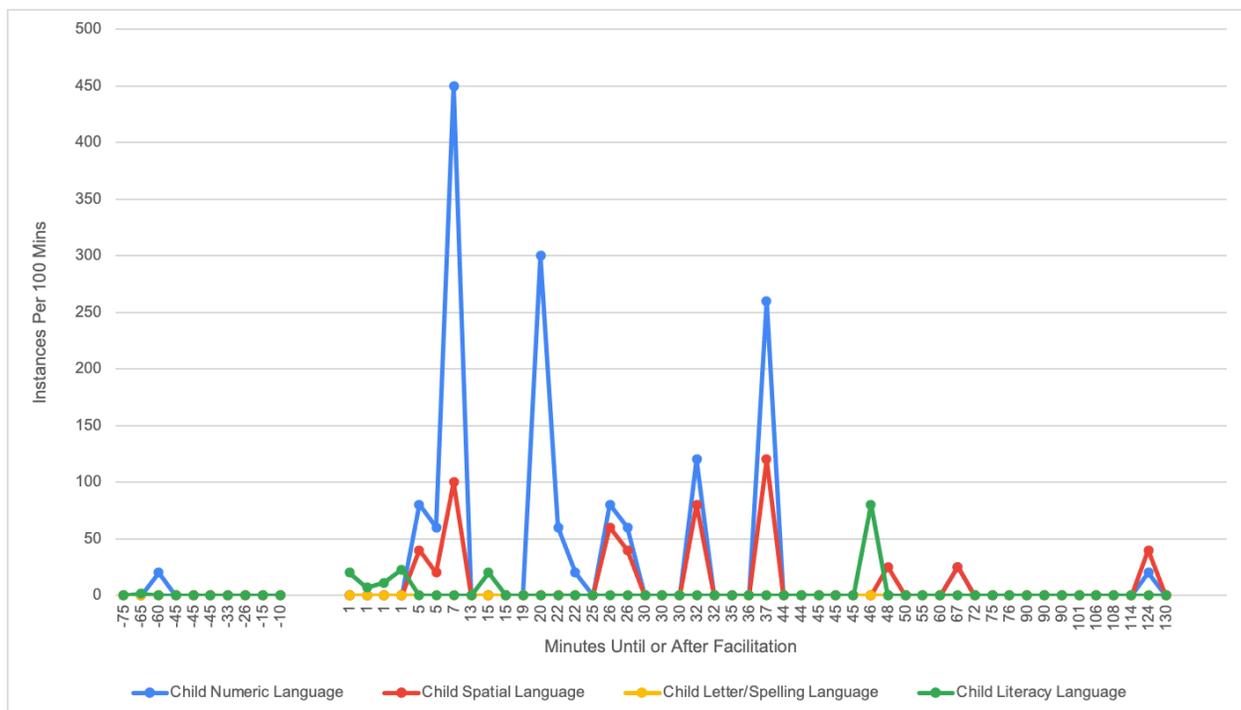


## Four Fun Data Facts!

### Fab Youth Philly's Impact on the Playstreets

November 11, 2022

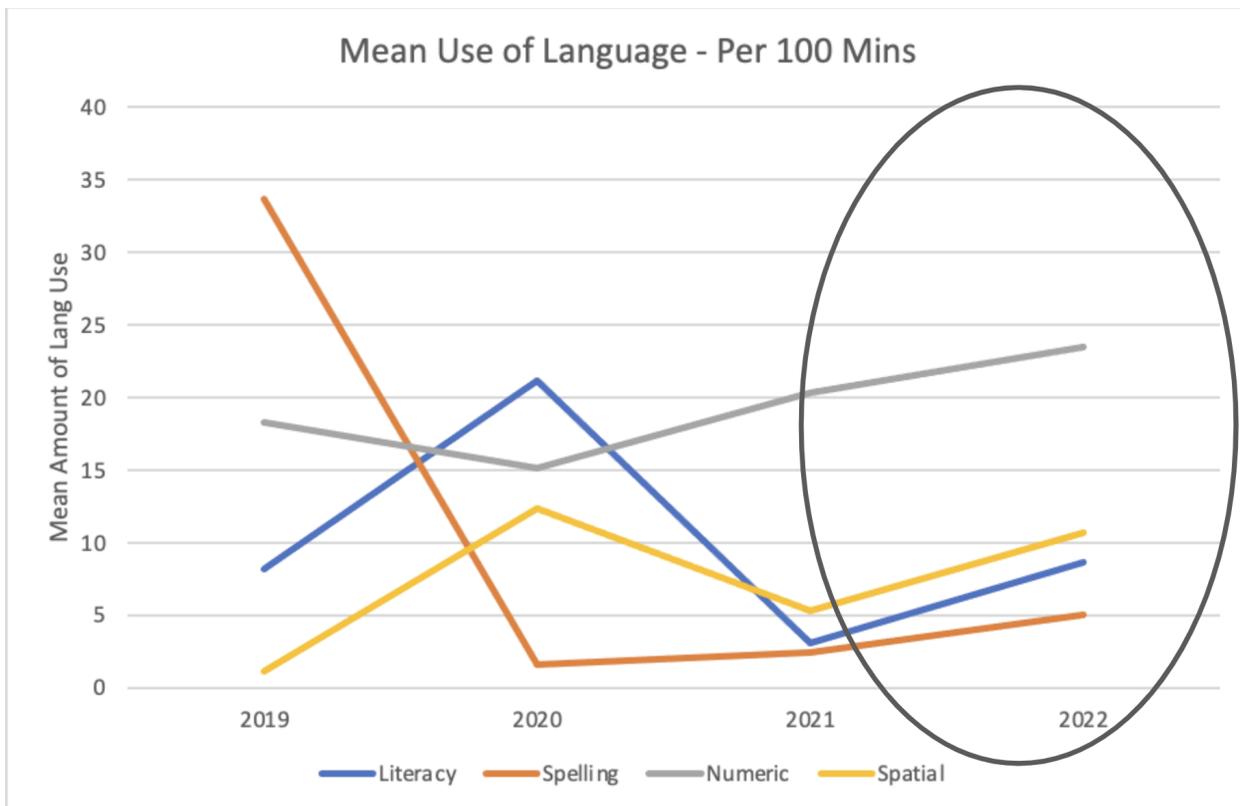
1. In summer 2022, Play Captains spent 45 minutes leading playful learning activities on the Playstreets - but the impact of their facilitation could be seen long after they left! After the Play Captains were gone, children continued to show positive emotions, they were socially and physically active, and they used high-quality language.



Children used a lot of **numeric language** (e.g., counting) and a moderate amount of **spatial language** (e.g., shapes and directions), even after Play Captains left the Playstreets! Note that is “carry-over” language, as not much language was captured before the Play Captains began their session facilitation.

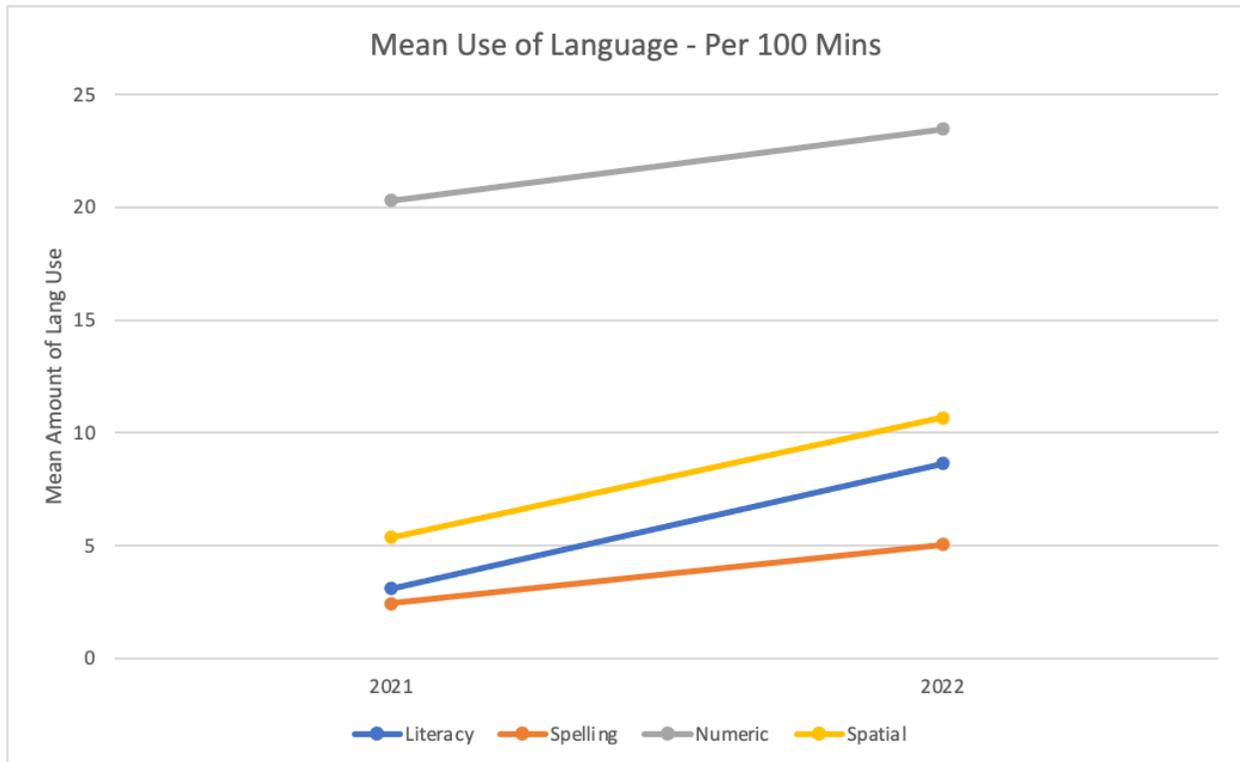
2. In summer 2022, children used more literacy, spelling, numeric, and spatial language than the previous year!
  - a. Children’s use of literacy language (e.g., vocabulary words), spelling language (e.g., practicing letters), numeric

- language (e.g., counting), and spatial language (e.g., shapes and directions) all increased. See graph below.
- b. Engaging with numeric and spatial language is important for children as they continue to take STEM classes throughout their education. Research shows that children's early number competency is strongly associated with later math abilities (Jordan et al., 2009).
  - c. Similarly, vocabulary learning and letter recognition are important skills for children's language development, which is crucial for school success.



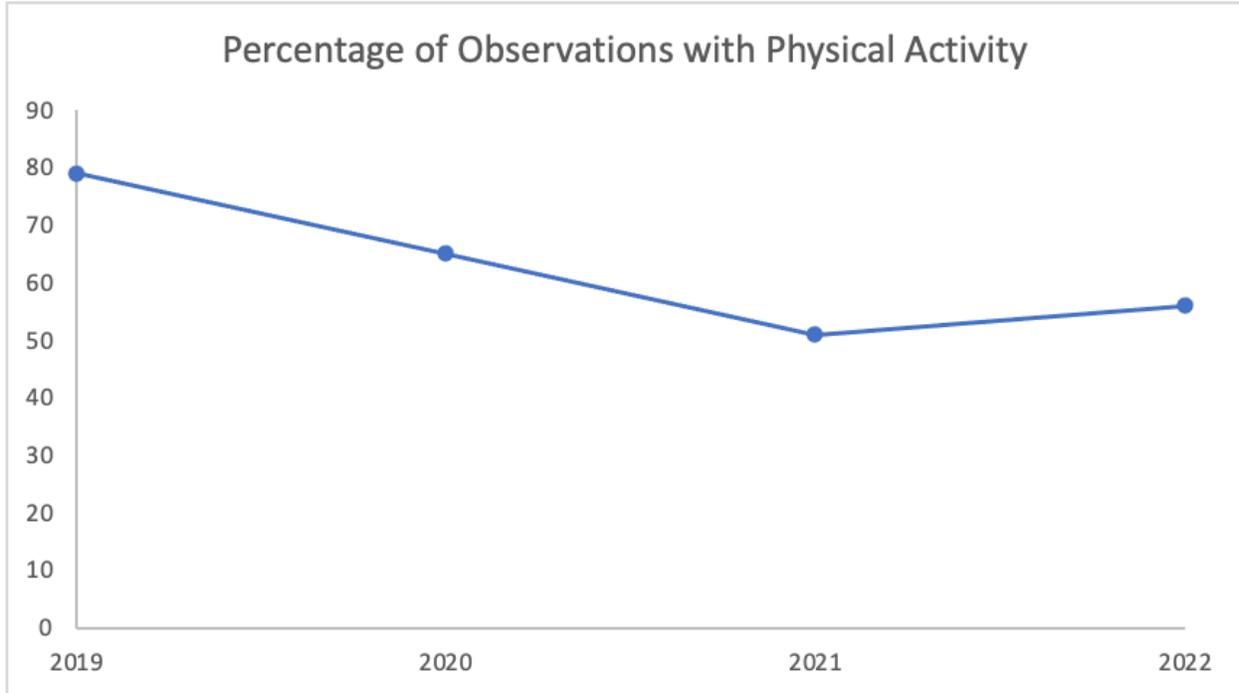
This graph shows the mean amount of language use of children (per 100 mins of Playstreets) while on Playstreets being facilitated by FYP. It will be important to look at the context of each year individually, considering how many Playstreets there were each year and what types of activities may have sparked different types of language use each year.

This graph shows the increase in language use, across all domains of language, from the summer of 2021 to summer 2022. Again, context from each summer is important to consider.



This graph shows the mean amount of language use of children (per 100 mins of Playstreets) while on Playstreets being facilitated by FYP.

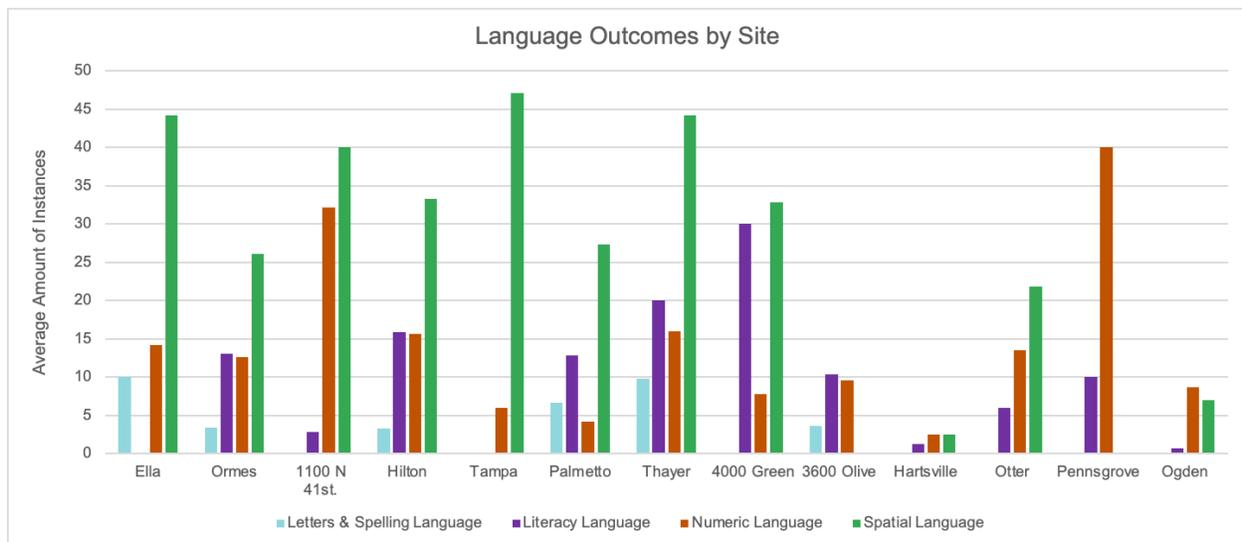
3. In summer 2022, children engaged in more physical activity compared to last summer!
  - a. In 56% of observations, children were recorded as engaging in a moderate to high amount of physical activity when the Play Captains were facilitating. This was up from 51% in summer 2021.
  - b. This is important as research shows that for children, high levels of physical activity are associated with positive impacts on numerous health outcomes (Janssen & LeBlanc, 2010).



Weather Trends: Below is the average temperature from each month of Playstreets. We can look at how physical activity on the Playstreets might correlate with average temperatures. With 4 summer's worth of data, we see that Summer 2022 was the hottest so far. The percentage of observations with medium- to high-levels of physical activity went up from 2021 to 2022, despite the temperature being higher. However, generally, we are seeing physical activity go down as temperatures rise each summer. We cannot say this is the reason why physical activity went down from 2019 to 2021, however. There could be many reasons for this and context will matter.

July 2019	80.04 degrees
August 2019	76.68 degrees
July 2020	80.92 degrees
August 2020	77.22 degrees
July 2021	78.28 degrees
August 2021	78.14 degrees
July 2022	81.41 degrees

4. In summer 2022, we had some 'rockstar' sites!
  - a. Pennsgrove and 1100 N 41st Street had children using a high amount of numeric language (i.e., counting, talking about numbers).
  - b. Sites like Tampa, Thayer, and Ella have children using a high amount of spatial language (i.e., shapes, directions).
  - c. It'll be important to think about a few elements when interpreting these numbers:
    - i. How many sessions did Play Captains host on these streets (for e.g., some streets had to shut down early in the summer, so if only one child was present it's good to recognize that these numbers are only coming from a single child)?
    - ii. What were Play Captains doing on particular streets that might be causing these numbers to be high (or low)?



Per 100 Minutes of Playstreets

#### References:

Janssen, I., & LeBlanc, A. G. (2010). Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. *International journal of behavioral nutrition and physical activity*, 7(1), 1-16.

Jordan, N. C., Kaplan, D., Ramineni, C., & Locuniak, M. N. (2009). Early math matters: kindergarten number competence and later mathematics outcomes. *Developmental psychology*, 45(3), 850.