Blue font is EAB’s original coding.

Red font is PJC’s original coding.

Cells marked in gray were originally in agreement.

Cells marked in green were in agreement after discussion

Cells were temporarily marked yellow if a coding was absent.

Strikethrough indicates a match after a coding absence was indicated.

Discussion notes

46:50 Michael: Because Michael is recommending a specific mathematical topic to Jeff, this does not qualify as generic, social collaboration.

Jeff: Is explaining a the board, which qualifies as informal presentation.

Romina: Is providing an explanation to Brian. One may argue that this is informal presentation, but when viewed in video context, she is actually developing upon Jeff's explanation, which is communication improvement.

Brian: PJC missed coding for Brian's behavior originally, but provided a matching coding when this was indicated.

48:10 Michael: Jeff is clarifying Romina's explanation, which falls into the definition of communication improvement.

Jeff: This was originally left blank by PJC. Because Jeff is not actively contributing, this segment was coded disengagement.

Romina: The description for Romina states she is presenting, so this qualifies for the more specific coding of informal presentation.

Brian: Because Brian is questioning a specific mathematical operation, this is not any type of generic colaboration. Answer checking best fits this description because he is attempting to check and accept the answer provided by Romina.

49:00 Ankur: The coding was originally missed by PJC, but provided when this absence was indicated.

Michael: This cell contains two descriptions. They are participating in presentation, but they are not actually presenting. Instead, they are attempting to improve Jeff's explanation.

Jeff: This cell contained two descriptions, but the coding was matched when this absence was indicated.

Brian: While Brian's interaction is minimalist, it is not generic. He is approving of Romina's answer, which fits the definition of answer checking.

49:30 Ankur: From watching this segment, it can be understood that Ankur is helping check Jeff's answer. This is a more specific coding than collaboration.

Michael: Providing a formula does not qualify as generic collaboration. Michael is assisting Jeff, building upon his idea.

Jeff: While at the board, Jeff is fulfilling the roles associated with presenting. Thus, informal presentation is a better overall fit to describe his engagement.

50:05 Ankur and Michael: These two are helping build upon Jeff's explanation. This qualifies as communication improvement. Because Ankur and Michael are leaving the official explaining to Jeff, this seems a more suitable coding.

Jeff: While at the board, Jeff is primarily engaged as the group's presenter. It can be said that he spent time checking his answer, but his primary role was group presenter or even discussion leader.

50:25 Romina: Her explanation includes mention of a specific mathematical function, and so her engagement cannot best be described as generic collaboration.

Brian: Coding for Brian's engagement was originally missed, but matched once this absence was indicated.

Segment Coding

Time Ankur Mike Jeff Romina Brian

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 00:46:10 | **Communication imrovement** (Not collaboration because Jeff is presenting an answer)  **Communication improvement** | **Disengagement**  **Disengage-ment** | **Informal presentation**  **informal presentation** | **Disengagement.**  **Disengage-ment** | **Disengagement.**  **Disengag-ement** |
| 00:46:50 | **Disengagement.**  **Disengagement** | **Communication Improvement**  **collaboration** | **Informal presentation**  **collaboration** | **Communication improvement** (adding to Jeff’s explanation)  **collaboration** | **Researcher guidance**  **Collaboration**  **Researcher guidance**  **~~Collaboration~~** |
| 00:48:10 | Not visible.  **N/A** | **Communication improvement.**  **collaboration** | **Disengagement.**  **???** | **Informal presentation**  **collaboration** | **Communication improvement**  **Communic-ation improvement** |
| 00:49:00 | **Researcher guidance; collaboration.**  **Researcher guidance**  **~~collaboration~~** | **Communication improvementX2.**  **collaboration** | **Researcher guidance; informal presentation.**  **Researcher guidance**  **~~Informal presentation~~** | **Disengagement.**  **Disengage-ment** | **Answer checking.**  **collaboration** |
| 00:49:30 | **Researcher guidance; checking answer (responding to Jeff asking for a check).**  **Researcher guidance; collaboration** | **Communication improvement (Stating the formula as Jeff writes).**  **collaboration** | **Informal presentation**  **Checking answer** | **Disengagement.**  **Disengage-ment** | **Disengagement.**  **Disengage-ment** |
| 00:50:05 | **Communication improvement.**  **Informal presentation**  Time Ankur Mike Jeff Romina Brian | **Communication improvement.**  **Informal presentation** | **Informal presentation.**  **checking answer** | Not visible.  N/A | Not visible.  N/A |
| 00:50:25 | **Disengagement.**  **Disengagement** | **Collaboration.**  **collaboration** | **Informal presentation.**  **Informal presentation** | **Informal presentation.**  **collaboration** | **Researcher guidance.**  **Collaboration.**  **Researcher guidance**  **~~collaboration~~** |
| 00:50:55 | **Disengagement.**  **Disengagement** | **Disengagement.**  **Disengagement** | **Informal presentation.**  **Informal presentation** | **Disengagement.**  **Disengage-ment** | **Communication improvement.**  **Communica-tion improvement** |

Group engagement type count

Checking answer 2

Communication improvement 3

Collaboration 11

Disengagement 11

Informal presentation 5

Researcher guidance 5

answer checking - 2

collaboration - 4

communication improvement - 11

disengagement - 12

informal presentation - 10

researcher guidance – 4

Match by count: 43-6/43 = 86%

Match by cell = 23 / 43 = 53%

Match after discussion 100%

Time Ankur Mike Jeff Romina Brian

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 00:46:10 | Ankur asks for the next row as Jeff writes. | Watching Jeff. | Jeff creates three entries on the row of Pascal’s Triangle above, then asks what to explain next. | Listening. | Watching Jeff. |
| 00:46:50 | Watching. | Checks that Brian understands how nCr works. Jeff asks for guidance on how to explain next, and Michael recommends explaining their choice of generic nCr. | Jeff protests presenting all their work, but begins explaining that they have rewritten Pascal’s Triangle using nCr notation. Jeff presents how to go between a row of Pascal’s Triangle and nCr. | Watching. Romina points out work to Brian to discuss nCr. Jeff notes the majority of their work was spent on that work. | The researcher asks Jeff to review their work.  Brian agrees with the researcher that he’s a quick study. |
| 00:48:10 | Not visible. | Notes the formula Romina is discussing is n choose x. | At board. | Romina offers to point out their combinations to Brian. She explains their formula to calculate nCr, noting the denominator removes combinations they do not need. | Asks what the exclamation point is; the group replies factorial. |
| 00:49:00 | The researcher has Ankur repeat this is the reader’s digest version.  Time Ankur Mike Jeff Romina Brian | Michael and Ankur guide Jeff to add two terms. | Jeff ask for guidance again, and the researcher tells him to show the addition rule in general. | Watching Jeff. | “OK” to Romina’s explanation. |
| 00:49:30 | Researcher recommends that Ankur write on the side, but he continues discussing with Jeff. | Helps Jeff rewrite the formulaic addition. | Jeff adds at the board, and verifies with the group that his answer is correct. | Watching. | Watching. |
| 00:50:05 | Helps Jeff explain. | Helps Jeff explain. | Jeff explains again: pointing to nCx he notes it x gains one, and x+1 loses one. Michael and Ankur check him immediately, and he agrees the x+1 stays the same. Finally, they guide him to note the top becomes n+1 because there are more choices to be made. | Not visible. | Not visible. |
| 00:50:25 | Watching. | Thinks Brian follows their explanation. | Jeff explains by relating the problem to class. He notes that the rows are formed by adding the above terms, and begins explaining in terms of adding a pizza topping. | Succinctly explains that they are constructing Pascal’s Triangle via adding. | The researcher asks them to explain so Brian can follow.  Brian notes he can just watch from the back. |
| 00:50:55 | Watching. | Watching. | Jeff notes they are explaining why they add. Jeff notes when adding another topping, x becomes x+1, and if not gaining a topping, x+1 stays the same, so the two terms are added.  Time Ankur Mike Jeff Romina Brian | Watching. | Asks Jeff to continue explaining. |