Room Summary Report

The **Room Summary Report** is at the center of every coaching session. This high-level report puts the spotlight on interactive talk during the LENA Day.

All system-generated goals and earned rewards are displayed on this report.

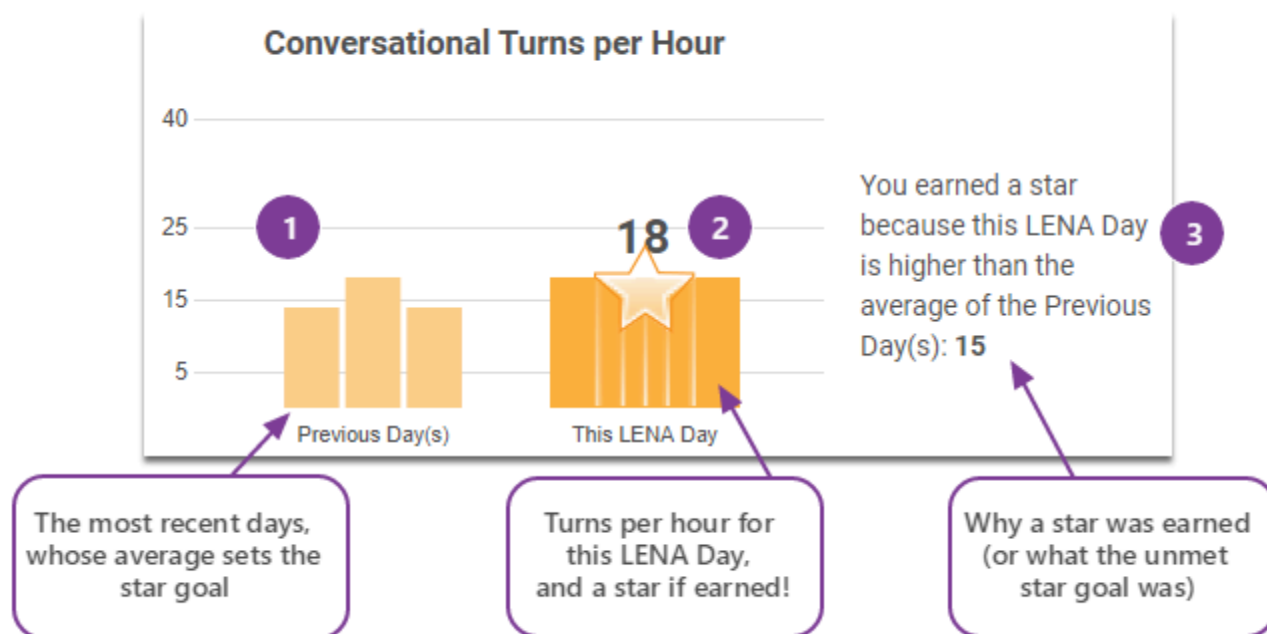Click on each item below to learn more.

1. Total Stars banner

The **Total Stars banner** shows the running count of all stars earned up through the LENA Day that is displayed. The banner also shows *how* the accumulated stars have been earned.

A room can earn up to two stars per LENA Day, one for [Conversational Turns](#) and one by having an [Interactive Day](#).
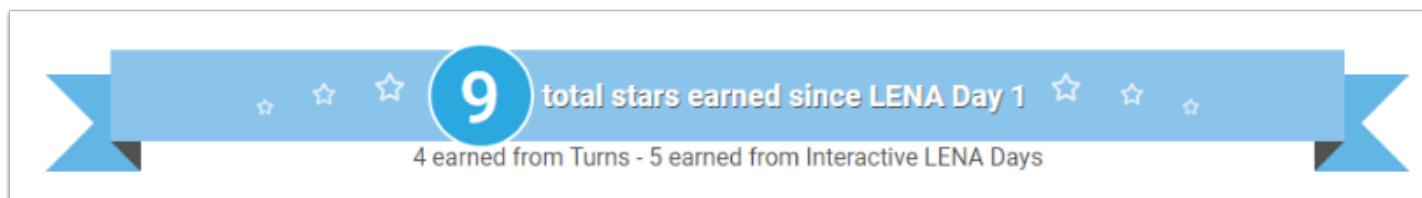
2. Conversational Turns per Hour graph

The **Conversational Turns per Hour** graph compares [turns](#) on the selected LENA Day against turns on the previous days. Here's what you'll see:

Conversational Turns per Hour

Callout 1: The most recent days, whose average sets the star goal

Callout 2: Turns per hour for this LENA Day, and a star if earned!

Callout 3: Why a star was earned (or what the unmet star goal was)

Star explanation text: You earned a star because this LENA Day is higher than the average of the Previous Day(s): **15**
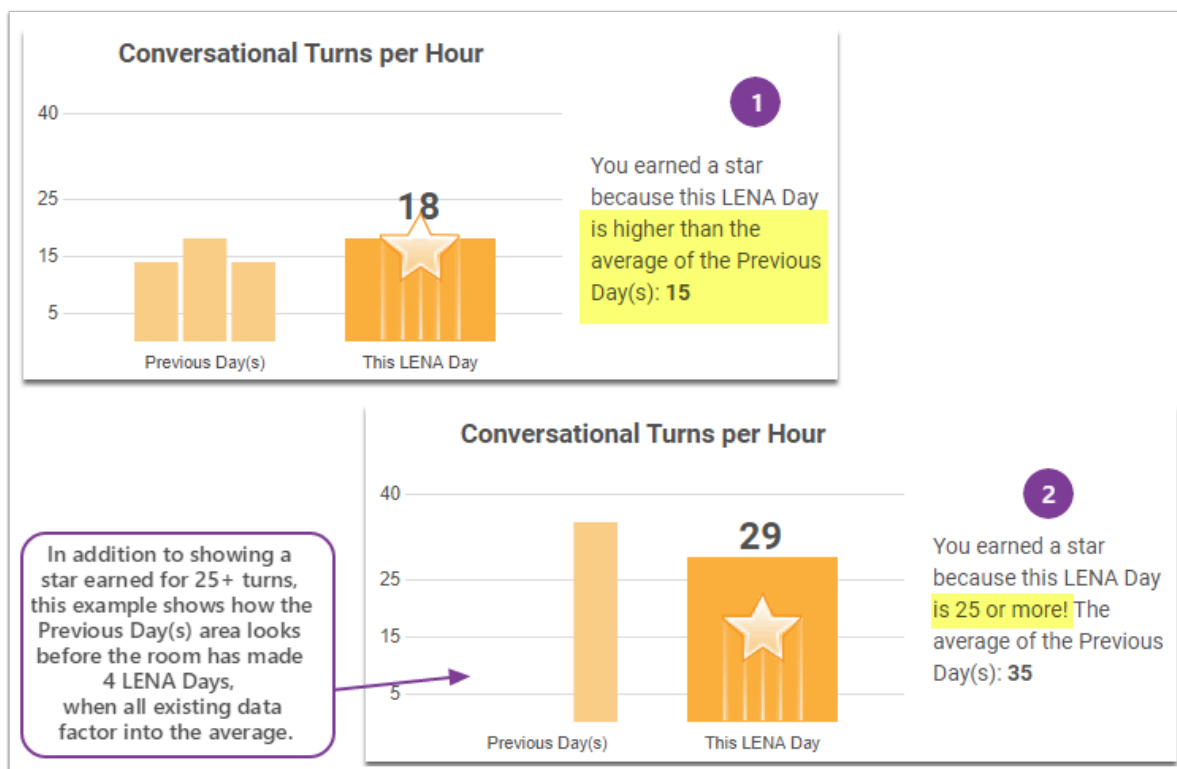
1. Previous Day(s)
   - Bars show the three most recent days for comparison (or the one or two previous days, if the room hasn't yet completed three).
   - Hover your mouse over each bar to see date and count.
   - Beating the average of these days is one way to earn a star!

2. This LENA Day
   - The bar shows the average turns per hour per child on the selected reporting date.
   - A star is displayed if turns exceeded the previous average *or* if turns averaged at least 25 per child per hour.

3. Star explanation
   - The reason for earning a Conversational Turns star is displayed, along with the previous average.
   - If no star is earned, the goal is displayed.

How is a Conversational Turns star earned?

A room can earn a Conversational Turns star for:

1. **Increased turns** compared to the average of previous days (even if lower than the most recent LENA Day) *or*
2. **Very high turns per hour** at 25 or more (even if the value is lower than the previous days' average)

Data details: Calculating Conversational Turns per Hour and the previous days average

This LENA Day

Conversational Turns Per Hour for This LENA Day is the average number of conversational turns per hour for the entire classroom on the selected date.

In contrast to other measures displayed, this number includes **all turns detected**, including the following:

- turn counts from before 8 AM (which are not displayed on the hourly breakouts or on the talk clocks)
- turn counts from partial hours (which are either prorated or excluded on hourly breakouts and talk clocks)

*Conversational turns per hour = All turns / Total recording duration * 3600*

"Total recording duration" means the sum of *all* children's recording durations.

"Recording duration" is based on a combination of data detection and hard cutoffs:

- Each child's eligible LENA Day data starts when the first adult word is detected in that recording.
- Each child's LENA Day ends at 5 PM *or* when speech activity ends and doesn't resume - whichever is earlier. For example, the child's LENA Day can end before 5 PM if the recorder is turned off, or if the vest is removed and stowed in the covered LENA bin.
- The "recording duration" is the time between the start and the end and is measured in seconds.

Previous Days Average

The average of the previous days is a rolling average, the average of the most recent 3 LENA Days for that classroom. Exceptions:

- When a classroom does not yet have 3 previous days, then it's the average of all previous days.
- On the first LENA Day, there is no previous average. A star can still be earned for 25+ turns per hour.

3. This LENA Day - Hourly Breakout graph

The **Hourly Breakout** shows the **pattern of talk** in the room for the selected day, from 8 AM to 5 PM. Each bar represents the average turns per child for that hour.

A **trophy** and the number of turns appear on the hour with the highest average Conversational Turns.
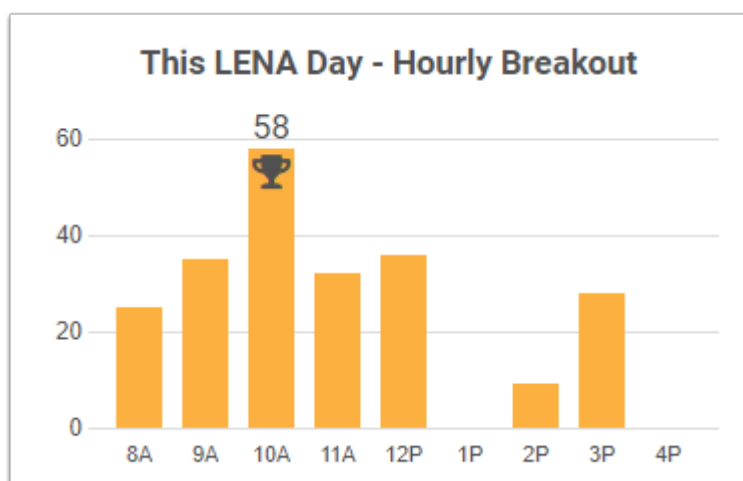
Coaches and teachers can use this graph in combination with knowledge of the day's activities to better understand the pattern of talk in the room. Which activities seem to correspond with high turns? Which correspond with low turns? What kinds of adjustments might increase turns in low-turn hours or low-turn activities? Teachers may want to involve the hourly breakout in their goal setting.

Data details: What data go into the Hourly Breakout?

Each hourly bar includes the counts from any recording with at least 30 minutes of data for that hour, from 8 AM to 5 PM.

It may be helpful to consider what this graph *excludes*: counts from any recording with fewer than 30 minutes of data in a given hour, as well as any counts prior to 8 AM. Being optimized for hour-by-hour representation in this way, the Hourly Breakout bars do *not* match or add up to the daily turns per hour.

> ⚲ The Hourly Breakout displayed on this report is repeated in the **Conversational Turns - Hourly Breakout** graph on the Room Detail report, which does show data from before 8 AM. After a teacher gets comfortable with the Room Summary report, use the Room Detail report to deepen the discussion.

4. Room-Level Interactive Talk Clock

While the Hourly Breakout helps us see relative differences in *total* turns hour by hour, the **Room-Level Interactive Talk Clock** shows how *interactive* each hour was in the context of who was present, and how *consistent* the level of interaction was from 8 AM to 5 PM.

The main concepts represented in the clock are **Interactive Hour** and **Interactive Day**.
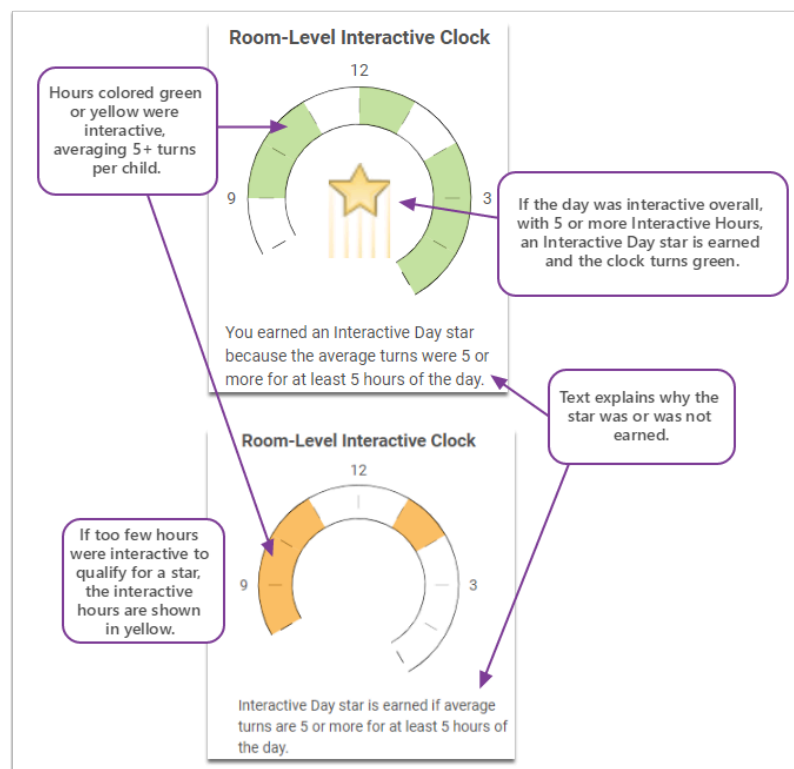
Interactive Hour

- An hour is "interactive" if, on average, all children present during that hour experienced at least 5 turns per hour.
- An Interactive Hour is filled in with a color.
- An hour that is left blank means *either* fewer than 5 turns per child, *or* no/not enough recording was made in the hour.
- The color used on the clock depends on the *number of interactive hours in the day*. The clock is green if the day qualifies as an Interactive Day; otherwise it is yellow.

Interactive Day

- A LENA Day is an "Interactive Day" if at least 5 hours are Interactive Hours.
  - For short days with 5 or fewer total hours recorded, then it's an Interactive Day if *all* hours are Interactive Hours.

- Interactive Hours on an Interactive Day are green.
- The room earns a star for an Interactive Day.

How are interactive hours calculated on the Room-Level Interactive Talk Clocks?

We calculate the average turns per child for each whole hour. If the result is 5+ the hour is colored in.

Average turns per child for the hour = Sum of all turns for the hour / Total number of recordings in the hour

There are two special data exclusion/inclusion rules for the Room-Level Interactive Talk Clock that are applied before this calculation.

Beginning of day rule

The Room-Level Interactive Talk Clock starts at 8 AM. Turns before 8 AM are ignored.

Partial hour rules

Children arrive and leave at different times, and recordings rarely begin or end at the top of the hour. To best represent interaction at the whole classroom level, the Room-Level Interactive Talk Clock calculations start with special rules about partial hours, typically occurring at the beginning and end of a child's day.

- When a child records for fewer than 30 minutes in a given hour, the room-level clock ignores that child's data for that hour.
    - A child with 10 turns in 10 minutes is excluded from the room-level calculations for that hour, because the amount of time recorded is too short.
- When a child records at least 30 minutes of a given hour, his Conversational Turns count is "pro-rated" to match the *rate* of turns achieved during the time recorded. That pro-rated count is used in the hour's calculation. For example:
    - A child with 5 turns in 30 minutes has an hourly rate of 10 turns per hour. This child contributes 10 turns toward the "sum of all turns for the hour" on Room-Level clock hour calculations.
    - A child with 6 turns in 40 minutes has an hourly rate of 9 turns per hour. This child contributes 9 turns toward the "sum of all turns for the hour" on Room-Level clock hour calculations.

> ℹ️ Why does the room clock show a non-interactive hour when that same hour is interactive on all of the child clocks?
>
> The partial hour rules applied to the room-level clock calculations do not apply to the child-level clocks. At the child level we can simply use the actual count without skewing the data. This means that it's possible for 15-minute partial hour to be interactive for each individual child, but not interactive for the room as a whole.
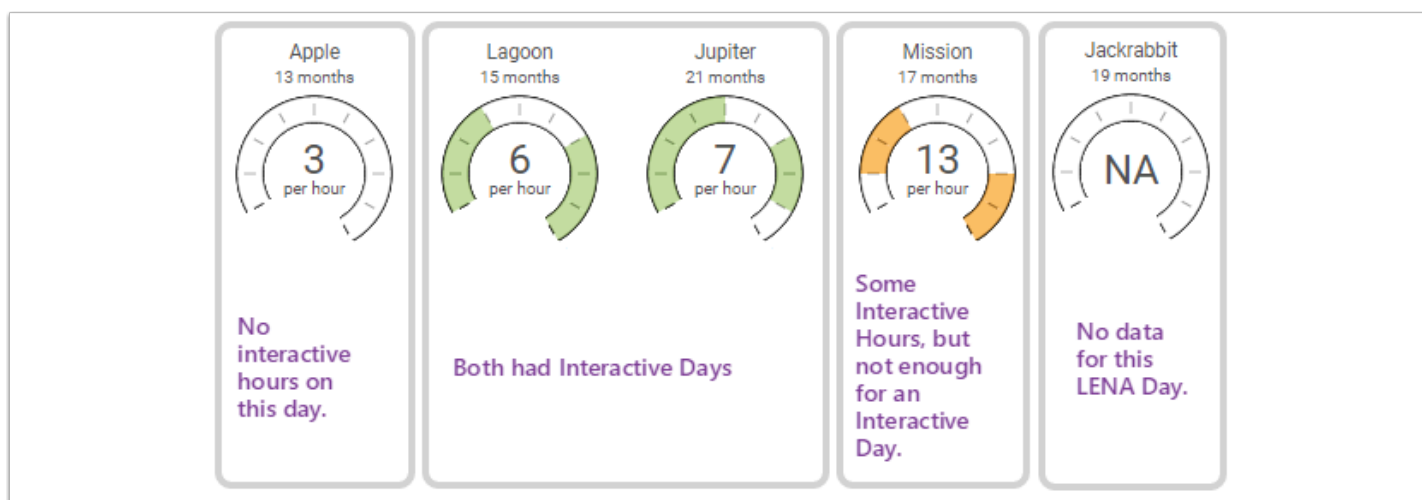
5. Child-Level Interactive Talk Clocks

The **Child-Level Interactive Talk Clocks** show each child's experience on the selected LENA Day, between 8 AM and 5 PM.

The individual clocks show **Interactive Hours** (colored in) and **Interactive Days** (green) for each individual child.

Further, the number in the middle of each clock is the **average turns per hour** for that child on this LENA Day.

Click on any child's clock to open his/her [individual report](#) in a new tab.

Apple	Lagoon	Jupiter	Mission	Jackrabbit
13 months	15 months	21 months	17 months	19 months
3 per hour	6 per hour	7 per hour	13 per hour	NA
No interactive hours on this day.	Both had Interactive Days		Some Interactive Hours, but not enough for an Interactive Day.	No data for this LENA Day.

Interactive Hour

- If a child experienced 5+ turns in an hour, it's an "Interactive Hour."
- An Interactive Hour is colored in on the clock. Hours with fewer than 5 turns or no recording data are left blank.

Interactive Day

- A child's LENA Day is an "Interactive Day" if at least 5 hours are Interactive Hours.
  - If the child recorded during 5 or fewer hours, then it's an Interactive Day if *all* hours are Interactive Hours.
- Interactive Hours on an Interactive Day turn green.

> 💡 Children with the lowest turns per hour are listed first, because they may be good candidates for problem solving and goal setting.
>
> Any enrolled child who did not contribute data on this LENA Day is listed last, and his/her clock says "NA" - not available.

How are turns per hour calculated on the Child-Level Interactive Talk Clocks?

Average Turns per Hour

For the number in the middle of the clock:

Average Turns per hour = Total Turns for the recording / Total duration of the recording

"Total duration of the recording" is the time between the first detected adult word and 5 PM, or when speech activity ends and doesn't resume - whichever is earlier. For example, the child's LENA Day can end before 5 PM if the recorder is turned off, or if the vest is removed and stowed in the lidded LENA bin.

This calculation includes turns before 8 AM, even though the clock display starts at 8 AM.

Interactive Hours

For each hour with data, starting at 8 AM, we simply count the number of turns detected for that child. If the result is 5+, the hour is colored in.

In contrast to the Room-Level clock calculations, the Child-Level calculations do not exclude partial hours. Individual clocks reflect the turns counted during that clock hour even if the child has fewer than 30 minutes of recording time in that hour. For this reason, it's possible for a given hour to be interactive for each individual child, but not interactive for the room as a whole.

6. LENA Day date selector

The report always opens to the most recent LENA Day.

Click on the **date selector** to view, print, or save the Room Summary for a past LENA Day.

7. Language selector

The report opens in the preferred language of the user. Click the **language selector** to change the language displayed on the report (English or Spanish).
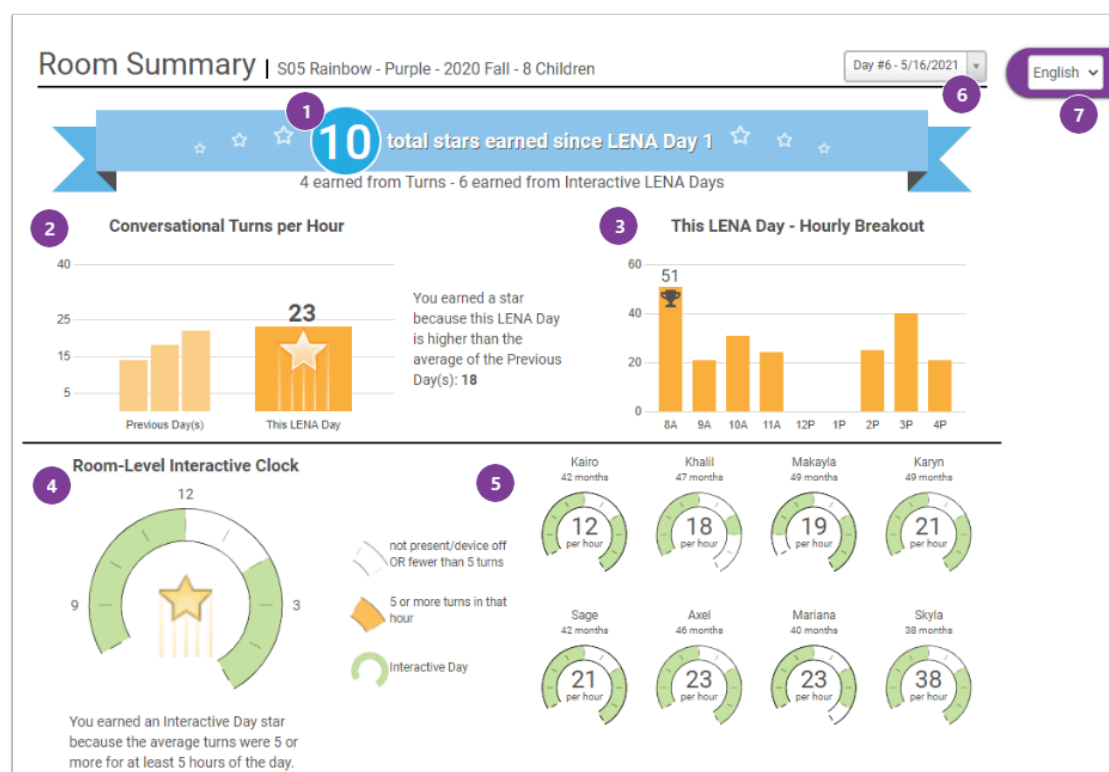
How to access the Room Summary Report

The Room Summary Report is included in the reports area of Coaching Session Prep for every session.

It's also available at any time by clicking the pie chart icon on the room dashboard or on a center's detail dashboard.