ways to elicit and support

Today helped me develop more ways to scaffold student

Today helped me develop more ways to support students' in

Today helped me develop more ways to support students in

**Ambitious Science Teaching** 

modeling science explanations

sense-making opportunities

student discourse

Lots of 'New Learnings' - chose I for today - illicit student responses - to support the develop revising of models.

3. How will you incorporate your learning from today in your instructional practice?

See above

4. What supported your learning the most today?

· Working with my peer group-The creation of time within the workshop to work" on Ambitians instruction.



|     | Clock Hours Survey                                                                               |         | 1              |        |      |          | . 2 |
|-----|--------------------------------------------------------------------------------------------------|---------|----------------|--------|------|----------|-----|
| Nar | ne: Travis Brown                                                                                 | Date: _ | A              | u      | 1    | 3 -      | ()  |
|     | 1 721                                                                                            |         | 3              | $\cup$ |      |          |     |
| Nar | ne of Event:                                                                                     |         |                |        |      |          |     |
| 1.  | Please rate the following statements:                                                            |         |                |        |      |          |     |
|     |                                                                                                  |         | Stron          | gly    |      | Stron    | gly |
|     |                                                                                                  |         | Agree          |        |      | Disag    | ree |
|     |                                                                                                  | NA      | 1              | 2      | 3    | 4        | 5   |
|     | Today was productive and helpful                                                                 | NA      | (1)            | 2      | 3    | 4        | 5   |
|     | Today added to my growing set of practices related to Ambitious Science Teaching                 | NA      | Î              | 2      | 3    | 4        | 5   |
|     | Today helped me understand more about how to assess student thinking when I analyze student work | NA      | 1              | (2)    | 3    | 4        | 5   |
|     | Today helped me develop more ways to elicit and support                                          | NA      |                | 2      | 3    | 4        | 5   |
|     | student discourse                                                                                | 1       |                |        |      | 4        |     |
|     | Today helped me develop more ways to support students' in modeling science explanations          | NA      | (1)            | 2      | 3    | 4        | 5   |
|     | Today helped me develop more ways to scaffold student                                            | NA      | $\binom{1}{1}$ | 2      | 3    | 4        | 5   |
|     | sense-making opportunities                                                                       |         | 4              |        |      | 4        |     |
|     | Today helped me develop more ways to support students in developing evidence-based explanations  | NA      | (1)            | 2      | 3    | 4        | 5   |
| 2.  | Share your most important learning from today:  Now to impliment AST incorporate equity into     | 9       | rac            | ticc   | is a | no       | )   |
| 3.  | How will you incorporate your learning from today in your instru<br>Lodeling to to my frag       | ruction | nal prac       | tice?  | 0-10 | p<br>No. |     |
| 4.  | What supported your learning the most today? The offortunity to expenses as a learn              | per     | jer            | r Cl   |      |          |     |
| 5.  | What supported your learning the least today?  Ht fines to much s                                | His     | ing            |        |      |          |     |

Name: Malia McDouell Date: 81518

Name of Event: CASIL Pool Camp

1. Please rate the following statements:

|                                                                                                  |    | 1   | Strongly<br>Agree |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-----|-------------------|---|----------------|---|
|                                                                                                  | NA | 1   | 2                 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | (1) | 2                 | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1   | (2)               | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1   | (2)               | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA |     | ; 2               | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA |     | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | (1) | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | (1) | 2                 | 3 | 4              | 5 |

2. Share your most important learning from today:

helping others to allaborate + watering teachers to teach

3. How will you incorporate your learning from today in your instructional practice?

4. What supported your learning the most today?

Other Grahtho working to respond to Participant needs

| D 4 d 12 -12                                                                                                                                                                              | 0            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Name: Donna Autchinson Date: Aug 13-15,                                                                                                                                                   | 2018         |
| Name of Event: CASTL                                                                                                                                                                      |              |
| 1. Please rate the following statements:                                                                                                                                                  |              |
| Strongly Agree Disagree                                                                                                                                                                   |              |
| NA (1) 2 3 4 5                                                                                                                                                                            |              |
| Today was productive and helpful NA (1) 2 3 4 5                                                                                                                                           |              |
| Today added to my growing set of practices related to Ambitious Science Teaching  NA  2 3 4 5                                                                                             |              |
| Today helped me understand more about how to assess student thinking when I analyze student work  NA  2 3 4 5                                                                             |              |
| Today helped me develop more ways to elicit and support student discourse  NA  2  3  4  5                                                                                                 |              |
| Today helped me develop more ways to support students' in modeling science explanations  NA  2 3 4 5                                                                                      |              |
| Today helped me develop more ways to scaffold student sense-making opportunities  NA  2 3 4 5                                                                                             |              |
| Today helped me develop more ways to support students in developing evidence-based explanations  NA  1 2 3 4 5                                                                            |              |
| 2. Share your most important learning from today:  The process to develop a unit using  Phenomenon.  3. How will you incorporate your learning from today in your instructional practice? |              |
| I will begin by using modeling class as a way to promote student.  4. What supported your learning the most today?                                                                        | in<br>+ ta   |
| 4. What supported your learning the most today?                                                                                                                                           |              |
| Reviewing the posters produced teachers that we saw on day of                                                                                                                             | ve.          |
| 5. What supported your learning the least today?                                                                                                                                          | 1            |
| The breakout sessions did not go in                                                                                                                                                       | ot           |
| In for each typic. Needed                                                                                                                                                                 | ln           |
| depth for each typic. Needed of opportunity to create each Them                                                                                                                           | <b>&amp;</b> |

**Collaboration for Ambitious Science Teaching and Learning** Clock Hours Survey Name: Jamie Johnson Date: 08 5 18 Name of Event: \_\_\_\_\_\_CAST| 1. Please rate the following statements: Strongly Strongly Disagree Agree 3 NA 3 NA 2 Today was productive and helpful Today added to my growing set of practices related to NA 2 3 **Ambitious Science Teaching** Today helped me understand more about how to assess NA 1 2 5 3 4 student thinking when I analyze student work Today helped me develop more ways to elicit and support NA 5 student discourse Today helped me develop more ways to support students' in NA 1 2 3 4 5 modeling science explanations Today helped me develop more ways to scaffold student NA 5 3 4 sense-making opportunities Today helped me develop more ways to support students in NA 3 5 developing evidence-based explanations 2. Share your most important learning from today:

I feel I am prepared to bring climate related science questions to my instruction. 3. How will you incorporate your learning from today in your instructional practice? Big ideas and questions drawn from my grade level The wide range of knowledge 3 experiences of the MStructors and fellow teachers. 4. What supported your learning the most today? 5. What supported your learning the least today? 2 ideas 3 representation. charAS ) Wish I know more.

Clock Hours Survey

| Name: Laura Friend       |                  | Date: | Aug | 13-15,2018 |
|--------------------------|------------------|-------|-----|------------|
| Name of Event: Ambitious | Science Teaching |       |     |            |

#### 1. Please rate the following statements:

|                                                                                                  |    | Stron |    |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------|----|---|----------------|---|
|                                                                                                  | NA | 1     | 2  | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1     | 2  | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1     | 2  | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1     | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1     | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1     | 2) | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1     | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 0     | 2  | 3 | 4              | 5 |

### 2. Share your most important learning from today:

3. How will you incorporate your learning from today in your instructional practice?

Having already tried out some of these practices last year, I'm ready to help my colleagues begin and embrace them

4. What supported your learning the most today?

Hearing the different ways facilitators have implemented these tods/approaches.

Seeing

5. What supported your learning the least today?

A lot of sitting or Day 3

Name: Mike Thingan

Date: Aug 15th 2018

Name of Event: Ambitions Science Teaching

#### 1. Please rate the following statements:

|                                                                                                  |    | Stron | - 1 |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------|-----|---|----------------|---|
|                                                                                                  | NA | 1     | 2   | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1     | 2   | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1     | 2   | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1     | 3   | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1     | 3   | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1     | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1     | (2) | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1     | 2   | 3 | 4              | 5 |

2. Share your most important learning from today:

Models help students synthesize their learning and fie activities to a plenomenon

3. How will you incorporate your learning from today in your instructional practice?

1) I will practice eliciting student ideas that help value student thinking and guide instruction

4. What supported your learning the most today?

The book, conversation with my table mates

5. What supported your learning the least today?

Quickly rushing through slides (although I understand why!)

Clock Hours Survey

| Name: Kristin Lemley Name of Event: CASTL | Date:    | 18       |
|-------------------------------------------|----------|----------|
| Name of Event:                            |          |          |
| 1. Please rate the following statements:  |          |          |
|                                           | Strongly | Strongly |

|                                                                                                  |    | Stron<br>Agree |   |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|----------------|---|---|----------------|---|
|                                                                                                  | NA | 1              | 2 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA |                | 2 | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1              | 2 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA |                | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 0              | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 0              | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1              | 2 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA |                | 2 | 3 | 4              | 5 |

2. Share your most important learning from today:

Using models and modeling in my teaching to facilitate deeper thinking in my students.

3. How will you incorporate your learning from today in your instructional practice?

Re- designing my units using anchoring events & models

4. What supported your learning the most today?

Concrete examples + resources

5. What supported your learning the least today?

Sit- and- get

Clock Hours Survey

| Name: Any Ratke | Consert      | Date: 8/15/18 |
|-----------------|--------------|---------------|
| Name of Event:  | <del>-</del> |               |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |    |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|----|---|----------------|---|
|                                                                                                  | NA | 1                 | 2  | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA |                   | 2  | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1                 | 2  | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1                 | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1                 | 0  | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 2  | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 23 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2  | 3 | 4              | 5 |

2. Share your most important learning from today:

Overview of AST

3. How will you incorporate your learning from today in your instructional practice?

applying strategies & my seemes classes

4. What supported your learning the most today?

Collaboration of other teachers

Clock Hours Survey

| Name: Amy Davis      | Date: 815118 |  |
|----------------------|--------------|--|
| Name of Event: CASTL |              |  |

#### 1. Please rate the following statements:

|                                                                                                  |    | Stror | - ' |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|-------|-----|---|----------------|---|
|                                                                                                  | NA | 1     | 2   | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | (1)   | 2   | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1     | 2   | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1     | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1     | (2) | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1     | (2) | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1     | 2   | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1     | 2   | 3 | 4              | 5 |

2. Share your most important learning from today:

I recognized the importance of modeling throughout investigating a phenomena.

3. How will you incorporate your learning from today in your instructional practice?

Using the student talk packet of ideas, beginning to explore summary tables & modeling more.

4. What supported your learning the most today?

Group discussion & activities:

5. What supported your learning the least today?

The activities

Name: Odi Crimmins
Date: 8/15/18

Name of Event: CASTL Summer Learning Institute

1. Please rate the following statements:

|                                                                                                  |    | Stron |   |   | Stro<br>Disa |    |
|--------------------------------------------------------------------------------------------------|----|-------|---|---|--------------|----|
|                                                                                                  | NA | 0     | 2 | 3 | 4            | 5  |
| Today was productive and helpful                                                                 | NA | (1)   | 2 | 3 | 4            | 5  |
| Today added to my growing set of practices related to Ambitious Science Teaching                 | NA | 1     | 2 | 3 | 4            | \$ |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1     | 2 | 3 | 4            | 9  |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1     | 2 | 3 | 4            | \$ |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | (1)   | 2 | 3 | 4            | 5  |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 2     | 2 | 3 | 4            | 4  |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1     | 2 | 3 | 4            | d  |

2. Share your most important learning from today:
The tools & Studen discourse support &

3. How will you incorporate your learning from today in your instructional practice?

I will directly dive into Planning using

AST Tods as my first Step.

4. What supported your learning the most today?

Time to process plan

5. What supported your learning the least today?

Today was great!

At first I felt a little
rushed/over-whelmed... but it
all came together today.

| Clock Hours Su                | rvey          |
|-------------------------------|---------------|
| Name: Margaret Morgan         | Date: 8/15/18 |
| Name of Event: CASTC Bootcame | 7             |

#### 1. Please rate the following statements:

|                                                                                                  |    |     | Strongly<br>Agree |   | Stror<br>Disag | • |
|--------------------------------------------------------------------------------------------------|----|-----|-------------------|---|----------------|---|
|                                                                                                  | NA | 1   | 2                 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA |     | 2                 | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1   | 2                 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | (1) | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA |     | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | (1) | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA |     | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | (   | 2                 | 3 | 4              | 5 |

| 2. | Share your most important learning from today: |
|----|------------------------------------------------|
|    | Watching of the teachers of teams of teachers  |
|    |                                                |

3. How will you incorporate your learning from today in your instructional practice?

A # of AST units next yeur increase collaboration w/ Colleges

4. What supported your learning the most today?

variety of took

5. What supported your learning the least today?

Mone

| Name: Chris Scott                                                  | Date:   | 8               | -     | 4-  | (8)            |    |
|--------------------------------------------------------------------|---------|-----------------|-------|-----|----------------|----|
| Name of Event: (AST)                                               |         |                 |       |     |                |    |
| 1. Please rate the following statements:                           |         |                 |       |     |                |    |
|                                                                    |         | Strong<br>Agree |       |     | Stron<br>Disag |    |
|                                                                    | NA      | 1               | 2     | 3   | 4              | 5  |
| Today was productive and helpful                                   | NA      | 1               | 2     | 3   | 4              | 5  |
| Today added to my growing set of practices related to              | NA      | ~               |       |     |                | _  |
| Ambitious Science Teaching                                         |         | (1)             | 2     | 3   | 4              | 5  |
| Today helped me understand more about how to assess                | NA      |                 |       |     |                | _  |
| student thinking when I analyze student work                       |         | (1)             | 2     | 3   | 4              | 5  |
| Today helped me develop more ways to elicit and support            | NA      | 0               |       |     |                |    |
| student discourse                                                  |         | (1)             | 2     | 3   | 4              | 5  |
| Today helped me develop more ways to support students' in          | NA      | 13              |       |     |                | _  |
| modeling science explanations                                      |         | (1)             | 2     | 3   | 4              | 5  |
| Today helped me develop more ways to scaffold student              | NA      |                 |       |     |                |    |
| sense-making opportunities                                         |         |                 | 2     | 3   | 4              | 5  |
| Today helped me develop more ways to support students in           | NA      | A               |       |     |                |    |
| developing evidence-based explanations                             | 1.0.    | (1)             | 2     | 3   | 4              | 5  |
| watching other teachs                                              | 45      | 79-1            | Le    | 0 0 | ch             |    |
| 3. How will you incorporate your learning from today in your insti | ruction | nal pract       | tice? |     |                |    |
| 4. What supported your learning the most today?                    |         |                 |       |     |                |    |
| watching others teach                                              | 1       | 201             | V-C   | VV  | 10             | de |
| to try                                                             |         | 9               |       |     |                |    |
| 5. What supported your learning the least today?                   |         |                 |       |     |                |    |
| Seeing other FA o                                                  | WA      | 100             | 0     |     |                |    |

Clock Hours Survey

| Name: Cath     | y Nitchnas | Date: 8-14- | 18 |
|----------------|------------|-------------|----|
| Name of Event: | CASTL      |             |    |

#### 1. Please rate the following statements:

|                                                                                                  |    |         | Strongly<br>Agree |   | Stron<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|---------|-------------------|---|----------------|---|
|                                                                                                  | NA | 1       | 2                 | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1       | 2                 | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA |         | 2                 | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | <u></u> | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1       | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 0       | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA |         | 2                 | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA |         | 2                 | 3 | 4              | 5 |

| 2. | 2. Share your most important learning from today: |  |  |   |   |  |  |  |
|----|---------------------------------------------------|--|--|---|---|--|--|--|
|    |                                                   |  |  | / | - |  |  |  |

Lesson & training to use of my students.

3. How will you incorporate your learning from today in your instructional practice?

Definitely going to use modelling to

4. What supported your learning the most today?

chance to collaborate w other teachers!



Clock Hours Survey

| Name: Charlotte Mack | Date: 8-15-18 |
|----------------------|---------------|
| Name of Event: CASTL |               |

#### 1. Please rate the following statements:

|                                                                                                  |    | Stror<br>Agre |          |   | Stror<br>Disag |   |
|--------------------------------------------------------------------------------------------------|----|---------------|----------|---|----------------|---|
|                                                                                                  | NA | 1             | 2        | 3 | 4              | 5 |
| Today was productive and helpful                                                                 | NA | 1             | X        | 3 | 4              | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | X             | 2        | 3 | 4              | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1             | <b>Y</b> | 3 | 4              | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 1             | X        | 3 | 4              | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1             | X        | 3 | 4              | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1             | *        | 3 | 4              | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1             | X        | 3 | 4              | 5 |

2. Share your most important learning from today:

Summary chart

3. How will you incorporate your learning from today in your instructional practice?

moders

4. What supported your learning the most today?

talking with other teachers

5. What supported your learning the least today?

the amout of down time. 10st

Clock Hours Survey Name: Laura Schultz Date: 8/15

Name of Event: CASTL - Ambitious Scie

1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |   |   | Strongly<br>Disagree |   |
|--------------------------------------------------------------------------------------------------|----|-------------------|---|---|----------------------|---|
|                                                                                                  | NA | 1_                | 2 | 3 | 4                    | 5 |
| Today was productive and helpful                                                                 | NA | (1)               | 2 | 3 | 4                    | 5 |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 1                 | 2 | 3 | 4                    | 5 |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 1                 | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to elicit and support student discourse                        | NA |                   | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | (î)               | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA |                   | 2 | 3 | 4                    | 5 |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 2 | 3 | 4                    | 5 |

2. Share your most important learning from today:

It's okay to take balay steps

3. How will you incorporate your learning from today in your instructional practice?

Focus on sensemaking activities related to big ideas.

4. What supported your learning the most today?

mutiple learning mode

5. What supported your learning the least today?

Talking during work time

Clock Hours Survey

| Crock 110             | 4,004,10      |
|-----------------------|---------------|
| Name: Jeff Holtgeerts | Date: 8/15/18 |
| Name of Event: CASTL  | 100           |

#### 1. Please rate the following statements:

|                                                                                                  |    | Strongly<br>Agree |     |   |   |   |  | · . |  | Strongly<br>Disagree |  |
|--------------------------------------------------------------------------------------------------|----|-------------------|-----|---|---|---|--|-----|--|----------------------|--|
|                                                                                                  | NA | 1                 | 2   | 3 | 4 | 5 |  |     |  |                      |  |
| Today was productive and helpful                                                                 | NA | 1                 | (2) | 3 | 4 | 5 |  |     |  |                      |  |
| Today added to my growing set of practices related to<br>Ambitious Science Teaching              | NA | 0                 | 2   | 3 | 4 | 5 |  |     |  |                      |  |
| Today helped me understand more about how to assess student thinking when I analyze student work | NA | 0                 | 2   | 3 | 4 | 5 |  |     |  |                      |  |
| Today helped me develop more ways to elicit and support student discourse                        | NA | 0                 | 2   | 3 | 4 | 5 |  |     |  |                      |  |
| Today helped me develop more ways to support students' in modeling science explanations          | NA | 1                 | 0   | 3 | 4 | 5 |  |     |  |                      |  |
| Today helped me develop more ways to scaffold student sense-making opportunities                 | NA | 1                 | 2   | 3 | 4 | 5 |  |     |  |                      |  |
| Today helped me develop more ways to support students in developing evidence-based explanations  | NA | 1                 | 0   | 3 | 4 | 5 |  |     |  |                      |  |

2. Share your most important learning from today:

Planning Time

3. How will you incorporate your learning from today in your instructional practice?

Create apportunities for more student ownership in their learning.

4. What supported your learning the most today?

Comments by colleagues.

5. What supported your learning the least today?

I Sound the task regarding "Gotta Hove Lits" was confusing. It was very difficult to hear the local conversations in a noisy room.