Data Viz

Pitches

All pitches are related to my investigative journalism research topic, which is de Blasio’s expansion of full-day pre-K in NYC. In particular, I’m investigating how the expansion of pre-K is exacerbating class size reduction efforts in part due to cosharing space (a phenomenon in which a pre-K is introduced to an existing public school, claiming space that was badly needed by elementary classes to break up grade into smaller sections, reducing the ratio of student to teacher) as well as inadvertently reducing the budget (a phenomenon in which, due to lack of zoning, affluent and needy children enter pre-K together, reducing the percentage of needy families as compared to affluent, thereby reducing the projected budget for entire school, when in reality, affluent parents pull their pre-k kids beginning in kindergarten since K and up enrollment is determined by zoning as well as ‘choice’).

Potential graphics/projects/themes

* Present vs. Future
  + Present:
  + Future:
* Reality vs. Hypothetical
  + Reality:
    - How does the projected academic success of students in small class sizes who had no pre-K compare to the academic success of students who had pre-K but large class sizes?
      * Result will be the same. Shows how important both are (but mostly how important class size reduction is and how much more attention it deserves)
        + <http://www.classsizematters.org/wp-content/uploads/2012/11/C_Ruhm_Persistence_20071.pdf>
      * Follow up could be hypothetical question:
        + How much smarter would elementary school kids be if they had all been enrolled in pre-K AND all had small class sizes?
        + What would happen if class size reduction had been de Blasio’s campaign head, rather than pre-K?

Analyze potential later financial returns, performance returns, psychological returns and compare to equivalent data set for pre-k kids

<http://www.classsizematters.org/wp-content/uploads/2011/04/California_CSR_Fatih_Unlu.pdf>

http://www.classsizematters.org/wp-content/uploads/2012/10/Small-Classes-in-the-Early-Grades-Academic-Achievement-and-Graduating-From-High-School.pdf

* + Hypothetical:
    - What would the city look like if…?
      * How smart would NYC be in ten years if every child between 3-4 in NYC was enrolled in full-day pre-K today?
        + i.e. look up projected test score increases if child was enrolled in pre-K
      * How smart would NYC population become if every child could be taught in a smaller class?

1. Long-term effects of small classes on achievement in 8th grade
   1. http://www.classsizematters.org/wp-content/uploads/2011/04/Konstantopoulos\_20091.pdf
2. Effect of achievement in 8th grade on college enrollment/graduation
   * + - *Behavior*: How many less \_\_\_\_ (something like time-outs) would elementary school teachers have to issue if their students had been enrolled in pre-k? [base this on a psych. Study of how pre-k affects behavior, social and otherwise]
       - How much more money would the city have to spend to build enough schools so that pre-k could be separated from public schools?
       - How much more money would the population of kids who graduate from NYC public schools make in the future if they all attended pre-k? (Again based on a study if available)
         * Long-term effects of small classes on achievement in 8th grade
         * Effect of achievement in 8th grade on later salary growth (or perhaps on college enrollment/graduation 🡪 college enrollment/graduation’s effect on projected salary)
       - *Negative*: How overcrowded would public schools be in X years if full day pre-K continues to co-share with elementary schools?
     + *Big picture*: if full-day pre-k was offered across the country?
     + *Teachers*:
       - What if the teachers’ views of class size were taken into effect?
         * http://www.classsizematters.org/research-and-links/#surveys of parents, teachers and students

* **Potential studies**:
  + **Benefits of class size reduction on upper grades**: http://www.classsizematters.org/research-and-links/#benefits for the upper grades
  + **Benefits for post-secondary education**: http://www.classsizematters.org/research-and-links/#benefits for post-secondary education
* **Data sets available**
  + 2012 class sizes: http://www.p12.nysed.gov/irs/pmf/2011-12/home.html