

YEAR-ROUND SCHOOLING

by

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Abstract

Changing a school district's calendar to facilitate year-round schooling would be a major undertaking for any school district. One must wonder if such drastic change needs to be made if there are few academic advantages to such a change. Should a district seek to change from the traditional school calendar to a year round calendar without substantial evidence that such a calendar would improve student achievement? What obstacles would the district face, and more importantly, what benefits would be gained by changing from a traditional school calendar to a year-round schedule? Other than some isolated cases, most literature does not show a correlation between a year-round school calendar and increased academic success of the students. There is not enough evidence to prove to a district that year-round schooling would increase academic achievement and save on over-all costs to the district.

Chapter I – Introduction

Free public education began in the United States in the middle of the 1800s. At that time, far more than half the population lived in rural areas and farming was a major occupation for fifty to sixty percent of the nation (Kennedy, Cohen, & Bailey, 2010). According to Juliet Lapidos (2008) other factors also played a major role. Lapidos stated, “Attendance was below 50% in the summer months and physicians feared students would spread diseases common during the heat of the summer” (p. 1). Buildings being poorly ventilated, student and teacher burnout and the wealthy vacationing during the summer were other traditional reasons for schools to be closed during the summer months (Lapidos).

Over the years, the United States gradually became an urban country. The 1920 census showed for the first time in American history that over fifty percent of the population lived in cities (Kennedy, Cohen, & Bailey, 2010). The dawn of the twentieth century also ushered in new technologies that changed farming. Tractors began to replace draw animals and threshers and reapers made the previous work of many people able to be accomplished by only a few. These advancements continued to fuel the trend of families moving to cities and suburbs in search of work they could no longer find on rural farms.

Because farming continued to make technological leaps that reduced the necessity of farmhands, fewer people needed to stay on farms throughout the nineteenth century. By the year 2000, fewer than three percent of the American population listed agriculture or farming as their main occupation (Kennedy, Cohen, & Bailey, 2010). Although there has been a major population shift in the United States and a great decline in the number of people employed as farmers, the school calendar has not changed in most public school districts. Most schools end

within a week or two of Memorial Day in May and do not resume until the week or two around Labor Day in September.

Many aspects of education, including best practice and methodology, have changed since the introduction of free public education. The basic study of reading, writing, and arithmetic has been altered and enhanced several times throughout the twentieth century. Whether it was because of the nuclear and space race with the Soviet Union in the 1940s and 1950s, racial desegregation, integration, and forced busing of the 1960s and 1970s, the new computer technology of the 1980s or the explosion of the internet in the 1990s and the twenty-first century, subject matter may still be consistent but the delivery of the subject matter has changed drastically. As with other institutions, every time a crisis or technological change has occurred, the dynamics of the institution changes, either to counteract the new difference or to strength the institution.

The reason the school calendar was originally set up in the current format has changed significantly. Not only what is being taught but also what is required of the current students in our schools has changed markedly over time. The school calendar has remained the most unchanged area in education. Sault Ste. Marie Area Public Schools is looking for ways to improve student academic achievement and saving on fiscal costs. Would changing to year-round schooling help the Sault Schools achieve either of these goals?

Statement of the Problem

Schools have run on the same calendar for over one hundred and fifty years. Students go to school for nine months and then have three months off. This much time off seems like it would hinder student learning, and therefore, progress and achievement. In many classes and grades, the first month is spent simply reviewing the previous year's content and not exploring

new curriculum. With curriculum changing and requirements becoming more and more rigorous there is less time available in the fall for review, and if current trends continue, this review time will decrease not increase. Although it may seem obvious that changing to year-round schooling would fix this problem that is not necessarily the case. Many barriers are involved when changing a school calendar for a community. The current economy is a major consideration when deciding whether or not to change the traditional schedule. Many students have summer jobs which help fuel the local economy and satisfy the needs of employers while providing services to customers. Therefore, the economic cost of altering the calendar and having school open all year is a major factor when districts take up the idea of year-round school.

Teacher contracts pose another challenge to implementing a new calendar. Though the number of instruction days and the number of students per class in a year may not be determined by faculty contracts, teacher wages and benefits are. A decided change in the school year would necessitate a new contract that would need to be negotiated, and this negotiation might make the bottom line of year-round school too costly for a district or community. Another major impact is the simple change of tradition. Considering that most people do not take to change very easily or quickly, to alter something as ingrained as the school year could be a task of tantamount proportion. Whether it is a same spring break each year or the scheduling of a major sporting event or community event, most schools have very rich traditions and strong ties with the local community. Changing the calendar could have a major impact on these traditions and cause more pressures on communities that already have obstacles to community cohesion and continuity.

Research Question

Should the Sault Ste. Marie Area Public Schools look to change the school calendar from the traditional format we now have to a year-round calendar? What obstacles and barriers would make it so the Sault Area Public Schools could not change to a year-round calendar?

Definition of Terms

Year-round schooling – Changing the traditional school calendar where students attend a 180 day schedule with the summer break mixed in throughout the school year in more frequent shorter breaks (National Association of Year-Round Education, 2010).

Single track – Year-round schedule where all students and staff are on the same time schedule for classes and vacations (National Association of Year-Round Education, 2010).

Multi-track – Year-round schedule where students and staff are on different time schedules. Classes and vacation times are spread out so the facilities are always in use Throughout the year (National Association of Year-Round Education, 2010).

NAYRE – Acronym standing for The National Association of Year-Round Education (National Association of Year-Round Education, 2010).

EYS – Extended School Year. Different from year-round schooling, in extended-year schooling days are added to the school calendar. 200 and 220 day school years are the norm. (National Association of Year-Round Education, 2010).

Chapter II – Review of Literature

Year-round schooling is nothing new. The concept started in the 1970s and there are currently around 3,000 year-round schools in the nation, according to Dr. Charles Ballinger, Executive Director Emeritus of the National Association for Year-Round Education. Ballinger stated, “The most important reason for changing to year-round schedules is to eliminate learning loss that occurs during the summer” (Ballinger, 1995, p. 28). This is a good idea considering the fact that Michigan offers their standardized tests for elementary and middle school students in October rather than the spring of the year, which means they have a learning gap of three months prior to taking the test. However, the evidence that will be discussed in this paper does not demonstrate significant change for most students because of a year-round schedule. When President Barack Obama named Arne Duncan the Secretary of Education, Duncan made several headlines about his vision for where education is heading in the United States. During his speech in Denver in April of 2009, Duncan suggested our school days, weeks, and years were too short (Prabhu, 2009). Duncan’s plan for revamping education has four main goals. The first is increasing the amount of time students are in school. Also part of his plan is implementing data-driven decision making, raising state and national standards, and rewarding teacher excellence (Prabhu). A full copy of Duncan’s plan can be found on the Department of Education’s website under school reform agenda.

Duncan’s reasoning for these changes is the diversification in the world-wide workforce. Duncan stated students in the United States are competing globally with students from China and India for jobs and schools should be open six to seven days a week, eleven to twelve months a year (Prabhu, 2009). With this new focus on method and calendar by the Secretary of Education, year-round schooling is going to be examined again in even closer detail. However, with the

budgetary problems school districts are witnessing and the revenue losses in many state budgets, changes like Duncan is suggesting become problematic. Having schools open six and seven days per week would certainly mean hiring more teachers and staff, which would equate to higher costs in both wages and benefits. As well, the fixed costs of running a school (i.e., electricity, heat, and busing) would also increase causing additional burden on district budgets.

Although the traditional calendar has dominated most public school settings for the past one hundred and fifty years there is strong support for the change to year-round schooling. Proponents of year-round schools have created an official organization, the National Association of Year-Round Education <nayre.org> and maintain a website providing information to promote their position.

Much information can be obtained from the NAYRE website in support of year-round schooling. Information can be gained from various links for each state on how to make the actual transition to year-round schooling. What will the calendar look like? What changes will be made with the current schedule? How much time will be off during certain seasons of the year? The website shows graphs, tables, and charts that break down the information in an easy-to-read format. Links are also given for seminars and conferences to obtain more information on the transition to year-round schooling.

The main focus of the rest of the website is devoted to the positive reasons why the NAYRE thinks schools should change to year-round schooling. The organization provides numerous scholarly papers on the topic. NAYRE archives give current information and events provided individually by states, which are broken down by respective states for easy access. Most of all, the website provides positive reasons why districts should change to year-round

schooling. By stating how it improves education and how the school calendar helps students learn and achieve, NAYRE presents a convincing argument for year-round schools.

The current website provides links to research articles and conference presentations that promote the change to year-round schooling. The NAYRE executive director, Dr. Charles Ballinger, provides a section promoting the benefits of year-round school. For instance, Ballinger stated, “Different students have different learning needs” (Ballinger, 1995, p. 30). This is true, different students do have different learning needs. However, that does not mean year-round schools is going to apply multiple intelligences and best practice unless the administration and the teachers spent time to change their teaching styles, and that can be done just as well in a traditional school calendar. He also stated, “If an elementary student is struggling with fractions or a middle school with algebra, intersession becomes an opportunity to take immediate corrective action” (Ballinger, p. 30). This would indicate a change in the delivery of the curriculum, which would mean there were individual sessions for remediation. There is no evidence that these types of changes in curriculum are happening at year-round schools.

Not all year-round school calendars are the same. There are single-track and multi-track schedules. In a single-track schedule all students and staff are on the same schedule. All students and staff are on breaks and vacations at the same time. The long summer vacation is shortened into smaller breaks scheduled throughout the year. The most common single-track schedules are the 45-15 day calendar, the 60-20 day calendar, and the 45-10 day calendar. In each of these calendars, the first number represents the number of days students are in school followed by the second number indicating the length of the break or days off of school. Some break sessions are called intersessions. These are times when students can come into school and receive either remediation or enrichment courses (National Association of Year-Round Education, 2010).

Multi-track scheduling also has many forms. Schedules are done on four-track calendars of 45-15, 60-20, and 90-30. There is also the five-track calendar that runs 60-15. Multi-track scheduling is typically done to alleviate overcrowding and is a cheaper alternative to building new facilities. A four track schedule can extend the capacity of a 750 person building to 1,000 students. Only three tracks would be in school at any one time with the fourth track out on vacation. This can increase the capabilities of the facility by 33%. A five-track schedule run on 60-15 calendar can increase the capacity of a facility by 25% (National Association of Year-Round Education, 2010). Schools with increasing enrollment that do not have the funds to build new facilities might want to seriously look at the multi-track schedule. However, increasing the capacity of a building only reduces infrastructure costs and does not address the cost of faculty and staff.

Shields (1996) studied six year-round schools in Utah and six in Alberta, Canada, from 1990-1995. At the time, Utah was the state with the second highest number of year-round schools. She performed a case study comparing traditional-track elementary schools with elementary schools run on a year-round schedule. The year-round school in the study was on a multi-track schedule. Shields used qualitative interviews and surveys with parents, school staff, and students as well as quantitative test scores in her study. The study produced some positive findings that supported the use of year-round schedules. Shields compared year-round schools to traditional schools in the following areas: total reading, total math, total language, total basic battery, total science and social science at the elementary level. The t-value of these tests demonstrated, other than the reading scores, “all other differences were found to be non-significant” (p. 7). If there is no significant change showing academic improvement it makes little sense to change to year-round schooling. Academically, Shields’s study showed that

students in year-round schools had higher reading scores than those in the traditional-calendar schools.

According to the t-test comparing the results of standardized tests between traditional and year-round schools, Shields research demonstrated the greatest amount of improvement occurred for students at the lowest achievement levels (Shields, 1996). One contributing factor for this outcome could be that remedial services were offered during the breaks to allow lower achieving students to catch up with their peers academically. As state previously in this paper, schools would have to change there methodology to make sure remediation is being done and Shields's study does not demonstrate that there is any change in teaching methodology. Shields indicated that shorter breaks and less time between academic classes means that students come back to school remembering the material because they have not had three months to forget it. In the same research Shields states, "The similarities of both student academic and non-academic outcomes suggest that the school year calendar is not a major factor in determining the quality of the educational experience which students receive" (Shields, p. 27).

Shields (1996) found through survey research of parents, students and administrators several positive effects of year-round schooling in non-academic areas. Students in the study claimed to feel more focused in year-round schools. Once again, with only three weeks off rather than three months, the breaks would be much more like a traditional winter break than the historical summer. Thus, students would not have the extensive amount of time to forget what they learned all school year or be distracted by work or boredom. For instance, parents surveyed indicated, "The frequent breaks allow for more quality time with our children throughout the year" (Shields, p. 27). Students also claimed to have a better attitude towards school. This idea of attitude might simply be that students adjust to the schedule, and thus, feel a part of it--much

like they do in February of a traditional calendar. This evidence supports other research about students' attitudes in year-round schools (Baker, 1990; Gandara, 1992). Baker conducted surveys of parents at the Conroe School District in Texas and found parents to favor the year-round schedule over the traditional schedule. Gandara surveyed teachers in several urban areas and found that they were also in favor of year-round education. These findings are not valid because the teachers were asked if they were in favor of year-round education with the stipulation that there would be an increase in pay. This most likely had a major impact in their decision to favor the schedule change.

Students also felt that their teachers individualized instruction more (Shields, 1996). Teachers reported less stress and burn-out and stated that they felt more refreshed. Because of the lack of stress, they were able to prepare better lessons and concentrate more on individualized instruction. Teachers also felt that students were more engaged for shorter amounts of time as compared to the long stretches of time between breaks in traditional calendar schools (Shields). Although these claims are made, as stated earlier in the paper, there is not significant statistical data to prove any of this has a positive impact on student academic achievement.

A study done in North Carolina by McMillen (2001) showed some positive aspects of year-round schooling. Most of McMillen's findings came from studying the results of North Carolina's end-of-grade (EOG) exams for students in third through eighth grade in 106 schools. McMillen also used student demographics like gender, ethnicity, and level of parent education in the study. A major difference in McMillen's study is most schools, 87%, are on a single-track, year-round schedule as opposed to a multi-track (McMillen).

McMillen (2001) found low-achieving students and students from parents of lower education levels performed better in the year-round school than in the traditional calendar school. McMillen studied the results standardized state test results of 345,000 public school children in North Carolina in grades three through eight over a two year period. Of North Carolina students, 95% take the standardized state test. Although the scores did not significantly increase in the other areas students in year-round schools coming from households with parents having a high school diploma or lower scored six percent higher than students from the same home status at traditional schools (McMillen). These findings are consistent with the findings in the Shields study. Although there is a benefit to some students there is not a significant increase overall. McMillen also noted that the study, “Does not speak to the differences between single and multi-track schedules and does not differentiate between the two calendars based on the amount of instruction time” (p.14). Even if the study did show improvement for students it would not be possible to tell exactly why and for a district to know what track of year-round schooling to change to.

When looking for research showing the positive aspects of year-round schooling, a distinction must be made between what is known from research and what is theoretical (McChesney, 1996). Although studies can show data on student test scores (Kneese, 1994) or financial savings (Shields & Oberg, 2000) other aspects of education can be harder to judge. Kneese compared the standardized state test scores in Texas at ten suburban schools. Students from the schools were randomly selected and a total of 933 were in the study. Students were from elementary schools and in fourth, fifth and sixth grade. Tests for statistical significance and practical significance were used. Using a t-test scores were shown to be significantly higher in reading and math. Students in year-round schools scored approximately 1/3 standard deviation

higher, or approximately five points, than students from traditional schools. The same study showed students from lower socio-economic status scored ten points higher (Kneese). Some studies suggest that year-round schooling can improve teacher professionalism. However, teacher professionalism can mean different things in different districts. Teacher professionalism can also mean different things to an administrator compared to a parent or a student.

McChesney (1996) suggested that one must define year-round schooling, because the studies do not differentiate the results of the benefits of year-round schooling based on what kind of year-round schooling it is. This is important because there are two major types of year-round schooling. Because most studies do not differentiate when it comes to student achievement the big question of whether to go to year-round schooling or not cannot be answered sufficiently. There are several different ways to organize how the schedule is made. White (1992) suggested it is important to understand what year-round schooling means for the district. It must be clearly communicated to the people which form of year-round schooling will be implemented and why the change is being made.

Other components to successful year-round schooling include assigning administrators carefully and evaluating the program thoroughly (White, 1992). White also warns districts to beware of the appeal of new buildings and to make sure that any new schedule or calendar that is adopted must be evaluated thoroughly to make sure the change was worth it both academically and financially (White). White maintains the main reason schools change to year-round calendars is to handle increased enrollment without spending the money on buildings. White was the assistant superintendent for the Jefferson County Schools in Colorado. Jefferson County went to year-round schooling because of increased enrollment and a lack of public support to

build new facilities. Staff and administration need to be redistributed throughout the district where they will be most useful and helpful to the transition.

Winters (1994) studied test scores on student achievement in southern California schools in the San Diego area looking for quantitative data showing higher student academic achievement. Winters reviewed nineteen studies that were readily available by the National Association for Year-Round Education. In doing this he accessed scores from commercially developed and standardized instruments like the Texas Assessment of Academic Skills Test and the Test of Achievement and Proficiency. The results showed students in year-round schools performed better on standardized test compared to students on traditional school calendars. Fifty-eight categories of improvement were studied and forty-eight were shown to rate a plus, meaning the students outperformed those in traditional schools on 83% of the categories. The results of the TAAS Test for example showed the results over-all were +/-, or zero, which means no gain, however the results for at risk students was +, which meant that the study favored year-round school. The Comprehensive Test of Basic Skills showed a p-value of <06 for math and reading. One question from these results would be the fact that 70% of the students who showed improvement had received additional remediation (Winters). Were the improved test scores the result of year-round scheduling or the remediation, which could also be done in a traditional calendar school?

Finally, Ballinger reported that Garfield High School in Los Angeles and Robert Coleman Elementary School in Baltimore showed many non-academic advantages to year-round schooling (Ballinger, 1995). Both schools report better attendance for both teachers and students. The report also indicates lower dropout rates, fewer discipline referrals, and less vandalism on school campus (Ballinger). However, these are qualitative findings with no

empirical evidence given to support the claims. Qualitative survey studies are part of how year-round schools try to demonstrate that they are beneficial. What really should be examined is quantitative data like attendance, student drop-outs, and referrals are recorded by the schools. Having solid statistics to support these claims should not be hard to do. When studying year-round schooling one must review qualitative studies because there is a lack of quantitative data and studies.

Ophiem, Mohajer, and Read (1995) conducted a qualitative survey of administrators for both year-round and traditional schools. The group surveyed elementary school principals in Texas. One hundred and five surveys were mailed out. All fifty-nine year-round elementary schools in Texas received a survey. Forty-six elementary schools on traditional calendars were randomly selected and received a survey. Sixty-one surveys were completed and returned. Seventy-one percent of the year-round school surveys were returned while 41% of the traditional calendar school surveys were returned (Opheim, Mohajer, & Read). This could impact the findings seeing that not even half the traditionally run schools responded to the survey.

Principals were asked to rank five hypotheses on a five-point Likert scale. Responses ranged from +2, which indicated strongly agreeing to -2, which indicated strongly disagreeing. Zero meant the principal was neutral on the question. The first question asked whether principals felt year-round schooling presented problems for staffing and professional development. The findings were that principals strongly disagreed that to be the case. Principals reported year-round schooling led to less teacher burnout, less teacher and student absenteeism, less discipline and better utilization of facilities (Ophiem, Mohajer, & Read, 1995). However, the question also showed no reduction of administrator burnout and demonstrated some conflict with teachers taking summer classes at colleges run on a traditional schedule, which becomes an

issue because teachers generally have to take classes to keep themselves certified in their teaching areas. The findings of qualitative data from principals who were surveyed about how well their schools are run are questionable. Especially when I consider what happens in Sault Area Schools. For instance, I have been observed once in six years by my building principal and our superintendent is rarely seen in the high school. If this experience is accurate to other schools, how could principals know what is happening in the classroom and whether the students are achieving at a higher level or feel good about what is going on in the classroom?

The study showed principals believed year-round schooling showed academic improvement but most of the improvement came for bilingual and special education students. There was no data to support that year-round schooling significantly increased the academic performance of the average or accelerated student. The study was neutral on a question focusing on the impact of year-round schooling on parents and the community. There was no correlation between year-round schooling and extra-curricular activities. The schedule did not show any positive or negative impact to sports, band, drama, or any other school sponsored activity for the students. There were parent complaints about the difficulty in finding reliable child care in year-round school calendars (Ophiem, Mohajer, & Read, 1995). This would seem to contradict the claim that the study was neutral on the impact of year-round schedules on parents. This issue of schools acting as child care institutions has long been significant with parents.

The last question in the survey dealt with cost. Was year-round schooling more expensive than the traditional school calendar? Results were mixed. Schools with multi-track schedules found that year-round schooling saved money compared to the cost of building new facilities. There was no evidence that single-track year round schooling saved money over the

cost of operating a traditional school calendar (Ophiem, Mohajer, & Read, 1995). Neither of these survey results dealt with faculty costs; instead, each focused on infrastructure.

The study reported principals were most enthusiastic about student increases in academic achievement but points out that there is no empirical evidence to support the claim, other than test scores being higher for bilingual and special education students. As summarized, table 1 indicated that bilingual/ESL/LEP students benefited with higher standardized test scores. The only statistical information given was the students scored at a $p < .001$. The authors note that a comprehensive quantitative study would need to be done to prove these claims (Ophiem, Mohajer, & Read, 1995). If it is true that bilingual and special education students improve but no one else does, one must ask if making such a change is worth the time, effort, and research especially in places that have few bilingual students, thus reducing the improved population to only special education students.

In 1994, the state of Kentucky conducted a study to see if changing the school calendar could improve performance. In 1995, the study results were published and the state of Kentucky encouraged schools to explore variations to the traditional school calendar. Thirteen schools formed the Kentucky Association for Year-Round Education. After five years of implementing the year-round schedule, nine of the schools agreed to be part of a mixed methods study by Grooms and Smotherman (2003), who collected data from several different standardized tests in an attempt to gain quantitative evidence supporting the success of year-round education. Surveys of teachers, administrators, parents, students, and school board members were conducted to show non-academic benefits of year-round schooling. The scale ranked items on a five-point variation. The results showed ten positive aspects of the change from traditional school calendars to year-round calendars in the nine Kentucky schools. Six positive results were

discovered through the surveys and four positive results through the data. However, two negative aspects of year-round schooling were also brought to light through the survey results and statistical information on standardized test scores. Over-all, a comparison of standardized test scores from the year-round schools showed eight of the year-round schools scored below the national average in 1997 but four of those eight year-round schools were above the national average by 2001 (Grooms & Smotherman).

The first positive performance indicator found using the survey data was that students showed increased self-esteem in four areas. Students in grades four through eleven were said to have greater self worth and self trust. If these data are true, then the outcome of both the feeling of self worth and self reliance is that students will value what they have to say and what they have to do; therefore, they will be more connected to education as a whole because they will not see the process as wasting their time. Students also felt they were more capable of facing tomorrow's struggles and were better able to develop positive relationships at school (Grooms & Smotherman, 2003). Students who feel comfortable in problem solving situations like facing unknown problems of the future do not surrender as quickly or as often to dilemmas they face in their everyday lives. On top of that, if students feel more comfortable in relationships self expression becomes easier and communication is more effortless.

The surveys also found that students in year-round schools had a better attitude towards math and reading than students in traditional schools. Surveys were given to students in seventh through eleventh grade and found students in year-round schools responded with positive comments on the surveys 42% more often than students from the traditional schools in math and 31% more often in reading. This research is consistent with the data which demonstrates students at the elementary level scored higher on standardized math and reading tests. Students in grades

three, six, and nine also scored higher on standardized tests in reading. Mean gains in reading ranged from eight to thirty-four percent increases in test scores compared to previous test scores achieved within a traditional calendar schools (Grooms & Smotherman, 2003).

An analysis of the data also indicated positive impact on student dropout rates and attendance. The dropout rate in the nine schools decreased from 3.5% to 1.5% over the five years of the study. Student absentee rates also decreased, significantly at the middle school level. The middle school absenteeism rate decreased by 15.7% compared to numbers from the traditional calendar schools. Absentee rates at the elementary level decreased by 4.7% and at the high school level they dropped 5.3% (Grooms & Smotherman, 2003).

Instructors reported liking the year-round schedule more than the traditional calendar. Teachers claimed in the survey that they were more refreshed and motivated. Motivation sometimes becomes a monumental problem in the middle of the school year. The principals surveyed indicated that well-rested teachers are more likely to spend more time and energy on the classroom than those who are drained from the day-to-day drudgery of the classroom. Teachers felt they were better able to maintain the interest of their students, and thus, the school was making better use of learning time for students. Teachers also claimed that the shorter breaks actually motivated students and supported academic growth (Grooms & Smotherman, 2003). Other teacher benefits were also found in the study. Because teachers on a year-round calendar had more energy and were not as tired, survey results showed they were less likely to suffer from stress and stress related illnesses or burnout than those on the traditional school calendar. Teachers felt they were better prepared to deal with new situations and were more flexible under the year-round schedule. Teachers disagreed strongly on the survey about being

nervous by the year-round schedule or that it led to more on-the-job stress and feelings of aloneness (Grooms & Smotherman).

Along with teachers, administrators also had strong feelings in favor of year-round schooling. Administrators felt benefits to the year-round schedule included: sufficient leadership and support from the district, better access to parent communication, more time for implementing special programs, better use of planning time, and over-all better support from students and teachers. Ninety-five percent of administrators surveyed strongly agreed with the benefits of the year-round calendar (Grooms & Smotherman, 2003). This percentage may show significance although the principals themselves were involved in planning and implementing year-round schooling.

Perhaps most important, the Kentucky school systems showed a great deal of parental support. Seventy-eight percent of parents surveyed said they liked the shorter, more frequent breaks. Sixty-three percent of parents felt year-round schooling offered their children more help and made teachers more available for parent contacts (Grooms & Smotherman, 2003). Although the parents of children in the Kentucky school system showed support for year-round schooling parents in Wake County, North Carolina were against the change from a traditional school calendar to year-round schooling. Although the parents lost the case it was appealed all the way to the state supreme court. Dawn Gaff, co-founder of the group behind the challenge, Wake CARES, said, "Families with both younger and older children could face multiple schedules." (Bowens, 2009, p. 2).

Although the study showed several positive results in support of a year-round calendar, there were two areas that demonstrated year-round calendars are worse than traditional calendars. Year-round schools showed no difference in the number of students who were failing

or being held back a grade (Grooms & Smotherman, 2003). This information seems to contradict studies saying year-round schooling helped lower-level students succeed academically (McMillen, 2001; Shields, 1996).

Year-round schooling, although showing better student attendance, showed an increase in teacher absenteeism. Eight of the nine schools in the Kentucky study showed an increase in teacher absenteeism (Grooms & Smotherman, 2003). This increase is hard to explain. When teachers are not in their classrooms, the district loses money by having to pay the teacher salary and by having to pay a substitute; and more importantly, when the teacher is not in the classroom continuity of study and student learning decrease. These two issues seem important enough in and of themselves to warrant further consideration. However, as stated above, administrators overwhelmingly supported the benefits of year-round calendars. Maybe, because they are weighing overall benefits against one negative aspect of the system it is easier for them to justify their support.

Von Hippel (2006) used psychological experiments to study the spacing effect. Their studies show that people learn and retain more when they have several shorter breaks, what psychologists call spaced practice, as opposed to having fewer larger breaks, what they call massive practice. Anyone who has worked on any long-term project knows this concept is not automatically true. Longer breaks might lead to longer breaks and disinterest as well as stress because one is not doing what he or she should be doing. On the other hand, numerous breaks might lead to more breaks which leave gaps in concentration with and continuity to the work at hand leading away from depth in study and concentration to surface level activity. Therefore, it is hard to see if student achievement will necessarily improve. The psychological study does not normatively indicate the capabilities to learn and retain increase with spaced practice.

Although this research works in their lab experiments, they found no evidence that it applies to students in year-round education. Data taken from test scores showed no significant differences between year-round schools and traditional calendar schools. Instead of fixing the problem, year-round calendars simply moved the learning problem around to different times of the year (Von Hippel, 2006).

While researching year-round schooling, Worthen and Zsiray (1994) found many of the same problems as other researchers. Most studies showed no distinction between single and multi-track schedules, although they have a different impact on a district. Worthen and Zsiray also found that no definitive study had been attempted and that studies that do exist would be difficult to relate to other studies or be added upon. Studies with quantitative numerical data were so hard to find in year-round education that a student from the University of Houston had to change her topic on her doctoral thesis (Worthen & Zsiray).

Von Hippel (2006) also found many things wrong with past studies on year-round schooling. Many significant factors in education were not recorded in the studies reviewed. Class size was not reported in most studies. Most teachers would agree that class size is a major factor in education. As well, the time tests were given was also not recorded. A year-round school with a test given at the end of the school year cannot be accurately compared to test given to students at the beginning of a traditional school year. A student taking a test at the end of the school year still has the information fresh in their minds. A student with a traditional schedule who takes a test in the fall has just had three months off and the information is possibly forgotten.

Perhaps one of the reasons class size is not mentioned more in year-round educational research is that year-round schools were found to have larger class sizes (Von Hippel, 2006).

Using a five point Likert scale, Von Hippel found principals to rank their schools 3.4 on the scale at year-round schools compared to 2.5 from principals of traditional schools. Overcrowding may be evident in another finding of the Von Hippel study. Year-round schools were found to be twice as likely to have half-day kindergarten schedules as schools with traditional calendars. This is another potential problem with parents who are opposed to year-round schooling due to the difficulty in finding adequate daycare for their children.

Evidence shows that year-round schooling helps poorer students and students from lower educated parents, supports the idea that middle class parents are often the ones most opposed to year-round schooling (Von Hippel, 2006). Middle class parents are not willing to change to a new calendar schedule if there is no evidence that this change will help their respective students. These parents are more likely to be involved in school decisions and their opposition is an important factor in any calendar change. Another component that may play into lower income students performing poorly is that disadvantaged parents are less likely to start their children later, when they are mature enough for school, or hold their children back due to being unable to afford more daycare (Downey & Hickman, 2003).

Palmer and Bemis (1999) wrote a paper giving an extensive review of the literature on year-round schooling. They cited many difficulties in making positive claims for or against year-round schooling. The research showed that although the number of schools and students in schools with year-round schedules was increasing greatly, almost 400% from 1989 to 1999, there is little solid evidence or quality research showing significant positive academic achievement (Palmer & Bemis). One major problem found by Palmer and Bemis when trying to analyze data from year-round research studies was the difference in number of years of the study. Some studies were conducted over long periods of time while others were done in only one year. An

increase in test scores or student achievement in a one-year period could be the results of many different factors other than the schedule. Smaller class size, the amount of special needs students, and experience of the teacher could all be factors in a one-year change.

Studies reviewed showing supposed positive aspects of year-round schooling were found to be insignificant. According to the evaluation brief on year-round schools and achievement in North Carolina, the mean standardized achievement score for both reading math showed insignificant growth in both subject areas. Reading score increased only .13% and math scores only .22% that is not significant enough to change the school calendar (Public Schools of North Carolina, 2000). Attendance was not significantly higher or lower or enough to warrant a claim that the schedule made an impact. The studies were comparing schools on different schedule tracks and studies done over different lengths of time (Palmer & Bemis, 1999). Qualitative studies showing teacher and student attitudes were also found to show insignificant improvement over traditional school schedules. Studies showed the attitudes about how the schedules were implemented and why the schedules were implemented to be more significant than the schedules themselves (Palmer & Bemis).

An example of parental attitude toward these inconsistencies demonstrated in a court case brought by parents to Wake County, North Carolina (*WakeCares, Inc. v. Wake County School Board*) over changing to year-round schedules (*Education Week*, 2007). The result was the school board did not need permission from the parents to change the school schedule. The case was appealed to the North Carolina Supreme Court in 2009 and the decision was upheld (Bowens, 2009) Although North Carolina is a state that has several year round schools, parents felt the change would be too disruptive to their children. School officials claimed the change was being made because the school system was growing and they could not handle the increase with

a traditional schedule. Parents claimed that the fact that most of the schools were elementary schools, with only three middle schools and no high schools changing their calendars would cause their children to be on different vacations at different times and be disruptive to family vacations as well as making it harder to find daycare (*Education Week*). This supports claims (McMillen, 2001; Shields, 1996) that careful planning, communication, and community input are vital to implementing a successful year-round schedule in a community. Palmer and Bemis (1999) found several areas of concern with year-round schooling that simply had little or no research. The impact of teacher contracts, transportation, extracurricular activities, all important to budgets.

In 1994, Worthen and Zsiray released their study of year-round schooling in North Carolina over the past twenty years. This was an extensive study funded by the University of North Carolina. In a survey given to all 132 school districts in North Carolina 107 were returned. Of those, 102, or 95%, reported that they either are already on a year-round calendar or are currently looking into making the change. That accounts for 77% of the total school districts in North Carolina (Worthen & Zsiray). Although this research is old other sources indicate year-round schooling continues to grow in some areas. According to the NAYRE (2010) there were 360,000 students enrolled in year-round schools nation wide in 1987 and over 2.3 million enrolled in year-round schools by 2003. The Council of Chief State School Officers (2009) released a report in 2008 showing seventeen states currently have formal education policies on year-round schooling. Minnesota has 134 districts using year-round schooling. California has 130 districts using year-round schooling. Of Illinois school districts, 25% are currently running on a year-round schedule. However, this report showed North Carolina now has only 19 districts

using year-round schools, which is significantly lower than the 1994 research reported were considering to change to year-round schools.

Although becoming more popular in North Carolina in the 1990's, Worthen and Zsiray (1994) found several negative aspects of year-round schooling in the North Carolina research that had been mentioned in other studies. Parents of younger children have complained about the difficulty in finding daycare. There have been significantly higher absenteeism rates reported in the summer months in schools with year-round schedules, which is probably related to the additional cost of air conditioning, particularly in southern schools. Students participating in extra-curricular activities, need to return to school during their off track times or are unable to participate (Worthen & Zsiray, 1994). This last point has more bearing than one might believe. Schools base social calendars around their sports and after school activities, the fact that these participants have to be at school when others are not is quite a scheduling conundrum because parents would have to reschedule their lives to ensure their child's participation in school activities. These could all be reasons for the decrease in school districts in North Carolina now running year-round schools as shown in the Council of Chief State School Officers (2009) report and for the resistance against changing from traditional to year-round schooling in the Wake case.

Some positive aspects of year-round schedules have been found from the research as well (Grooms & Smotherman, 2003). Teachers report better classroom behavior and classroom management. However, statistics showing data on the actual number of disciplinary referrals were not given, these were simply teacher perspectives from surveys. Studies also claimed that it was easier on families to spread the cost of school supplies out over twelve months and that quality substitute teachers were easier to find. These findings were both obtained from surveys

(Worthen & Zsiray, 1994). As stated, finding trustworthy substitutes who could actually deliver educational experiences to students would be a great benefit to student achievement.

Some findings are inconsistent. Research (Worthen & Zsiray, 1994) showed that year-round schooling helped the community in that it spread out the use of community facilities and there was a decrease in crime and vandalism. On the other hand, the study also confirmed year-round schooling hurt local businesses and the local economy because students made up a large percentage of the summer work force and now were unavailable to work and earn extra money over the summer (Worthen & Zsiray). This, too, might affect revenues in many communities across the country that rely on summer tourism for a bulk of their economy.

The final findings of the Worthen and Zsiray (1994) study deal with analyzing costs. School finance and the overall state of the economy are very important issues to consider when deciding whether to change to year-round scheduling. Other than the savings in a multi-track schedule as opposed to the costs of building new facilities, there were no definitive findings showing single-track or multi-track scheduling being substantially cheaper than running a school on the traditional school calendar (Worthen & Zsiray).

There are several proponents for year-round schooling (Ballinger, 2010); however, there are just as many studies and sources that indicate year-round education shows no improvement in education (Von Hippel, 2006, 2007) Some studies (Von Hippel) claim year-round education shows no academic gain among students and cost school districts more money than schools run on a traditional calendar.

Von Hippel (2007) recently continued his study on year-round education. His study included mixed research methods. Data was taken from surveys from the Early Childhood Longitudinal Study conducted by the Department of Education. Data from test scores on math

and reading from over nine hundred schools country wide were also used. Seventy percent of the schools used in the study were public schools (Von Hippel). Standardized Test scores comparing kindergarten students and first grade students in year-round and traditional calendars were compared. Von Hippel wanted to see if the longer lay-off during the summer in traditional calendar schools would have an impact on student test achievement. The results showed less than one percent difference in the scores of students from traditional schools compared to that of year-round schools (Von Hippel, 2007). Von Hippel's study did show some gains consistent with pro year-round schooling research. Students in the study from the poorest families showed slight improvement in math and reading. Standardized test scores from 748 public schools were examined and compared. Twenty-seven schools in the study ran a year-round schedule. Students from the year-round schools scored higher on the standardized tests but their scores were less than one percent than the students from the traditional calendar schools and one percent was deemed statistically insignificant. Von Hippel stated, "There may be a slight advantage for students from the poorest families but the results are absolutely trivial in difference" (p. 2). The study indicated another consistent finding that changing to a multi-track, year-round schedule can help reduce the costs that come with increased school size. Most of the schools in the study were from highly populated urban and suburban districts. However, as stated previously, little or no research about transportation or teacher contract costs seem to be indicated in these studies. Von Hippel claimed there is no evidence that changing to a year-round school will increase academic performance; however, he did not argue against year-round schooling. His study simply indicated there is not significant differences between the calendars and schools hoping to change for the sole purpose of improving academic performance are unlikely to see this happen (Von Hippel, 2007).

Although organizations like the National Association for Year-Round Education and its proponents like Ballinger promote the change from traditional school calendars to year-round schooling there simply is not enough evidence to show that the change is academically or financially advantageous for a district. Other researchers do not believe that there is enough evidence in academic improvement to change from the traditional schedule. As Von Hippel said, “On purley academic, I would not advocate a year-round calendar [...] if a school is considering a year-round schedule in hopes of boosting academic achievement it seems unlikely those hopes will be realized” (2007, p. 2).

Year-round schooling is a controversial issue. Most schools in the United States still operate on the traditional school calendar. Although some states are going more and more towards year-round schooling, Minnesota and California for example, most states are not. There is not clear evidence available showing the benefits of year-round schooling over traditional schooling. A problem with showing the benefits of year-rounding schooling is a lack of quality research. Many studies have mixed results that come from putting schools run on different year-round schedule tracks within the same study. Other problems with the research are putting elementary and secondary schools in the same studies or having schools that have been studied for only one year in studies with schools that have been researched for multiple years. There is a lack of solid quantitative data to numerically support an academic improvement for large numbers of students. There is a lack of solid quantitative data to numerically prove a district would save money changing from a traditional school calendar to a year-round calendar. Other than saving money in operational costs compared to building new facilities, there is no evidence supporting a cost savings. Much of the support for year-round schooling comes from qualitative surveys that only offer opinion, not fact.

Chapter III – Results and Analysis Relative to Problem

The research for year-round education is vague and unclear. Many studies pertaining to year-round schooling show qualitative data without quantitative support. This makes it hard for districts to give proof why they should change to a year-round calendar. The existing research is split between single-track and multi-track schedules. Although some evidence exists showing academic gains with certain demographics of students, such as non-English speaking students or students from poor socio-economic status (Ballinger, 1995; McChesney, 1996) there is an equal amount of studies showing over-all academic gains to be inconclusive (McMillen, 2001; Von Hippel, 2006). An explanation for this discrepancy could be the research does not differentiate between single-track and multiple-track year-round schedules, and many of the results do not clarify and do not study a broad gambit of students. Rather, they focus on one demographic like elementary schools or middle schools. As stated in the North Carolina Public Schools Evaluation Brief the studies are not, “random” enough (North Carolina Public Schools Evaluation Brief, 2000).

Studies on year-round schooling are split roughly in half between single-track and multi-track schedules. Financially, there is no clear evidence supporting either schedule saves money over a traditionally run district that is not facing overcrowding and increasing enrollment. Multi-track schedules do show a cost savings, but that is only compared to the cost of building new facilities. Saving money and increasing academic performance would be the two main reasons to change a school schedule. There is no conclusive evidence that either is obtained from switching from traditional to year-round scheduling.

Chapter IV – Recommendations and Conclusion

Recommendation

Should the Sault Area Public Schools consider switching from the traditional school calendar to a year-round calendar? The Sault has a declining enrollment. Our high school had over one thousand students ten years ago. Today we have a little over eight hundred. In 1995 Sault Area Public Schools had six elementary schools. Sault Area Public Schools has closed three in the past eleven years. These were very controversial decisions and there are still bitter feelings in the community regarding the decisions. We have failed to pass three bonds since the last elementary school was closed. Community support would most likely be opposed to such drastic changes. We are also a tourist town in the summer. Many students have summer jobs at the local tourist shops. This is another factor that would make going to year-round schooling an unpopular decision.

We are not in need of changing our schedule due to increased enrollment. Although we do have a large number of disadvantaged students, we offer summer school and have tutoring available throughout the summer at Lake Superior State University. We do not have a large non-English speaking population. There is not enough solid evidence to show that changing to year-round schooling would significant increases in student academic performance. There is not enough research available to answer other questions about year-round schedules such as the impact on teacher contracts and the impact on families or extra-curricular activities. A clear presentation to the school board showing the advantages to changing would be impossible to create. School leaders should make this information known to the community through school board meetings, other public meeting places within the community and local media outlets such as the local newspaper or radio. When members of the community in favor of year-round

schooling are informed of the lack of academic achievement and the fact that cost savings are not evident the push for year-round schooling should decline or more research would need to be conducted to see if any information is available showing how the Sault Public Schools could possibly benefit from changing their school calendar.

Areas of Further Research

In order to gain clear statistical data there needs to be a distinction made between which type of year-round schedule is being used, either single or multi-track. Studies should be conducted over a longer period of time than simply a year or two. Statistics should be taken on standardized test scores, absent rates for teachers and students, number of referrals and discipline situations, and number of drop-outs. The statistics should be broken down and compared to each other and compared to schools on a traditional schedule. Equal numbers of schools should be studied and compared. School size should also be included in the study. A small rural school and a large urban school could be impacted differently.

A mixed study could be useful. Including surveys from parents, students and school officials on attitudes and satisfaction of changing to year-round schooling can be useful. However, the qualitative results need to be supported with quantitative statistical data showing actual academic improvement and cost savings. If it does not save money and increase academic performance, why change? There seems to be no other reason to change the schedule of a school if it does not change academic performance or save the district money.

Summary and Conclusion

Education has changed significantly since the first public schools appeared in the United States in the early 1800's. The one thing that has remained constant is the traditional school

calendar. Originally designed to allow students to be home to help parents farm, most families do not farm today and more people live in urban areas than rural areas.

There are studies of the impact of year-round calendars but they are inconclusive. There is no clear statistical data showing year-round education benefits either the cost savings to a school district or showing significant academic improvement across the board for students.

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