



Why Theory Matters: An Examination of Contemporary Learning Time Reforms

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Abstract: This article explores the contemporary policy reform push to extend and expand learning time in schools. In light of the potential and continued prominence of learning time reforms in today's national educational landscape, this article makes visible the ways in which theory matters for the near- and long-term success of equity-focused educational reforms. Using the recent enactment of learning time reforms in Colorado as an illustration, and the zone of mediation framework as a conceptual lens, this article demonstrates how such reforms are likely to be weakened and undermined without strong theoretical grounding.

Keywords: Learning time; equity; learning theory; zone of mediation; reform processes

Porque teoría es importante: Una investigación de la reforma contemporánea del tiempo de aprendizaje

Resumen: Este artículo examina políticas contemporáneas que enfatizan un cambio para extender y/o dispersar el tiempo de aprendizaje en las escuelas. Dado el potencial y relevancia actual de las reformas hacia el tiempo de aprendizaje en el campo general de educación, el propósito de este artículo es brevemente enaltecer las maneras en las cuales la teoría educativa son de suma importancia, a largo y corto plazo, para asegurar el éxito de dichas reformas educativas orientadas hacia la equidad. Utilizando el ejemplo de la implementación de estas reformas en Colorado, y el instrumento teórico de la zona de mediación, este artículo demuestra como reformas similares pueden ser disminuidos por una falta de una base de teoría fuerte.

Palabras claves: Tiempo de aprendizaje; equidad, teoría de aprendizaje; zona de aproximación; procesos de reforma

Por que teoria é importante: Uma investigação das reformas contemporâneas do tempo de aprendizagem

Resumo: Este artigo examina o promover da reforma contemporânea das regras para ampliar e expandir o tempo de aprendizagem nas escolas. Considerando o potencial e o contínuo destaque da reforma do tempo de aprendizagem no ambiente da educação nacional atualmente, este artigo ilustra as maneiras em que teoria é importante para o sucesso imediato e futuro das reformas educacionais que se focalizam em equidade. Usando a recente promulgação das reformas do tempo de aprendizagem em Colorado como ilustração, e o sistema de zona de mediação como uma lente conceitual, o artigo demonstra como tais reformas serão provavelmente enfraquecidas sem uma forte base teórica.

Palavras-chave: Tempo de aprendizagem; equidade; teoria de aprendizagem; zona de mediação; processos de reformas

Why Theory Matters: An Examination of Contemporary Learning Time Reforms

Many of the nation's most prominent and important school reforms are intended to improve children's quality of learning. They are designed to increase access to robust learning opportunities for children with the most pressing social and academic needs. But when salient parts of intended change reforms are not grounded in the best research evidence, they are less likely to improve learning or increase educational equity among diverse groups of students. The ability of a reform to promote *equity* depends in large part on whether it attends to the unequal ways that racial and class-based hierarchies structure social institutions, such as schools (Howe, 1997). As such, a reform that aims to ameliorate "opportunity gaps" (Carter & Welner, 2013) amidst students should be grounded in research about the equity-focused reform process; it should be pursued in ways that preserve its equity elements throughout all stages of design and implementation (Welner, 2001). Similarly, a reform that intends to enhance learning time should be grounded in research evidence about how people *learn*.

This article explores these issues through the lens of an equity-focused reform that has been prominent in recent years: the push to extend and/or expand learning time in schools. From adding time to the school day, to afterschool programming, to reorganizing the school bell schedule or academic yearly calendar, there have been significant efforts across the nation to increase the amount of quality learning time that youth experience on a daily basis. We find that though well

intentioned, these learning time reforms (LTRs) have generally suffered from weak theoretical coherence in their foundational assumptions about learning and about reform strategies.

These inconsistencies are seen across the literature base on LTRs, as well as in local on-the-ground examples that served as the impetus for this article. LTRs have emerged as policy strategies that are attentive to the amount and quality of in-school and out-of-school time across days, weeks, or years. If enhanced or better used, learning time is seen as having the potential to bolster academic learning, expand enrichment activities, and ultimately enhance students' opportunities and success. Given the potential and continued prominence of learning time reforms in today's national policy reform landscape, our proximate purpose in this article is to briefly make visible the ways in which theory matters for the near and long term success of equity-focused educational reforms. We do this by using a relevant and well-documented theoretical tool, the zone of mediation, to better understand the enactment of LTRs in our local state context.

Researchers' Positionality and Rationale for Engagement

Over much of the past decade, the Ford Foundation led a "More and Better Learning Time" (MBLT)¹ initiative, which was an approach to educational policy reform that was intended to redesign time inside and outside of school. The initiative was expressly intended to provide students who attend schools in areas of concentrated poverty with additional opportunities to participate in high quality learning experiences. In late 2012, Ford provided funding for More and Better Learning Time reforms in several geographic areas, including Colorado. The Foundation commissioned our university-based research team to partner with community and state organizations to get a grounded sense of how the reform was being understood and enacted.

Learning time reforms implicate multiple specialty areas within educational research, so our interdisciplinary educational research team includes experts in the areas of educational reform policy and learning design and theory. Our focus has been on understanding the local and national scope of LTRs, and the ways in which they are being experienced by practitioners, families, and schools. As such, our work has involved a comprehensive literature review of learning time reforms nationally², in tandem with qualitative investigations into state- and community-level experiences of the reform. While future articles will speak more directly to the empirical side of our work, in this brief article we make use of a robust and interdisciplinary theoretical perspective in order to situate and better understand a reform that continues to unfold in real time today.

Theoretical Perspective

Proposed as a strategy to improve the learning opportunities for children in areas of concentrated poverty, the MBLT initiative explicitly espoused a theory of change that aimed to attend to the dearth of high quality, enriching learning opportunities in low-income communities. In the same vein, other LTR initiatives, such as *extended learning time* and *expanded learning opportunities*, aimed to improve educational outcomes for youth by increasing the amount and quality of learning time available to youth.

Some research has found LTR efforts to be effective, especially for those students who had the most pressing academic or social needs (Farbman, Christie, Davis, Griffith, & Zinth, 2011;

¹ For more information on Ford Foundation's More and Better Learning Time Initiative, now known as Time for Equity, please see www.fordfoundation.org

² See Appendix A

Kaplan & Chan, 2011; Rocha, 2006). Fully realizing this potential, however, depends on design, implementation, and receiving context. Accordingly, the following paragraphs take a deep dive into the ways in which the zone of mediation framework, in tandem with perspectives from learning theory, can shed insight into conceptualization and instantiation of learning time reforms.

Theorizing Change in Equity-oriented Educational Reforms

Reform ideas, no matter how conceived, are reshaped during the inevitable adaptation of that reform that is partially due to inertia—to the difficulty of changing the *status quo* (Berman & McLaughlin, 1987; McLaughlin, 1998; Tyack & Cuban, 1995). But there are important differences between various types of school change. Some reforms can be thought of as making technical changes, with no major redistribution of power or resources. A professional development sequence aiming to better teach the writing of computer code could be part of a challenging and important reform, and it may require a concerted effort in order to be successful—but it would not confront certain additional obstacles encountered by reforms that challenge power relations or who gets access to scarce resources. Using the example of de-tracking in schools, on the other hand, Oakes (1992) explains the *normative* and *political forces*, as well as technical forces, that consequentially impact such equity-oriented reforms.

The zone of mediation framework (Welner, 2001) offers a way to highlight these and other dynamic forces affecting school reform efforts in particular sites. Specifically, the zone helps explain how larger technical, normative and political forces shape a reform's context, and it illustrates how the local institutions mediate—reproduce or counteract—these larger forces throughout the implementation process. When a reform proposal enters a site, its feasibility of adoption and process of implementation are largely determined by this context.

A reform designed to provide universal college-preparatory learning opportunities might confront, for example, normative beliefs around lowered academic expectations for students of color and students living in communities affected by poverty. This reform might also confront political resistance from more efficacious parents at the school, who worry that these opportunities, if not rationed, might be diluted for their own children. The resulting reforms are often reshaped or completely undermined by politically powerful resistance among parents or teachers who see stratified systems as necessary to provide higher quality opportunities for students they see as more deserving or motivated (Oakes, 1992; Wells & Serna, 1996; Welner, 2001). Similarly, a school's attempt to dismantle a “zero tolerance” discipline policy may be affected by racialized beliefs concerning deviance or criminality, as mediated by local community institutions and popular media norms; it might also be impacted by political imbalances tied to race and class at the local, state and national levels. Accordingly, the reform process for equity-minded change tends to follow a “downward” path, which means policies tend to be watered down or eliminated (Welner, 2001). Learning time reforms vary on this question. Some could be implemented in ways that do not threaten the status quo and do not advance equity—such as when a school extends its routine hours before thoughtful consideration of the ways its tracked classes are enabling some groups of students and constraining others. Others might adopt a more explicitly equity-minded approach, which involves the redistribution of resources in order to provide increased amounts of high quality learning time for students in low-income communities. Using the data from our Colorado study, the following section of this article illustrates how context and divergent forces can reshape an intended reform in ways that weaken its potential to close opportunity gaps.

Applying the Zone of Mediation to Practice: A Case Study of Learning Time Reforms in Colorado

For two years, our research team surveyed the policy framing and implementation of learning time reforms in Colorado, with a primary question in mind: what factors are influencing the nature and extent of the Ford MBLT implementation in Colorado? This study, designed to inform the MBLT initiative nationally and in Colorado, included two similar but complementary research pathways: documenting the work of parent and teacher organizing groups, and understanding the state's policy reform ecosystem. We wanted to understand how the intended reform was progressing and what forces were at work, shaping and reshaping the reform over time. Our data³ are from meeting observations; semi-structured interviews with community organization leaders, members and key policy actors in the state; and analyses of documents, including foundational work from the Colorado Education Initiative (CEI), formerly known as Colorado Legacy Foundation, and a report produced by a professor at the University of Denver based on research that coincided with ours. For this article, we only include illustrative examples to ground our theoretical discussion.⁴

In the case of an equity-minded educational reform, it should improve access to quality opportunities to learn for students of color and students from high-poverty. Learning time reforms make for an interesting case study because they can be designed and enacted in ways that fall at substantially different points along the equity continuum. While the MBLT reform was designed to challenge powerful norms and beliefs by providing less advantaged children with rich, engaging opportunities to learn, other LTR approaches might largely replicate or merely intensify approaches that maintain educational inequity by providing what one of our community organization parent members deemed “more of the same” [referring to the existing poor quality of the school's programs]. Accordingly, the implementation of Colorado's MBLT initiative nicely illustrates the importance of how political, normative, and technical forces can shape equity-minded reform initiatives.

Political Forces

Beginning in 2009, Colorado was hit hard by the national economic downturn and subsequent reduction in financial resources. Alongside this financial reality was a continued state

³ Our research was carried out in partnership with three organizations seeking to advance MBLT in Colorado: South West TURN (SWT), Together Colorado (TC), and Padres & Jóvenes Unidos (PJU). SWT is a network for teacher union members whose mission is “to support local teacher union leaders as collaborators in the improvement of student learning” (www.turnweb.org). It is part of a national TURN organization that organizes union chapters to provide better school reform alternatives. TC is an interfaith community-organizing organization, part of the larger PICO network that works at the local level on issues of relevance to its constituents (www.togethercolorado.org). PJU is a multi-issue, intergenerational organizing group that works for “educational excellence, racial justice for youth, immigrant rights and quality healthcare for all” (www.padresunidos.org). A second leg of our research was carried out at the state level, involving interviews with key stakeholders involved in the implementation of learning time reforms in Colorado. Our design followed the principles of exploratory, qualitative research, meaning we used an evolving, iterative process of snowball sampling and ongoing data collection until we reached saturation. Our primary method was to interview leaders of the groups, accompanied by observation of meetings and public events. Fuller presentation and discussion of this empirical work, however, is not the purpose of the present brief article.

⁴ Emergent presentation of our early empirical research are also available at American Educational Research Association 2014 & 2015 proceedings.

push to embrace the national effort for high-stakes accountability policies. When the Ford Foundation started its work with local partners on the MBLT reform effort, these two factors—one of a fiscal nature and one of a core political nature—had already exerted a powerful influence over the context within which MBLT would be implemented. Colorado’s context—its zone of mediation—favored reforms seen as effective at increasing test scores and doing so at little or no cost. Accordingly, when advocates of digital and blended learning⁵ courted policymakers in Colorado, these reforms were seen as compatible within this zone, as a means to increase test scores at little or no cost. This advocacy ended up being very successful, with blended learning initiatives ultimately absorbing much of the state’s LTRs. Digital or blended learning advocacy in the state, then, can be understood as having been facilitated by the zone of mediation, created by earlier fiscal and political forces, and as an advocacy push that itself has shaped the MBLT zone of mediation.

Fiscal scarcity. Because Colorado is home to the nation’s most restrictive tax-and-expenditure-limitation law, called the Taxpayer Bill of Rights, or “TABOR,” school funding began the recession at a deficit, and the subsequent recovery has been slow to refill state coffers (Lav & Williams, 2010; see also Colorado School Finance Project, 2015). Colorado is also among the lower ranking states in per pupil funding—it ranks 37th of 49, spending substantially less per pupil than the national average (Baker, Sciarra, & Farrie, 2015).⁶ In 2011, a state trial court found that the state’s “public school finance system is irrational, arbitrary, and severely underfunded” (*Lobato v. State of Colorado*, 2011, p. 182). Moreover, little institutional action to address this problem is likely, because Colorado’s Supreme Court subsequently determined that the state constitutional requirements in terms of resources and funding are minimal or nil (*Lobato v. State of Colorado*, 2011). Further, in statewide elections in 2011 and 2013, voters rejected funding proposals that would have partially addressed these shortfalls. The *Lobato* decisions, along with these failed statewide initiatives and the ongoing impact of TABOR, point to a long-term dearth of resources in Colorado’s education system as well as the likelihood that this dearth will continue for the foreseeable future. Such a resource-deprived context is helpful to keep in mind even when considering many largely unrelated forces that also shaped Colorado’s zone of mediation for LTRs, some of which are discussed below. A sustained effort to enrich learning opportunities in disadvantaged communities, as envisioned by the Ford Foundation’s MBLT initiative, is very difficult in a time of fiscal scarcity when cheaper school reform proposals—however unproven—are far more appealing to policymakers.

Accountability policies. Although Colorado policymakers and leaders expressed an aim to expand their objectives beyond scores on high-stakes tests, our interviewees, both from community based and state institutional levels, acknowledged that this was difficult to do in the test-based accountability context. One of our interviewees described ongoing efforts among state policy makers to broaden the goals of education reforms in the state by moving away from “such a narrow focus on academics.” Similarly, a state policymaker told us that Colorado education leaders “understand that the goal isn’t just about math and reading scores, despite working in an accountability context that places a strong emphasis on academic achievement.” But these authorities and others we spoke with all expressed doubts that they would make progress. And our

⁵ The Colorado Education Initiative defines blended learning as a mode of instructional delivery at the course, unit, or school level “that blends online and face-to-face instruction” (Murin & Watson, 2012, p. 4).

⁶ We use Baker, Sciarra, & Farrie’s (2015) funding fairness measure of the overall level of per-pupil funding for each state, because it controls for factors influencing state and local education costs (i.e., “regional wages, poverty, economies of scale, and population density;” p. 4). Other rankings place Colorado lower (e.g., *Education Week’s* “Quality Counts” places Colorado at 43rd of 51 in per pupil spending (Retrieved from http://www.cosfp.org/HomeFiles/QualityCounts/QC2015/QC2015_State_Comparison.pdf).

experiences on the ground at local schools revealed the same-- that the immediate need to improve reading scores, for example, necessitated investment in a new online technology to personalize reading remediation for students who were struggling.

Our interviewees also pointed in particular to the state's Great Teachers and Great Leaders Act (see Colorado Department of Education, 2008),⁷ a personnel evaluation system heavily dependent on students' measured academic growth. They explained that this high-stakes, test-focused accountability system made it difficult for policymakers, institutions, and educators to focus on time reorganization that was, at best, only indirectly attached to the accountability system.

Mediating institutions. As noted above, larger societal forces can be reproduced or counteracted by institutions situated in particular contexts. Taking this zone of mediation into consideration, Ford's grantees included Colorado Education Initiative, which was already established as the state's most influential LTR organizer, convener, and broker. Ford funded CEI to help build capacity for a successful MBLT reform. CEI is a non-governmental organization and privately funded strategic partner that was created in 2007 by the Colorado Department of Education (CDE) to work closely with state policymakers to develop and improve educational policies and practices. For our purposes, CEI is best thought as a mediating institution, but its level of influence in Colorado over education policy in general, and over LTRs in particular, make it a powerful force in its own right.

Prior to Ford's MBLT initiative, CEI had already been pursuing an expanded learning opportunities (ELO) reform effort that developed from a competitive grant which brought LTRs into Colorado's education policy landscape. The earlier grant also had an expressly equity-minded focus, recognizing systematic education inequities in opportunity, both race- and class-based: "Academic disparities are exacerbated outside school walls, as low-income and minority students differ widely from their more affluent, white peers in access to enriching and extracurricular opportunities" (Council of Chief State School Officers, National Conference of State Legislatures, & National Governors Association Center for Best Practices, 2001, p.1). At the time, Colorado's education leadership team set out to use ELO for other important purposes: "to engage students in school, recover high school dropouts, and link workforce needs with education goals" (Council of Chief State School Officers, National Conference of State Legislatures, & National Governors Association Center for Best Practices, 2001, p. 1). Yet in the ensuing years, Colorado's policy focus saw a shift away from the grant's attention to "access to enriching and extracurricular opportunities" and toward more instrumental goals that reflect the socioeconomic context in which this reform is embedded—and the shift became more pronounced in later years. The mix of LTR goals evolved to eventually become a tool for the development of "academic, professional, and entrepreneurial competencies that the modern economy demands" (Colorado Education Initiative, 2014).

By 2014, digital or blended learning became a clear part of the LTR agenda in Colorado. The CDE and CEI rebranded their ELO effort as a "Next Generation Learning" initiative (NextGen), which "seeks to creatively and systemically integrate a vast range of new and existing next generation teaching and learning tools, resources, modules and approaches into more personalized, engaging and relevant learning experiences that tap into each student's passions, interests and learning styles inside and outside of the classroom" (The Colorado Education Initiative, 2014). An interviewee described this most recent vision as "ELO 2.0."

⁷ Other cited examples of testing and accountability policies were Colorado's Achievement Plan for Kids (CAP4K; SB 08-212), and the Reading to Ensure Academic Development Act (READ; HB12-1238). See also Colorado Department of Education, 2008.

By 2015, the focus was explicitly on developing and piloting digital learning technologies that (a) provide student instruction through varying degrees of online-interfaced learning systems (e.g., blended learning), (b) afford instant data-based feedback to teachers and students, and (c) enable the creation of new competency-based student outcome systems in lieu of traditional systems based on seat time and grade level enrollment. These technical elements of reform were tightly linked to the state's other major reforms, with the goal of "leverag[ing] and inform[ing] key existing policy initiatives, including Colorado's Graduation Guidelines, Postsecondary and Workforce Readiness Endorsed Diploma criteria, and District and School Performance Frameworks" (Next Generation Learning, 2014).

In hindsight, one can find evidence that this emphasis on flexible and personalized learning was present even before the shift to the Colorado Education Initiative. Ubiquitous in Colorado LTR materials over the decade from 2007 to 2016 is the *personalized learning experiences* narrative, which has served as a bridge from the initial LTR focus to the later clear-cut focus on digital learning. As the reform eventually developed within the context of fiscal austerity and test-based accountability, CEI and CDE sought to implement a technology-focused, personalized-learning-centered ELO vision that would engender system-level and student-outcome-based changes that complemented local and state objectives. This was true before MBLT was introduced into Colorado's reform context, and the MBLT efforts did not substantially change that focus.

Over the two-year span of the Colorado study, what we witnessed could best be described as earnest efforts among some educators, community members and policymakers to prioritize the MBLT elements that they believed in. But those efforts were always tempered by concerns about the larger accountability system, and as the study progressed we saw policymakers embrace a system that privileged efficiency and individuality through the integration of cutting edge educational technologies. These changes were gradual but consistent. Before the express shift to NextGen, some schools engaged in LTR used blended learning as an enrichment tool, yet issues of time were not subsumed within a push for blended learning. Then, as CEI's embrace of blended learning became more central, the emphasis on reorganization of time towards equity moved further to the margins. Advocates of blended learning continue to use "extended learning opportunity" language (Vander Ark, 2015), but the key push was for digital learning technology. The learning time reforms became technical (and technological) changes, pushing aside efforts implicating normative and political change—those directly aimed at providing students in disadvantaged communities with the sort of enrichment that wealthier families often obtain for their children through available community resources.

Technical Forces: The Realities of Teacher Time

The technical dimension of learning time reforms, while seemingly straightforward in some senses (for example, using reform funding to simply add time to an afterschool program or rearranging enrichment time) surfaced as yet another important component of Colorado's inhospitable zone of mediation context. As noted by Oakes (1992) in her discussion of the detracking reform, "the technical changes in any one practice...will require simultaneous attention to the myriad other practices that correspond to it" (p. 17). Similarly, simply adding time to the school day implicates not only the students themselves, but also their parents' daily routines, district transportation systems, and notably, the *teachers* and their time.

In interviews with leaders from one of our partner organizations with strong ties to the local teacher community, we listened to important concerns about the lack of extra compensation and planning time that teachers faced in light of the recent reforms to extend or expand learning time. In addition to needing extra time to plan for the extra time for the students, teacher leaders voiced the

reality that teachers themselves were *already* strapped for time and resources within the high-stakes accountability context of their schools. More time, then, while seemingly a well-intentioned strategy to increase student learning and lessen opportunity gaps, was in fact at odds with what teachers felt was most needed for themselves, their fellow teachers, and their student community.

Existing independent of the perceived potential benefits of the proposed learning time reform, Colorado teachers' time and resource scarcity (overlapping with the above-mentioned political forces section) was an immediate and real technical force that impacted enactment of any LTR reform. The below quote from an interview with a teacher is broadly illustrative of the types of feedback we received from stakeholders in the Colorado community. When asked to name the challenges that particular schools were facing with MBLT, she said the following:

Our district just cut \$64 million in the last, you know, five million in five years. I mean it's been really tough lately. We've cut programs in schools. We've cut salaries. We've cut everything, and so our class sizes are huge. I would say time and money are always the two big huge barriers because teachers are doing more work with fewer resources than they've ever had before. Then it's like, "Okay. Well here, let's try one more thing." I think that that is a problem. (Interview with teacher organization leader, August 2013)

Recognizing that a teacher's job description is manifold and that her/his daily stressors are high is not news- but continuing to name the ways in which a multitude of technical forces are at play in the receiving context of an equity-focused reform, remains an important task when trying to better understand the ways in which such a reform is enacted. In the case of learning time reforms intended to promote equity for students from marginalized communities, we find such technical forces to be especially relevant and explanatory in regard to reform outcomes.⁸

Much like Oakes (1992) found in her analysis of detracking reforms in the 1990s, we contend that in order for a learning time reform to successfully carry out its intended aims of increasing the amount and quality of time that a child spends learning every day, the surrounding school, teacher, and community practices must also be "reconsidered and made compatible" (p. 18). While we saw learning time reforms taking many forms across both the literature and in practice, such as through a partnership and subsequent internship with a community organization, an added hour of science instruction, or adding a week to the school year's calendar, to name just a few, each type of reform was necessarily mediated by an almost innumerable amount of technical forces that ought to be accounted for in reform design, implementation, and evaluation.

Normative Forces: Learning Theory

Alongside the political and technical forces at play in the implementation of LTR efforts in Colorado, a number of normative forces, including primarily the conceptualization of what it means to account for and incite learning, mediated the ways in which LTR reforms were conceptualized and enacted on the ground level. Colorado's status quo of education policy is, like much of the rest of the nation, imbued with neoliberal concepts that frame equality and equity in terms of individual choices (Hursh, 2007). Our state's efforts to promote blended learning, for example, are consistent with the normative belief that learning is primarily the acquisition of knowledge (e.g. the ability to perform well on an assessment at one point in time). These efforts are also based on the assumption

⁸ See (Prudhomme, DiGiacomo, Van Steenis & Kirshner) forthcoming in AERA 2016 proceedings) for a full presentation of empirically driven findings on technical forces amidst the Colorado LTR context.

that students and teachers should be held individually accountable for knowledge acquisition, undergirded again by the normative neoliberal belief in efficiency. Yet these notions of learning and the role of schools, teachers, and learners sit largely in contradiction to what progressive educational research, and in particular, learning research, has demonstrated over the past three decades.

Committed to the investigation of the learning in real world settings, when we talk about learning in this article, we are not referring to *what* students learn, but *how* they learn. We are interested in moving beyond assessment or performance linked views of learning and toward an emphasis on the constellation of experiences and the set of conditions made available for students from all backgrounds to grow and develop. Informed principally by neo-Vygotskian sociocultural theory, we understand learning as a situated phenomenon, something that occurs as youth move between, across, and through the many settings of their lives, and is deepened through meaningful engagement and experiences with others in their community (Bell, Zhou & Bricker, 2013; Sefton-Green, 2015; Vygotsky, 1978). As such, reforms that aim to improve learning in a given context should outline the set of conditions by which the learning is being organized and instantiated and by which students are able to, among other things, gain increased expertise in a given area, take on new role within a relationship or activity, and exercise growing knowledge or skills in different contexts.

In our initial review of the existing LTR literature⁹, we found it to be largely grounded in narrow (yet normative) assumptions about learning (See also review by Patall, Cooper & Allen, 2010). By and large, the literature discussed reforms that aimed to improve students' academic skills in content-specific areas, and did not proceed from the assumption that learning was also constituted by students' ability to increase their participation in the meaningful activities of their academic, social, or cultural communities. The former view logically results in typical remediation-based interventions such as after-school homework help or online intensive skills programs that become *school after school*. As Honig and McDonald's (2005) review found, such programs show limited evidence of academic improvement and do not meet the rich potential for broader youth development outcomes (see also Halpern, 2002; Kane, 2004).

To be sure, research from the National Center for Time on Learning has made formidable efforts to provide time efficiency tools that can support technical fixes to lengthy passing periods or lunch schedules, in order to squeeze as much learning time out of the school day as possible (Farbman, 2012; Kaplan & Chan, 2011). However, we remain cautious again in equating time in the classroom with time on learning. Substantive educational research, particularly ethnographies among children and youth from marginalized communities, suggest that more time in school might—under the wrong conditions—actually erode learning and dignity (Fine, 1991; Kohl, 1994; Valenzuela, 2005). Educational anthropologists, in particular, have long shown how learning is not bound by the classroom walls; it occurs before school and after school, in the neighborhood and on the playing field (Gutiérrez, 2014; Lave, 1996; Lave & Wenger, 1991). Even while using a strict definition of learning, as those activities relevant to academic disciplines (what Gutiérrez [2014] calls “vertical” forms of learning), research documents the “funds of knowledge” that children accumulate as they navigate their family routines outside of school, which have potentially rich consequences for in-school engagement and performance (Moll, Amanti, Neff, & Gonzalez, 1992; Nasir, Rosebery, Warren, & Lee, 2006; Rogoff, 2003). Neither our review of the literature, nor our experiences on the ground in Colorado, revealed an engagement with such theories of learning and youth development.

Several notable institutional reports and peer reviewed articles have discussed tangible LTR strategies proven to best support student academic achievement—namely a longer school day, increased time for teacher professional development and collaboration in tandem with timely data, and sustained community-school partnerships (see reviews in Patall et al., 2010; Rocha, 2006). Yet

⁹ See Appendix B.

even here, learning is being conceptualized and measured in limited ways—again, primarily by achievement on standardized tests. While the ability to achieve on school tests is an important indicator of student learning, it is but one of many and is recognized as so in wealthier communities. As Cummins (2007) points out, there is a real danger of creating separate “pedagogies for the poor.”

In particular, the LTR approach that uses the “Extended Learning Time” (ELT) label tends to proceed under the assumption that learning time is isomorphic with time in school. This approach garners support from research about academic benefits from extending the school day or school year, and about challenges stemming from summer “learning losses” (Patall et al., 2010; Smith, Roderick, & Degener, 2005). The approach that uses “Expanded Learning Opportunities” (ELO) terminology does an arguably better job in recognizing the value of enriching young people’s development. Reforms flying under the banner of ELO often call for a rich array of after-school opportunities, such as music, sports, art, or civic engagement. ELO reformers tend to see these programs as justified if they contribute to youth development generally (Eccles & Gootman, 2002), not merely to test performance. Advocates of ELO also have begun to unpack what it means to reorganize classroom learning time. Often addressing concerns beyond more time for schooling in core academic areas or for test preparation, they extend the reform into opportunities for field trips, project-based learning, and cognitively demanding tasks (Farbman et al., 2011; Farbman, 2012). Some ELO reforms, therefore, have begun to emphasize not just *more* time but *better* use of time.

Yet both of the dominant approaches—ELT and ELO—are largely informed by the normative views of what learning is, and lack a more explicit engagement with learning theory to provide guidance for equity-oriented design and evaluation. Recognition of normative views of learning, however, ought not serve as an insurmountable barrier to change. Indeed, a number of contemporary educational reforms have demonstrated the ability to create learning opportunities for youth that reflect what is known about the provision of transformative learning and equitable change.

When Theory and Practice Come Together: Examples of Equitable Learning Time Reforms

In a comprehensive report of best practices of designed learning in non-formal educational settings, Sefton-Green (2013) provides an overview of what is known about the contextual factors and design principles that best support learning, growth, and development for youth. This report echoes the substantive research that demonstrates the conditions that have served to provide meaningful in and out of school equitable learning opportunities for youth from marginalized communities (See also Cole, 2006; Kafai & Pepler, 2011; Nasir, 2012; Nasir et al., 2006; Vásquez, 2013). We find such research to be highly relevant to the discussion of contemporary learning time reforms, because it highlights best practices from theory-informed research that has created more and better opportunities to learn for students who need them the most.

Serving as illustrative examples of Sefton-Green (2013)’s argument, he discussed two afterschool educational programs whose conceptualization and implementation has been driven by the nexus of equity-oriented theory and practice: The Fifth Dimension and the Computer Clubhouse. Both programs intend to provide increased amounts of high quality learning opportunities to students of color and/or students from low-income communities, and are illustrative of types of learning time reforms that bring together what is known about change theory and learning theory—and in doing so, are in continual conversation with the known realities of oft-inhospitable but always present zones of mediation. Designed to promote learning for youth, both programs orient themselves around strong theories of learning:

Both initiatives are led by universities working with community, and both were motivated by a strong theory of learning. The Fifth Dimension is rooted in neo-Vygotskian theory and explicitly tries to support learners move through a series of learning progressions, often using literacy, mathematical, and scientific curricula. Computer Clubhouse is rooted in Papertian constructivism, and offers structured play-like activities, often with customized computer technologies. (p. 55)

Recognizing the need for program pedagogy to align with theories of learning and development, Sefton-Green (2013) notes the mutually informing movement between theory and practice:

Like Fifth Dimension, the ethos of Clubhouse experiences is collaborative and social, with a sense that it is through this mode of participation that high-quality learning occurs. Indeed, in some senses, learning is defined as participation, and participation thus becomes a form of learning. (p. 59)

Responding proactively to the contemporary political climate of technology saturated educational settings, these programs have adopted technology that complements their ethos of youth-centered production, via new media activities like ‘Scratch’ or ‘digital storytelling’ (Cole, 1996; Sefton-Green, 2013; Vásquez, 2013). In this way, student learning is supported by a host of mediational tools and strategies that center around what best practice learning and change theory reveal about how young people learn and develop across the many contexts of their in and out of school lives.

In our own research about the MBLT reform in the Denver area we encountered examples that we think are promising for reasons similar to those highlighted by Sefton Green. For example, a number of the community organizers we worked with in the Denver area referred us to West Generation Academy, which refers to itself as an innovative and cost-effective public school model that is organized to maximize student engagement and teacher effectiveness. West Gen has been a strong champion of learning time reforms, and took action to increase the length of the school day and restructure how existing time is used. West Gen added over 280 hours of school a year for students, which was used to create: 1) a strong academic foundation with more data-driven and timely academic interventions, 2) on-going mentoring and support in a mentor-led advocacy class, and 3) a diversity of scaffolds to support students towards college and career success through intensive courses and internship opportunities.

West Gen intensive classes provided a way for the students to connect their personal interest (such as the environment, medical, technology, hospitality, or government) with what they were learning in school. Professionals outside the school either taught many of the ‘real-world’ intensives so that students could become socialized into the types of discourse and social practices within that particular professional community. Participating with these industry leaders or in the workspace on field trips allowed the students to learn through participation in the practice. They were given the opportunity to work with doctors and learn to put a cast on or design a line of greeting cards from a series of paintings. Such experiences reflect what is known about the best ways to support the positive youth development and consequential learning of students, in that learning is conceptualized as meaningful participation with others in communities of practice (Lave & Wenger, 1991; Rogoff, 2003).

Discussion

Students living in communities of concentrated poverty do not have the same kinds of opportunities to learn as those experienced in middle class and affluent neighborhoods. Children benefit when they experience robust learning opportunities that engage and excite them on a daily basis. Well-designed learning time reforms have the potential to close these opportunity gaps. Yet the Colorado experience illustrates how political, normative, and technical forces can shift and weaken the conceptualization and enactment of an equity-minded educational reform.

What we observed in the Colorado context of learning time reforms resembled patterns of what we observed in our review of the published literature on learning time reforms. The literature on learning time reforms largely reflects normative conceptualization of learning-as-achievement, and does not cohere in its articulation of what was meant by learning. The literature was also clear in its intentions to promote school-based change toward equitable ends, yet did not espouse a clear theory of change within schools, communities, or systems. Such articulations of theories of change and of learning will not do in our contemporary context of high-stakes accountability and market-driven social policies. As illustrated in this article, an equity-minded learning time reform like MBLT found itself in an inhospitable “zone of mediation,” in which its intended goals of promoting equitable change and increased access to quality opportunities to learn were subsumed to the existing priorities and values of local contexts.

Regrettably, even approaching a reform like MBLT with deep attention to learning theory and change theory may be insufficient to change policy and practice without a sustained effort to shift the context within which the policy is being introduced (Welner, 2001). In offering the conceptual contributions of learning and change theory, we have intended to promote the continued importance of theory in informing future practice in positive and meaningful ways for the reform-receiving communities. Indeed, we remain hopeful about the potential of learning time reforms to increase the opportunities for high-quality learning within high-needs communities, in consequential and sustainable ways. With a more precise theory of change, a well-integrated theory of learning, and attention to the receiving zone of mediation, equity-oriented reforms such as LTRs could indeed serve as an important vehicle toward the achievement of educational equity.

References

- Baker, B. D., Sciarra, D. G., & Farrie, D. (2015). *Is school funding fair? A national report card*. Education Law Center. Retrieved from http://www.schoolfundingfairness.org/National_Report_Card_2014.pdf
- Bell, P., Tzou, C., Bricker, L., & Baines, A. D. (2013). Learning in diversities of structures of social practice: Accounting for how, why and where people learn science. *Human Development*, 55(5-6), 269-284. <http://dx.doi.org/10.1159/000345315>
- Berman, P., & McLaughlin, M. W. (1987). *Federal programs supporting educational change: Implementing and sustaining innovations*. Santa Monica: RAND Corporation.
- Carter, P. L., & Welner, K.G. (Eds.). (2013). *Closing the opportunity gap: What America must do to give All children an even chance*. New York: Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780199982981.001.0001>
- Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Harvard University Press.
- Cole, M., & Distributive Literacy Consortium. (2006). *The Fifth Dimension: An after-school*

- program built on diversity*. Russell Sage Foundation.
- Colorado's Achievement Plan for Kids (CAP4K). (2008) State Bill (SB) 08-212. Retrieved from <https://www.cde.state.co.us/sites/default/files/documents/cdedepcom/download/pdf/sb212completelegislation.pdf>
- Colorado Reading to Ensure Academic Development Act (Colorado READ Act). (2012). House Bill (HB) 12-1238. Retrieved from http://www.leg.state.co.us/clics/clics2012a/csl.nsf/fsbillcont/BE80872E0CC93D2987257981007DC105?Open&file=1238_01.pdf
- Colorado Department of Education. (2008). Retrieved from www.cde.state.co.us
- Colorado Education Initiative, formerly known as Colorado Legacy Foundation. (2014). Retrieved from <http://www.coloradoedinitiative.org>
- Colorado School Finance Project. (2015). *Profile Data: 2015 Highlights*. Retrieved from http://www.cosfp.org/StateProfileData/2015/ProfileDataHighlights_2015.pdf
- Council of Chief State School Officers, National Conference of State Legislatures, & National Governors Association Center for Best Practices. (2007). *Supporting Student Success: The Promise of Expanded Learning Opportunities*. Retrieved from <http://www.ncsl.org/Portals/1/documents/educ/afterschooloverview.pdf>
- Cummins, J. (2007). Pedagogies for the poor? Realigning reading instruction for low-income students with scientifically based reading research. *Educational Researcher*, 36(9), 564-572. <http://dx.doi.org/10.3102/0013189X07313156>
- Eccles, J., & Gootman, J. (2002). *Community programs to promote youth development*. Washington D.C.: National Academies Press.
- Farbman, D. (2012). *The Case for Improving and Expanding Time in School: A Review of Key Research and Practice*. National Center on Time & Learning.
- Farbman, D., Christie, K., Davis, J., Griffith, M., & Zinth, J. D., (2011). *Learning time in American: Trends to reform the American school calendar*. National Center on Time and Learning: Boston, MA. Education Commission of the States: Denver, CO. Retrieved from <http://www.ecs.org/docs/LearningTimeinAmerica.pdf>
- Fine, M. (1991). *Framing dropouts: Notes on the politics of an urban high school*. Albany, NY: SUNY Press.
- Gutiérrez, K. (2014). Integrative Research Review: Syncretic Approaches to Literacy Learning. Leveraging Horizontal Knowledge and Expertise. *63rd Literacy Research Association Yearbook*. In P. Dunston, L. Gambrell, K. Headley, S. Fullerton, & P. Stecker, (Eds.) (pp. 48-61). Alamonte Springs, FL: Literacy Research Association.
- Halpern, R. (2002). A different kind of child development institution: The history of after-school programs for low-income children. *Teachers College Record*, 104(2), 178-211. <http://dx.doi.org/10.1111/1467-9620.00160>
- Honig, M., & McDonald, M. (2005). *From promise to participation: Afterschool programs through the lens of socio-cultural learning theory*. New York, NY: The Robert Browne Foundation.
- Howe, K. R. (1997). *Understanding equal educational opportunity: Social justice, democracy, and schooling*. New York: Teachers College Press.
- Hursh, D. (2007). Assessing No Child Left Behind and the rise of neoliberal education policies. *American Educational Research Journal*, 44(3), 493-518. <http://dx.doi.org/10.3102/0002831207306764>
- Kafai, Y. B., & Peppler, K. A. (2011). Youth, technology, and DIY: Developing participatory competencies in creative media production. *Review of Research in Education*, 35(1), 89-119. <http://dx.doi.org/10.3102/0091732X10383211>

- Kane, T. (2004). *The impact of after-school programs: Interpreting the results of four recent evaluations* (pp. 1–33). New York: William T. Grant Foundation. Retrieved from <http://www.wtgrantfoundation.org>
- Kaplan, C., & Chan, R. (2011). *Time Well Spent: Eight Powerful Practices of Successful, Expanded-Time Schools*. National Center on Time and Learning.
- Kohl, H. (1994). *I won't learn from you: And other thoughts on creative maladjustment*. New York: New Press.
- Lav, I., & Williams, E. (2010). *A Formula for Decline: Lessons from Colorado for States Considering TABOR*. Washington, D.C.: Center on Budget and Policy Priorities.
- Lave, J. (1996). Teaching, as learning in practice. *Mind, Culture, and Activity*, 3, 149–164. http://dx.doi.org/10.1207/s15327884mca0303_2
- Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511815355>
- Lobato v. State of Colorado. (2011). Findings of Fact and Conclusions of Law, Div. 424, Colorado District Court. Retrieved from http://www.courts.state.co.us/Media/Opinion_Docs/05CV4794%20Lobato%20v.%20Colorado.pdf
- McLaughlin, M. W. (1998). Listening and learning from the field: Tales of policy implementation and situated practice. In Hargreaves, A., Lieberman, A., Fullan, M.G. & Hopkins, D. (Eds.) *International Handbook of Educational Change*. (pp. 70-84). Netherlands: Springer Publishers.
- Moll, L. C., Amanti, C., Neff, d., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice*, 31, pp. 132-141. <http://dx.doi.org/10.1080/00405849209543534>
- Murin, A., and Watson, J. (2012). *Blended Learning in Rural Colorado: Status and strategies for expansion*. Evergreen Education Group. Retrieved from <http://www.coloradoedinitiative.org/wp-content/uploads/2014/07/Blended-Learning-in-Rural-Colorado-CDE.pdf>
- Nasir, N. (2012). *Racialized identities: Race and achievement among African American youth*. Stanford, CA: Stanford University Press.
- Nasir, N. S., Rosebery, A. S., Warren, B., & Lee, C. D. (2006). Learning as a cultural process: Achieving equity through diversity. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 491–504). New York: Cambridge University Press.
- National Governors Association Center for Best Practices, Council of Chief State School Officers, & National Conference of State Legislatures. (2007). *Six States Receive Grants to Expand Learning Opportunities*. Retrieved from <http://www.nga.org/files/live/sites/NGA/files/pdf/0705NEWSRELEASEELO.PDF>
- Next Generation Learning Challenges. (n.d.). Grants, Grant Opportunities, The Colorado Coalition section, para. 4. Retrieved from <http://nextgenlearning.org/colorado-coalition>
- Oakes, J. (1992). Can tracking research inform practice? Technical, normative and political considerations. *Educational Researcher*, 21, 12-20. <http://dx.doi.org/10.3102/0013189X021004012>
- Oakes, J., Welner, K. G., Yonezawa, S., & Allen, R. (1998). Norms and politics of equity-minded change: Researching the “zone of mediation.” In M. Fullan (Ed.), *International Handbook of Educational Change* (pp. 952-975). Norwell, MA: Kluwer Academic Publishers. Republished in *Fundamental Change* (2005). Springer Netherlands (pp. 282-305).
- Patall, E. A., H. Cooper, & A. B. Allen. (2010). Extending the school day or school year: A systematic review of research (1985–2009), *Review of Educational Research*, 80, 3,

- 401–436. <http://dx.doi.org/10.3102/0034654310377086>
- Rocha, E. (2006). *More than just moments in time*. Washington, D.C.: Center for American Progress. Retrieved from https://americanprogress.org/wp-content/uploads/kf/MORE_THAN_MOMENTS.PDF
- Rogoff, B. (2003). *The cultural nature of human development*. Oxford: Oxford University Press.
- Sefton-Green, J. (2013). *Learning at not-school: A review of study, theory, and advocacy for education in non-formal settings*. Cambridge, MA: MIT Press.
- Smith, B., Roderick, M., & Degener, S. C. (2005). Extended Learning Time and Student Accountability: Assessing Outcomes and Options for Elementary and Middle Grades. *Educational Administration Quarterly*, 41(2), 195-236. <http://dx.doi.org/10.1177/0013161X04269864>
- Tyack, D., & Cuban, L. (1995). *Tinkering toward utopia: A century of school reform*. Cambridge: Harvard University Press.
- Valenzuela, A. (2005). Subtractive schooling, caring relations, and social capital in the schooling of US-Mexican youth: Beyond silenced voices: Class, race, and gender in United States schools. In L. Weis & M. Fine (Eds.) *Beyond silenced voices: Class, race, and gender in United States schools*. Albany, NY: State University of New York Press.
- Vander Ark, T. (2015). Grant-Beacon Middle School Builds Character, Extends and Blends Learning. *Education Week*. Retrieved from http://blogs.edweek.org/edweek/on_innovation/2015/10/grant-beacon_middle_school_builds_character_extends_and_blends_learning.html
- Vásquez, O. A. (2013). *La clase mágica*. New York: Routledge.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher mental process*. Cambridge, MA: Harvard University Press.
- Wells, A. S. & Serna, I. (1996). The politics of culture: Understanding local political resistance to detracking in racially mixed schools. *Harvard Educational Review*, 66(1), 93-118. <http://dx.doi.org/10.17763/haer.66.1.274848214743t373>
- Welner, K. G. (2001). *Legal Rights, Local Wrongs: When community control collides with educational equity*. Albany, NY: SUNY Press.
- Welner, K. G. (2013). Free-market think tanks and the marketing of education policy. In M. Katz & M. Rose (Eds.) *Public education under siege*. Philadelphia, PA: University of Pennsylvania Press. <http://dx.doi.org/10.9783/9780812208320.67>

Appendix A

Literature Search and Coding Process

Our review and categorization of the literature included two primary stages, carried out over the past two years. The broad, initial search focused on the terms “extended learning time,” “expanded learning opportunities,” and “more and better learning time.” The output was refined to focus specifically on Learning Time Reforms and ultimately yielded 72 documents: 19 peer-reviewed articles; 32 reports from foundations, government, or research centers; and 21 news articles from journalistic sources. Six months later, we added two search terms: “increased learning time” and “expanded learning time.” This yielded 25 additional articles and reports, one of which was a peer-reviewed article; 18 of which were institutional reports from foundations, state and national policy centers, or non-profit research centers; and the remainders were from news articles or blogs. For the purposes of the present discussion, we included only peer-reviewed articles or institutional reports that spoke explicitly to our investigation of learning time reforms.

Coding Process. Because of the diversity in breadth and depth of the literature that surfaced in relation to learning time reforms, we needed a way to systematically make sense of the descriptive patterns that were emerging across the publications. This led to a coding process that became increasingly precise over time, beginning with identifying whether the LTR sought to *add* time or to *enrich* the existing time. Then, we applied three primary codes that sought to reveal the articulated *purpose* of the learning time reform. These included ‘achievement gap,’ ‘academic learning,’ and ‘opportunity gap’ (see Table 1 below). Programs with the goal of closing the achievement gap often worked to decrease the disparity in academic success. Often, this disparity was between groups, based commonly on free and reduced lunch status or race. The code of academic learning was used to describe programs that focused on increasing test scores or academic success, but not in contrast to other groups of students. Opportunity gap, similar to achievement gap, recognizes the disparity between groups. However, unlike those focusing on achievement gap, they focused on the disparity in opportunities, for instance how some students are afforded the opportunity to go to museums and college campuses and others are not.

After application of primary codes, our team worked together to apply secondary codes to the body of literature, which identified the strategies articulated to achieve the “purpose” of the LTR. (Again, see Table 1 below). While this re-reading and re-coding process was helpful in getting a better overall picture of the most common practices and strategies employed in LTRs, we ultimately found it wanting because of the dearth of theoretical grounding associated with articulated aims. As such, we drew upon our own team’s disciplinary expertise and decided to investigate existing theories of change and/or of learning that possibly undergirded the LTRs being discussed in the literature. Accordingly, we went through the literature once again (having updated and focused our running list with recent searches through ERIC and Google Scholar) and attempted to identify whether the literature had a well-articulated theory of change and/or of learning. This led to the general codes of lit, mid-level, or robust, which Table 2 reveals. This again helped our team get a better sense of the arguments that were being used to support the investigation of learning time reforms across the US-based literature, within the past decade. This iterative process of familiarizing ourselves with the literature base that was available largely informed our ongoing sense-making around what we were seeing on the ground level in Colorado. However, in the revision process for this article, we decided to use our literature review work to support, rather than to ground, our theoretical contribution to the study of contemporary learning time reforms.

Appendix B

Literature Review Sources and Coding

Table 1

Primary and secondary code application: Purpose and strategy of learning time reform

Author(s) and Year	Primary Codes: Purpose	Secondary Codes: Strategies
Kaplan & Chan, 2011	Achievement Gap	Efficiency (restructuring the day); personalization; deeper learning
Farbman, 2011	Academic Learning	Teacher collaboration; deeper learning
Britt & Raine, 2009	Achievement Gap	Teacher collaboration
Anderson, 1994	Academic Learning	Efficiency (restructuring the day)
The After-School Corporation, 2013	Achievement Gap	Enrichment; teacher planning and development; community involvement and engagement
Rocha, 2006	Achievement Gap	Individualized student learning; efficiency (restructuring the school day/year)
Princiotta & Fortune, 2009	Achievement Gap	Enrichment
National Center on Time & Learning & Mass 2020, 2011	Achievement Gap	Efficiency (restructuring the day)
Sunmonu, Larson, Van Horn, Cooper-Martin, & Nielsen, 2002	Academic Learning	Summer learning
Stonehill, Little, Ross, Deich, Morgan & Donner, 2009	Academic Learning	Enrichment; socio emotional development; academic learning; community learning and engagement
Chan & Kaplan, 2012	Achievement Gap	Efficiency (reorganizing the day)
Traphagen, 2013	Achievement Gap; Academic Learning	Robust learning environments, more time for core (science),
Public Sector Consultants Inc. Extended learning time: Is more always better? PSC: Putting thought into action: p. 1-7.	Academic Learning	Efficiency (restructuring the day)
Smith, Roderick, & Degener, 2005	Academic Learning; Achievement Gap	Test performance in math and reading; dropout prevention
Mass2020, 2012	Academic Learning	Efficiency (restructuring the school day)
Silva, 2012	Academic Learning	Efficiency (restructuring the school day)
The Wallace Foundation, 2011	Achievement Gap	Deeper learning, enrichment, teacher collaboration and planning, personalization/individualization, connected learning

Table 1 cont'd		
<i>Primary and secondary code application: Purpose and strategy of learning time reform</i>		
RAND, 2005	Opportunity Gap	Enrichment; robust learning environment; social and emotional Development; health and safety; teacher collaboration and planning; community involvement and engagement; dropout / educational failure prevention/reduction
National Education Academy, 2008	Achievement Gap	Community involvement and engagement, deeper learning, enrichment activities, teacher collaboration and planning, health and safety
McAlister, 2010	Opportunity Gap	Robust learning environment; social and emotional development; health and safety; enrichment
Patall, Cooper & Allen 2010	Academic Learning	Equity
ECONorthwest and the Chalkboard Project, 2008	Academic Learning	Deeper Learning; enrichment; dropout/Educational failure prevention/reduction; teacher collaboration and planning; summer learning; efficiency
Gabrieli, 2011	Achievement Gap	Efficiency (restructuring the school day); enrichment; job and career preparedness; college prep
Kotloff & Korom-Djakovic, 2010	Academic Learning	Deeper learning; enrichment
Redd, Boccanfuso, Walker, Princiotta, Knewstubb & Moor, 2012	Achievement Gap	Job and career preparedness
Sanger & Heckman, 2011	Academic Learning	Robust learning environment, enrichment
Malone & Noam, 2011	Achievement Gap	Community engagement
Malone, 2011	Academic Learning	Teacher planning and professional development
Citizen Schools, 2011	Academic Learning	Robust learning environments; test performance in math and reading
Bowles & Brand, 2009	Academic Learning; Achievement Gap	Academic learning, job and career preparedness, social and emotional development, health and safety
Rangel & Berliner, 2007	Academic Learning	Deeper Learning; personalization / individualization; robust Learning environment

Table 2

Tertiary code application: Theory of change and theory of learning

Author(s) and Year	Change: Theory Light to Robust (Light: technical approach to reform) (Robust: Equity-oriented; attends to normative and political change)	Learning Theory: Light to Robust (Light: "Deeper on core academic content"; "field trips"; "individualized"; "personalized"; learning in community partnerships) (Robust: Explicit articulation of value of bridging home and school; connected learning; cultural responsiveness) (Problematic: remedial; compensatory; absence of enrichment; sole focus on more test preparation)
Kaplan & Chan, 2011	Light	Light
Farbman, 2011	Light	Light
Britt & Raine, 2009	Light	Light
The After-School Corporation, 2013	Light	Light
Princiotta & Fortune, 2009	Light	Light
National Center on Time & Learning & Mass 2020, 2011	Light	Problematic
Stonehill, Little, Ross, Deich, Morgan & Donner, 2009	Mid-line	None
Chan & Kaplan, 2012	Light	Light
Traphagen, Davis, Farbman, Kaplan, 2011	Light	Mid-line
Smith, Roderick, & Degener, 2005	Light	Light
Mass2020, 2012	Mid-line	Mid-line
The Wallace Foundation, 2011	Light	Light
National Education Academy, 2008	Light to mid-line	Mid-line
Patall, Cooper & Allen 2010	Light	Problematic
ECONorthwest and the Chalkboard Project, 2008	Light	None
Gabrieli, 2011	Light to mid-line	Light to mid-line
Sanger & Heckman, 2011	Robust	Robust

Table 2 cont'd		
<i>Tertiary code application: Theory of change and theory of learning</i>		
Malone & Noam, 2011	Mid-line to Robust	Robust
Malone, 2011	Robust	Mid-line to robust
Citizen Schools, 2011	Mid-line	Light to mid-line
Rangel & Berliner, 2007	Mid-line	Robust
Jabobson & Blank	Robust	Robust
Metzker, 2003	Light	Light
Berry & Hess, 2013	Light to mid-line	Light
McMurrer, 2012	Light	Light
Pregot, 2013	Light	Robust
Harris & Princiotta, 2009	Light	Light
Ed Trust West, 2011	Light	Light

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