



Research Report

**YEAR-ROUND SCHOOLING AT THE
ELEMENTARY LEVEL: AN OVERVIEW
OF THE LITERATURE**

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TABLE OF CONTENTS

The Rural Origin of the Summer Holidays – An Urban Myth.....	Pg. 1
What is Year-round Schooling?	Pg. 1
Characteristics of Year-round Schools.....	Pg. 2
The Summer Achievement Gap.....	Pg. 2
The Relationship of Year-round Schooling of Student Achievement	Pg. 3
Physical Challenges.....	Pg. 4
Reaction of Students, Staff, and the Community	Pg. 4
Political Challenges.....	Pg. 5
As a Catalyst for Pedagogical Change	Pg. 6
Summer Holidays in Other Countries.....	Pg. 6
Conclusion	Pg. 6
References	Pg. 8

YEAR-ROUND SCHOOLING AT THE ELEMENTARY LEVEL: AN OVERVIEW OF THE LITERATURE

The Rural Origin of the Summer Holidays – An Urban Myth

There is a widespread perception that the two-month summer holiday is an inheritance from Ontario's agricultural past. Thus, Shields and Oberg's (2000) glossary for the 'traditional calendar' notes that it is "also known as the agrarian Calendar." Many articles state or infer the assumption that such a rural artifact from the distant past has little relevance to modern urban education. In fact, more recent research in the US by Gold (2002) and in Ontario by Weiss and Brown (2003) clearly show that the summer holiday originated as an *urban* educational initiative. Ontario's elementary school system was organized in the mid nineteenth century as a true year-round schooling calendar, with a two-week summer holiday in August. Because of pressure from the cities and towns, the summer holiday was gradually extended to its current length between 1860 and 1913. There were multiple reasons for the extension, among them financial restraints in keeping schools open; high summer absenteeism; the heat of schools in the height of summer; a then-current educational theory that keeping children in school over the summer would result in lower academic achievement.¹

What is Year-round Schooling?

The discussion of year-round schooling appears to take place almost entirely within an American and (to a lesser extent) Canadian context. The term does not refer to the continuous schooling that took place in Ontario and the Toronto Board in the mid nineteenth century, where schools were intended to be opened for more than 220 days per year. This continuous schooling is known as the **extended-year** calendar and is rarely implemented in the United States (von Hippel, 2007).

Instead, year-round schooling refers to alternative ways of organizing the current 185 annual instructional days. With **single-track** schools, "the school year begins earlier, ends later, and redistributes students' in-class and vacation times." Schools on a single-track model usually choose it for "educational reasons," often citing the reduced learning rates that occur during the full summer vacation. In single-track schools, all students share the same calendar. There are different variations. In one, students attend for 45 days followed by a 15-day break; in another, students will have a session of 60 days followed by a vacation of 20 days.

¹ Ironically, the only documented resistance to the Ontario extended summer holiday came from rural school boards.

Multi-track schools are usually introduced because of rapidly increased enrollment and/or overcrowding. Students are organized into three or four groups, with one group on vacation at any one time. The school therefore remains constantly in session, although the students attend the regular number of school days (Shields and Oberg, 2000; Ready et al., 2004).

Many year-round schools offer **intersession** programs between regular school sessions (usually 2-3 weeks in duration). Haser and Nasser (2005) consider intersession to be “the heart of year-round or modified schedules.” There is a wide range of “academic, cultural, athletic, remedial, and artistic opportunities for students.” Funding for these programs varies: some have regular funding or special grant funding, others are offered to parents at some sort of cost, while others are offered through local groups like Parks and Recreation or the YMCA offering recreational and sporting activities (Shields and Oberg 2000).

Characteristics of Year-round Schools

American year-round schools are more likely to be in the Western States (especially California), to be in suburbs and cities rather than rural areas, to have more Hispanic but less Black students than the general population, and to be from socio-economically disadvantaged backgrounds (although their poverty is moderate rather than high). There are few year-round private schools. Approximately 60% of year-round schools are single track and 40% are multi-track. Three quarters of year-round schools are in the elementary panel and one quarter in the secondary panel (von Hippel 2007; Cooper et al. 2004).

In the US, since both overcrowding and low achievement are closely linked to socio-economic challenge, it is not surprising that school systems with these challenges are more open to the year-round school structure.

While precise numbers are hard to come by, most publications provide a ballpark number of around 3,000 year-round schooling programs in the US; a recent newspaper article claimed 84 year-round schools in Canada (Mahoney, August 30 2007).

The Summer Achievement Gap

The modern discussion of summer school and year-round schooling is strongly influenced by Heyns’s seminal 1978 work, which established that there is an achievement gap for students because of the summer holiday; the gap is related to socio-economic status, with a greater gap among the “have-nots” compared to the “haves.” More recent research has amply supported

Heyns. A meta-analysis of 39 studies on summer achievement by Cooper et al. (1996) found that summer loss was equivalent to a month of instruction in school.

A Baltimore cohort study tracked a group of almost 800 randomly selected students starting from kindergarten, and provided more detail on the dynamics of the summer achievement gap. In general, while more socio-economically disadvantaged students enter school behind their more advantaged peers; their progress during school is similar. During the summer holidays, the learning of all students regresses, but the learning of disadvantaged students regresses more than the learning of advantaged students. The gap across social lines is compounded summer after summer; five years after starting school, it has increased substantially (Alexander, Entwisle and Olson, 2004). The strong relationship of elementary achievement to high school achievement and post-secondary access (e.g., Brown, in press) is so powerful that the elementary school summer learning gap can be seen as a fundamental explanatory factor for future job and life prospects as adults.

The Relationship of Year-round Schooling to Student Achievement

One might assume that given the summer learning gap, research on year-round schooling would definitively document strong knowledge gains. After all, if the gap shows up after the summer holidays, would not reducing or eliminating the summer holidays through year-round schooling eliminate the gap? However, this is not the case. McMillen (2001) examined two years of reading and mathematics achievement data from over 345,000 North Carolina students in Grades 3-8. He found that achievement in year-round schools was no different from regular schools and that “the merits of year-round education might best be judged on factors other than achievement.” Perhaps the most rigorous meta-analysis was the 2000 review by Cooper et al. Cooper concluded, “the quality of evidence available on modified school calendars made it difficult to draw any reliable conclusions.” Moreover, the evidence from the meta-analysis “revealed ambiguous results” – the effect favoured modified school calendars but the size, while significant, was small (Cooper et al., 2000, Cooper, 2003). Cooper did note that achievement for economically disadvantaged students was greater than the overall results. However, von Hippel (2007) describes the average effect size of the Cooper et al. meta-analysis as ‘trivial’ and the effect for disadvantaged students as ‘a bit larger’ – hardly a rousing endorsement.

Von Hippel looked at year-round versus regular school year learning from the Early Childhood Longitudinal Study (ECLS-K), an American national survey of kindergarten and Grade 1 students, and found no substantive differences. He concluded that while year-round schools

accelerated summer learning, they also reduced learning during the rest of the year. That is, "it may be that year-round schools replace the usual large summer setback with three or four smaller setbacks that happen during the year-round calendar's three- and four-week vacations."

This would explain why the catching up that students do during summer is "almost exactly canceled by their falling behind during the rest of the year." Von Hippel's hypothesis needs further research to be fully accepted. However, if true, it would mean that the amount of overall learning is a function of the total number of scheduled school days. Since the total number of scheduled school days in year-round schools is the same as regular schools, increased learning would need to take place through increasing school days in some other way – normally through the 'extended' school calendar (200 or more school days), summer school, intersession, or some other program.

One limitation of von Hippel's research is that presumably due to the small number of year-round schools in his sample, he could not differentiate between multi-track and single-track year-round schools. This is important because other research has indicated that multi-track schools have serious disadvantages compared to single track or regular calendar schools. According to Ready et al. (2004), many of the multi-track schools in California resegregate students within the school – the track closest to the traditional year-round school calendar ends up with the more advantaged and higher-performing students, and more experienced teachers. In addition, multi-track schedules can limit students' ability to take advantage of co-curricular and extracurricular activities (see Mitchell and Mitchell, 2005).

Physical Challenges

One of the original reasons for the summer vacation was the discomfort of schools in the summer. Many schools are still not air-conditioned. Addressing "how can students learn in a hot classroom?" (Peters, 2002) this is still one of the key hurdles that needs to be addressed in any year-round school.

Reaction of Students, Staff, and the Community

Research indicates that despite anecdotal evidence to the contrary, people involved in year-round programs are supportive of their calendar. The Cooper et al. meta-analysis (Cooper 2003, Cooper et al 2000) found that staff, students, and parents who participated in year-round schooling were positive about their experiences. According to Haser and Nasser (2003), the year-round calendar can promote teacher motivation and retention, and that teachers find

benefits to teaching intersession as well. There was little evidence of teacher/administrative “burnout” in year-round schools compared to regular schools (e.g. French, 1992). However, Wildman et al. (1999) found many cases of year-round principals who were intellectually aware of the importance of taking time off – yet found it hard to leave their school since it was usually in session. Wildman et al. therefore suggested that administrators in year-round schools be strongly encouraged to take available vacation time.

According to Shields and Oberg (2000), when year-round schooling “has been implemented with intelligence and integrity, teachers clearly believe that the benefits of a year-round schedule extend to their personal and family lives, their sense of professionalism, and their students’ learning opportunities”. Interestingly, Shields and Oberg also found that the parents of children with *both* traditional and year-round calendars each felt that their own calendar best provided teachers with needed breaks and helped to reduce burnout.

Political Challenges

A number of cases have been documented where implementation of year-round schooling ran into political difficulties. A large-scale implementation can fail due to lack of direction and purpose, or a lack of ownership by the school population (Weiss, 1993). A recent (2007) attempt by a North Carolina school district to convert more schools to the year-round calendar foundered when parent groups provided a legal challenge to the plan (Education Week, May 23, 2007). In Los Angeles – where year-round schooling is most often implemented to address overcrowding and budget restraints – a 1993 policy that allowed schools to choose their schedules resulted in more than 300 schools reverting to the traditional schedule. Since these schools were mostly in the wealthier areas of Los Angeles, this led to accusations of economic-based injustice for the remaining year-round schools, which were mainly in poorer neighbourhoods (Goldberg, 1996). Other challenges can come from groups that perceive threats to their livelihoods. Thus in 2001, an article in the *Toronto Star* drew attention to resort owners in Ontario’s cottage country, who suggested, “cottage country will be devastated if Ontario shifts to year-round schooling” (Ghafour, 2001). Shields and Oberg (2000) caution that any district wanting to implement a calendar change has to “carefully consider whether the selected calendar meets the needs of the local area.”

As a Catalyst for Pedagogical Change

According to Shields and Larocque (1998) the introduction of a year-round calendar is a first-order or structural/organizational change. The true importance of year-round schooling is that in many instances this first-order change trigger, or at least facilitate second-order, conceptual change related to teaching and learning. For example, teachers were clear that once it was implemented, year-round education itself was a non-issue. Instead, there were real innovations in how teachers re-thought teaching and learning in response to the year-round calendar, and how they re-conceptualized the pedagogy.

Summer Holidays in Other Countries

Given that almost all the literature on year-round schooling centers on the US, it might be useful to see how school calendars are organized in other countries. Internationally, summer holidays appear to be the norm, but with a wide range. Australia and New Zealand are sometimes pointed out as examples of year-round schooling, and indeed their holidays closely follow the recommended single-track calendar. The summer holiday in these southern hemisphere countries start shortly before Christmas in the later part of December, and finish at the end of January; there is an Autumn break of two weeks in April, a Winter holiday of two weeks in July, and a Spring holiday of two weeks in October. These breaks appear to be modified from the United Kingdom calendar, which has a 6-week vacation – as does Germany (from end of June to beginning of August). Japan has a one-month holiday (end of July to end of August). On the other hand, France, Ireland, Israel, Austria, the Czech Republic, and Cyprus have two month summer holidays similar to North America (see http://en.wikipedia.org/wiki/School_holiday and http://www.jours-feries.com/statique/index_pays2.html for these and other examples). The range and difference of summer and other school holidays probably explain the lack of clear international comparisons on the effectiveness of year-round schooling.

Conclusion

In a recent interview in the *Journal of Educational Research*, noted researcher Gerald Bracey was asked if he thought year-round schooling in the US would improve student achievement and test scores. He replied, “Year-round schooling OUGHT to improve achievement, but so far the data have not shown any great impact at all” (Journal of Educational Research, 2007). The gap between potential and achievement exists in most educational programs. The clearly documented ‘summer knowledge gap’ would suggest that programs combating this gap should

result in much higher achievement than similar traditional programs. However, the most stringent recent research like the Cooper et al. meta-analysis makes it clear that where differences exist, they are limited.

That being said, there are valid reasons to implement year-round calendars, other than academic achievement. Overcrowding and fiscal restraints have always been among the most important reasons for introducing many programs. Changes to the year-round calendar could be used as Shields and Oberg suggest, as a catalyst for change within the school and the classroom. Meta-analyses tell us the 'big picture', but a year-round schedule may be a better fit with specific school communities, or teachers within the school (something that can be decided only through authentic consultation).

Both McMillen (2001) and von Hippel (2007) speculate that increasing the number of school days may better result in increased achievement – rather than redistributing the same number of days throughout the school year, as occurs to most year-round calendars. McMillen points to the Gandara and Fish (1994) study, where the year-round schools had more than 220 instructional days in a calendar year, “leaving open the question of whether those gains might have been attributable to the added number of instructional days as opposed to the use of a year-round calendar.” The schedule of year-round schools – in particular, the offering of intersession instruction between regular sessions – appears to have the flexibility needed to increase the number of instructional days per year (The website of the Tracey, California school district notes that the three intersessions in its year-round schools add 26 instructional days per year – see <http://www.tracy.k12.ca.us/intersession.htm>). Still, an examination of the summer school literature shows that extending the number of instructional days has its own challenges. For example, more socio-economically challenged students do not do as well in summer school, so merely extending the number of days may maintain or even increase the socio-economic divide. In addition, the transformation into an extended school calendar raises a number of questions (e.g., the idea of one primary teacher over the school year becomes problematic in a school year of over 220 instructional days).

Like many educational issues, the relationship between the school calendar and achievement defies easy solution. Given that the number of instructional days per year has varied greatly in the past, there is no reason to believe that a school year of 185 instructional days will remain static into the future. Nevertheless, current research indicates that redistributing the same number of days within the school year will rarely result in achievement gains.

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