

## Full- Vs. Half- Day Pre-K: Results from Year 1 of a Longitudinal, Multi-Cohort Randomized Control Trial

A collaboration with Allison Atteberry (a former EdPolicyWorks postdoc) and Assistant Professor Vivian Wong.

### Full vs. Half Day Pre-K?

High quality early childhood education (ECE) programs can alter children's life trajectories and yield substantial social returns (Blau & Currie, 2006; Heckman, 2006; Loeb & Bassok, 2007; Shonkoff & Phillips, 2000; Weiland & Yoshikawa, 2013; Wong, Cook, Barnett, & Jung, 2008). For these reasons, public investment in ECE has grown rapidly over the past two decades. However, the quality of early childhood programs in the United States varies drastically. In addition, several recent studies suggest that the benefits of preschool participation may not persist. There is substantial interest, both from policy-makers and from researchers, in understanding how to enhance the benefits of early childhood interventions.

One promising approach to realizing social benefits from ECE investments is through improvements to their quality and intensity. For instance, the 2016 release of new Head Start Program Performance Standards substantially increased the number of program hours required. In addition, work exploring variation in Head Start program impacts suggests that Head Start centers offering full-day services had greater impact on children's cognitive skills than those providing part-day programs (Walters, 2015). Two other studies also indicate that children do better in preschool (Robin, Frede, & Barnett, 2006) and kindergarten (Gibbs, 2014) programs with extended days. Our study adds to the small existing literature by providing new experimental evidence about the impacts of full-day preschool, on a host of immediate- and medium-term outcomes. Westminster Public Schools ("WPS")—a small, predominantly low-income, non-White, and ELL district near Denver—became interested in expanding its pre-k offerings to explore the potential benefits of extending daily time in pre-kindergarten. In addition, WPS hypothesized that a full-day schedule would be more compatible with the work lives of many of the parents living in this district. Prior to 2016, WPS provided only half-day preschool, for four days per week.

In 2016-2017, WPS created nine new full-day classrooms as part of a Full-Day Pre-K Pilot Program (“FDPK”). Because about twice as many families wanted to attend full-day than could be accommodated in those classrooms, WPS sought to select students based on a lottery system.

In the summer of 2016, we initiated the first of a three-cohort randomized control trial of expanded pre-k (full-day classrooms, five days per week) relative to business as usual. At this initial stage, we will present findings about how this increased time plays a role in young children’s development and preparation for kindergarten. We utilize the 226-student randomization to estimate preliminary causal effects of the longer school day on student mobility, special education referrals, and literacy development. However, the question of whether full-day pre-kindergarten benefits students naturally rests upon understanding *how* the additional time in school is used, relative to how it would have been used in the absence of the full-day option. We therefore also present evidence gathered from parents and teachers via surveys about time-usage both inside and outside of formal pre-k time. This allows us to describe implementation fidelity, investigate heterogeneity across sites, and explore the mechanisms through which the additional time may be leveraged.