

**Literature Review**July 2015

# The Cost of School Holidays

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What Works Scotland (WWS) aims to improve the way local areas in Scotland use evidence to make decisions about public service development and reform.

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- learn what is and what isn't working in their local area
- encourage collaborative learning with a range of local authority, business, public sector and community partners
- better understand what effective policy interventions and effective services look like
- promote the use of evidence in planning and service delivery
- help organisations get the skills and knowledge they need to use and interpret evidence
- create case studies for wider sharing and sustainability

A further nine areas are working with us to enhance learning, comparison and sharing. We will also link with international partners to effectively compare how public services are delivered here in Scotland and elsewhere. During the programme, we will scale up and share more widely with all local authority areas across Scotland.

WWS brings together the Universities of Glasgow and Edinburgh, other academics across Scotland, with partners from a range of local authorities and:

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- Healthcare Improvement Scotland
- Improvement Service
- Inspiring Scotland
- IRISS (Institution for Research and Innovation in Social Services)
- Joint Improvement Team
- NHS Health Scotland
- NHS Education for Scotland
- SCVO (Scottish Council for Voluntary Organisations)

This Brief Literature Review is one of a series of papers that What Works Scotland is publishing to share evidence, learning and ideas about public service reform. This paper relates in particular to the **Improvement and Effectiveness** and **Prevention** work streams.

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#### Introduction

The summer holidays are generally portrayed as a carefree, happy time for children with the opportunities to play, for enrichment and happiness and to develop socially and emotionally; unfortunately whilst this is true for many children, for some school holidays are a time of great stress and impoverishment. This is especially the case for children from low income families where school holidays can bring greater financial pressures, food insecurity, isolation and poor health (Rai 2015). They are a time when some children can fall behind their peers in terms of educational attainment partly because they miss out on many of the enrichment activities enjoyed by their more affluent peers and are denied opportunities to take part in the sporting, cultural and learning activities but also because their health and wellbeing suffers. When school doors close, many children struggle to access educational opportunities and do not receive ongoing and continuous opportunities to learn and to practice and develop essential skills and this can be particularly important during the extended summer break (Summer Learning Association, 2009a). There is no an emerging body of evidence pointing to the potential damage this break can cause for children from areas of high social deprivation, Alexander et al. (2007) for example claim that more than half of the achievement gap between lower- and higher-income young people can be explained by unequal access to summer learning opportunities.

In this literature review we examine the evidence to support these claims and also explore some of the initiatives that have been set up to try and ameliorate the lives of children living on low incomes. The aim of this literature review is to provide evidence to a joint project bringing together What Works Scotland, Glasgow Life, the Glasgow Centre for Population Health, Child Poverty Action Group and NHS Greater Glasgow and Clyde and help in the design and development of programmes to tackle the problems faced by young people in low income families in Glasgow during the summer holidays.

The review will gauge the extent and nature of available literature on the cost of school holidays for families in the UK with low income and the effects holidays have on children's educational attainment. This topic is fairly poorly explored and documented and what little literature there is relatively recent and mostly comprises grey literature. One area where there is relatively substantial body of literature is around summer learning loss, the backslide experienced by young school children over the summer holidays, although this is mostly of North American origin. The literature review is split into two parts and in the opening section we document the key literature available on the cost of school holidays and in the second we look at the effect on educational achievement and child development.

The idea that the school year is predicated on agrarian practices, with children undertaking their studying during winter and spring to free them up over the summer to help during harvest time, is a myth. The origin of long summer holidays does stem back to the late Nineteenth Century. The long summer break rather than the result of agricultural need

owes its origins more to the professional practices of the Victorian era. Universities, Parliament, the Law Courts, public schools and other established bodies all closed for four or five weeks over the summer mainly to allow professionals to have holidays and urban schools adopted these practices (Bloom 2009). The traditional three-term calendar which was established in the 1870's when state schools were first introduced is still in use today. Whatever its origins the long summer holidays have increasingly come under pressure, although as Bloom points out this is not new and the first criticisms of long holidays emerged in the 1890's with concerns expressed over the effect they had on children's educational attainment.

# Section 1- Cost of School Holidays

# School holidays: Financial costs and participation in activities

The school holidays represent a financial challenge for many low income families and can for many produce what Rabindrakumar has termed a 'crunch point', a point that moves families from just coping to tipping over into debt (2015). Family Action (2012) for example report that activities such as day trips to zoos or similar attractions with two children can cost £99, considerably more than a week's disposable income for many families. Many parents in their survey had little or no expectation of being able to afford day trips or family holidays. The Joseph Rowntree Foundation Minimum Income Standard for 2014 (JRF 2014) proposes that for working age people the minimum expectation to a holiday should be at least a one week break in self catering accommodation, again beyond the means of many parents. Preston (2008) in her review of education and child poverty makes the point that participation in such activities for children from areas of high social deprivation is particularly important and that without them both their education and their wellbeing suffers.

Data from the United States show that children from areas of high social deprivation are significantly less likely to participate in summer activities (Terzian et al. 2009) The Early Childhood Longitudinal Study, Kindergarten Class, found that during the summer holiday months, a lower percentage of children from low-income households reported that they attended day or overnight camp, took family holidays, attended concerts or plays, and visited the following locations: libraries; shops; parks; art, science, or discovery museums; zoos, aquariums, or petting farms; and historic sites (Meyer et al 2004). The survey showed that 20% of low-income children reported visiting arts, science, or discovery museums over the summer, compared to 38% of middle-income children and 62% of high-income children.

Childcare during school holidays is one of the major costs of school holidays and analysis of the use of childcare across local authorities in England found that the cost of childcare during school holidays for families with two or more children and a working mother ranged from 13% to 18% of the family income (Paull and Brewer 2003). The Holiday Childcare

Survey for 2014 found that one week of full time (50 hours) holiday childcare cost an average of £114.51, ranging from £80 to £530 and has risen by 33% since 2010 (Rutter 2015). The average cost for childcare in Scotland is £104 per week. This survey reports that 'one day missed to cover childcare every year represents over 900,000 lost working days and costs the UK economy nearly £100 million every year' (Rutter and Lugton 2014, page 3). The difficulties in meeting child care costs over the school holidays has meant that some parents have opted to choose either zero hours contracts or self-employment and to carry the risks and low pay associated with these rather than opt for more permanent, better rewarded and secure employment (Hoggart and Vagaries 2008, Rabindrakumar, 2014).

Petrie (2015) makes the point that whilst work is seen as the route through which people from areas of high social deprivation can tackle the poverty and inequality they experience with child care presented as means to enable parents to enter the workforce, the cost of childcare, particularly during holiday periods, can impoverish families. There is also a substantial body of evidence to suggest that not only is holiday child care expensive it is also in many areas inadequate and unavailable. It is to an examination of the provision of holiday child care that this paper now turns.

#### **School Holidays and Childcare**

The demand and the need for accessible and flexible childcare during school holidays is increasingly being recognized as an area of demand and has been included in several reports on childcare but despite this there has to date been little or no attempt to develop policies to meet this need (Hawkins 2014). The political focus for childcare has in the main been on the under-fives and provision for school aged children has tended to be overlooked (Rutter and Lugton 2014). Unlike England and Wales, where local authorities are under a legal obligation to provide sufficient childcare for working parents and those studying with the intention to return to work, in Scotland, whilst local authorities must take a strategic view of childcare and ensure that families have access to integrated childcare, there is no equivalent legislation. The most recently published childcare survey reports that only one in six councils in Scotland has sufficient childcare capacity to meet the needs of working parents and provision in Scotland tends to be inflexible (Rutter 2015). In Glasgow the problem is particularly acute, driven in part by the very high demand made by meeting the needs of the large number of deprived two year olds who qualify for free early education coupled with large areas of social deprivation (Ibid). There are fewer childcare places in the most deprived parts of the city where private, voluntary and independent sector providers find it hard to break even (Ibid). Holiday childcare is most often provided by the private sector, reinforcing the disadvantage experienced over the holiday period by those who live in areas of high social deprivation (Petrie 2015).

Provision for older children, especially secondary school children aged between 11 and 14 years is even sparser and in a recent survey for Gingerbread whilst many parents felt that

children this age were still too young to be left for too long by themselves many childcare providers do not accept children aged 11 and over (Rabindrakumar, 2014). Holiday support for disabled children is also very poor and over 30% of parents with a disabled child identified cost of holiday childcare as a major problem with 26% raising concerns about poor provision and 22% claiming that their needs were not met throughout the holiday period (Working Families 2013)

In a study exploring lone parents' experiences of childcare the holiday period was cited as a particular difficulty (Rabindrakumar, 2014, 2015). Difficulties obtaining childcare provision in holidays has serious impacts on those who work, with Hawkins (2014) reporting that in a survey of 614 lone parents:

- 29% had reduced their working hours to look after children
- 22% had taken unpaid leave and
- 16% had stopped looking for work or turned down employment that they could look after their children.

Managing the care of children during holiday period often required complex and difficult solutions and in single parent families this is even more complex with over 25% of parents relying on at least three providers to help with cover (Rabindrakumar 2014). Recent changes in entitlement to support for lone parents who used to be eligible for Income Support until their youngest child was 16 but now have to move onto Job Seekers Allowance (JSA), unless they are entitled to Employment Support Allowance, when their youngest child is 5 will only exacerbate this problem. Once on JSA, they must comply with conditions to actively seek and be available for work, or face sanctions. In such cases where the youngest child turns 5 before school starts, this can create difficulties in fulfilling job searching requirements/taking up a job offer, due to lack of affordable and appropriate childcare, particularly over the summer holidays before school starts (Graham and McQuad 2014). With over 40% of dependent children in Glasgow City living in lone parent families this problem is particularly pertinent to this study (Office for National Statistics 2012)

There is little literature specifically exploring the lack of childcare during school holidays, even though this is regularly raised whenever childcare problems are introduced. Many children living in poverty are in families where childcare will be required to enable their parents to work or attend training. At 2007 in the UK, of all children in poverty:

- 43% of children in poverty were living with two parents, one of whom was in employment
- 7% live with a lone parent in employment
- 33% live with a lone parent who is not in employment
- 17% live with two parents, both of whom not in employment (Department for Work and Pensions 2007) cited by (Waldfogel and Garnham 2008).

It is to an exploration of holiday childcare that this report now turns.

#### School holiday childcare resources: required, used, provided

A Joseph Rowntree report on the potential for employment to reduce child poverty found seasonal patterns in exits from work during July to September for lone parents, and to a lesser extent for couple mothers, which may, they argue, be linked to inability to source and afford childcare during the summer school holidays (Simmonds and Bivand 2008). There is also an increase in lone parent benefit claims during the summer school holidays (Simmonds and Bivand 2008). Among parents responding to the Holiday Childcare Survey:

- 25% report having been forced to cut their hours of work during school holidays
- 12% report giving up a job because they could not find holiday childcare
- 17% report taking days off sick to cover holiday childcare (Rutter and Lugton 2014, page 3).

#### The Joseph Rowntree report states:

"We conclude, from these benefit claim figures, that lone parents can be shown to have difficulties sustaining work over the summer, impacting on annual earnings and incomes, and confining many to a no-pay, low-pay cycle. The evidence on the ages of children in the family confirms that the issue is most extreme for those with a youngest child of primary school age, and is also substantial for lone parents with, especially, older children, but also younger children. It is likely that the constraints on work availability imposed by the educational year will affect those with small children particularly if they also have children of school age. While this evidence relates to lone parents claiming benefit, we see no reason why similar patterns should not apply to all parents with caring responsibilities." (Simmonds and Bivand 2008, page 16).

These findings have been further supported by more recent work by Graham and McQuad (2014) exploring the impact of benefit changes on lone parents. The Holiday Childcare Survey found that 41% of working families used informal childcare (family or friends) during school holidays (citing Department for Education 2014). The authors note that not all parents had access to informal care, or were able to cover all school holidays with annual leave (Rutter and Lugton 2014).

In a survey of childcare by Ipsos MORI, 29% of respondents in England and Wales reported needing childcare during school holidays (Booth, Kostadintcheva et al. 2013). When asked what type of child care they would use if it was available, 41% of participants said they would use school holiday child care. 51% of participants who had difficulty obtaining childcare said they would use holiday childcare if it was available and affordable. This

suggests that some parents with low income did not report the need for school holiday childcare if they believed this service was not available to them or, even if it was available, they would not be able to afford it. The report does not compare need by participant household income.

Internationally, while all OECD countries have out of school hours activities during school term time, and around a half of these countries have provision during school holidays, the Netherlands is the only country where there is a statutory duty for schools to offer activities and childcare out of school hours (Pascal, Bertram et al. 2013, page 38). A review of childcare services in UK, conducted in 2001, found dissatisfaction with hours of school holidays childcare. This report for the Scottish Government notes the need for school holiday childcare to be available on the days needed, covering the hours needed (Malcolm, Wilson et al. 2002). For example, a holiday club run from 10am until 4pm may still cause childcare problems for a parent with no other childcare source who has to work from 9am until 5pm.

#### School holiday costs: food

The concept of "holiday hunger", children going hungry during school holidays because they cannot access free school meals, is now fairly well established and supported by a growing body of, albeit anecdotal, evidence. The claim for this is based mainly on increased usage of foodbanks during school holiday periods - there has to date been little direct research into meals for children during holiday periods. Clearly this issue is of particular importance to Glasgow, with 38.8% of primary school pupils, and 29.8% of (Scottish Government 2010) in receipt of free school meals.

The idea that poverty is linked to food insecurity is now well established and a national survey conducted on behalf of the Food Standards Agency found that 29% of people in the UK with low income were 'food insecure' (Nelson, Erens et al. 2007). Whilst there are currently no established official measures of food poverty - it has been defined variously as the inability to obtain healthy, nutritious food (Food Ethics Council) or a household which spends more than 10% of their annual income on food (Centre for Economics and Business) - there is a substantial body of evidence to support the claim that this is a growing problem in the UK in general (Cooper et al 2014). There is however no UK national monitoring system of food insecurity (Loopstra, Reeves et al. 2015). A rapid review on what food aid services exist in the UK found the limited literature available on who accesses the services, and why, was mostly from food aid providers (Lambie-Mumford, Crossley et al. 2014).

The Evidence Review for the All-Party Parliamentary Inquiry into Hunger in the United Kingdom cites oral evidence from the Trussell Trust that food banks report higher demand during school holidays (Forsey 2014). Recently the Trussel Trust, concerned by a 21% increase in food bank usage in August compared to June carried out a survey of 2000

parents and 1,176 teachers and on the basis of this claim that one in eight children do not get sufficient food in the school holiday and 19% of parents struggle to feed their children three meals a day during this period (Trussel Trust 2014). Further evidence is provided by studies into food bank usage in Hampshire (McCarthy 2012) and Lambeth (Minahen 2012) where increased demand when children are unable to obtain free school meals has been reported.

A review by Barnardo's on food poverty during school holidays has called for government support for families with low income to compensate for the lack of meal provision during school holidays and contribute towards childcare costs and developmental activities (Gill and Sharma 2004). However despite these calls and the growing evidence about child holiday hunger there has to date been no attempt to quantify the extent of the problem (All Parliamentary Group on School Food 2014). There is no national register, data are not routinely collected on need and there is a lack of reliable data on the number of children fed by food banks during school holidays or on the effect holiday hunger has on children and their development. The All Parliamentary Group on School Food (2014) have called for public financing to ensure that free meal services continue in holiday periods and have also called for further research into both how families manage during holiday periods and how services can best help families.

#### **Evaluations of school holiday food initiatives**

Lindsay Graham has carried out a major evaluation of programmes aimed at tackling summer food poverty in the US (2014). She argues that for such programmes to be successful they must be securely funded, make use of existing resources and facilities such as schools, community centres or other public buildings and be delivered by trained staff. The nutritional quality of the meals provided was also important.

In the UK there have to date only been a small and limited number of evaluations of such initiatives and in our search we found two: Holiday Kitchen (details provided below), and Tackling Holiday Hunger. The report on Tackling Holiday Hunger, an evaluation of Kellogg's Pilot Holiday Breakfast Club, has not yet been published. The evaluation was conducted by Professor Defeyter and Dr Graham at the University of Northumbria, there are currently no further details [http://healthylivinguk.org/research-item/breakfast-clubs-research/].

The evaluation of Holiday Kitchen examined the intervention's objectives to:

- improve social inclusion and aspiration
- · improve family nutrition and wellbeing
- reduce financial and emotional strain

The intervention included a theory of change mapping the rationale and objectives of the project. Over the school summer holidays in 2014, Holiday Kitchen provided 2,300 days of activities and food to around 300 families. The programme aimed to provide "holiday learning, food and play for families who need it most" (page 2). Families were recruited from referrals from children's centres, a domestic violence refuge, and other youth and community centres. The parents in the participating families were unemployed, except one mother who worked part time. Two thirds of respondents said their children received free school meals. One third of respondents had received assistance from a food bank in the past year. A third of parents said that they or their children were receiving support from education, health or social services (O'Connor, Wolhuter et al. 2015).

The programmes ran for three hours in the morning or afternoon, except one youth programme which ran from 9am to 8pm. Each participating family was asked to commit to eight half days across two to four weeks. The programmes operated through existing infrastructures and were delivered by organisations already working with low income and vulnerable families. A theoretical framework was used to develop activities to improve wellbeing: giving; learning; connecting; taking notice; and being active (page 11). These activities included providing meals, education about healthy food, learning, play and physical activities, and support and education for parents.

Evaluation of Holiday Kitchen included questionnaires, interviews with parents, volunteers and centre managers, staff focus groups and visualising activities with participating children. This aimed to gain feedback from participating children and parents, and of the staff, volunteers and commissioners of the project. This qualitative feedback gave insight into how well the activities were received in relation to each of the three key objectives. There was positive feedback for all of the activities, in particular: providing meals and activities for the children helped the parents financially; opportunities to socialise helped both children and parents increase their wellbeing and social networks; and information on healthy food and budgeting was helpful to parents but might be presented in a different format for children in the future (O'Connor, Wolhuter et al. 2015).

Having examined the costs of school holidays both in terms of childcare and food as well as the impact poverty has the opportunity to take part in enriching activities this paper now moves on to explore the how poverty, school holidays and attainment intersect. In contrast to the work discussed so far, where the evidence is to a large extent anecdotal, this is a better researched and evidenced area, although as we argue later the solutions to summer learning loss are less well evidenced.

#### **Section 2 - Summer Learning Loss**

### **Defining the problem:**

There is a substantial body of evidence to suggest that the long summer holidays actually force students to 'backslide' academically (KIngston 1997). This 'backslide' or 'learning loss' has been well documented over the years, usually by means of standardised tests conducted pre and post summer holidays (Heyns, 1978; Entwisle & Alexander 1992; Cooper et al., 1996; Downey et al, 2004). The summer interruptions to studies result in students not just to stand still in their academic progress, but actually to regress (Davies and Kerry 1999).

Most of the literature on the topic is of North American origin and there has to date been little work on summer learning loss in the UK, consequently most of the literature discussed in the review is from the United States, It is however important to point out that schools in Scotland, together with those in England, Wales, Germany and Denmark have much shorter summer holidays than the 13 week summer closure typically found in US schools and it may well be that summer learning loss is less of an issue here than in the US. That notwithstanding there has been some concern expressed on the topic in the UK and in 2014 the *Times Educational Supplement* reported a survey carried out by *The Key*, an organisation that provides management and leadership support to schools in England and Wales, on the impact of school holidays (Key Insights 2014, Ward 2014). The survey of over 1000 primary and secondary schools in England found that 77% of primary school leaders and 60% of secondary leaders expressed concern about summer learning loss among their pupils. Primary schools were more likely to develop schemes to alleviate the problem, with 81 per cent running reading programmes, compared with 46 per cent of secondaries.

A number of researchers have concluded that much of the difference in achievement between low-income students and their more advantaged classmates is due to inequities in their experiences during the summer months. This conclusion is based on studies that indicate that children in all income groups learn basic skills at similar rates during the school year; however, low-income children's skills regress more than those of middle- and high-income children during the summer (Von Drehle, 2010; Terzian et al.,2009; Alexander et al., 2007; Miller, 2007; Chaplin & Capizzano, 2006). Blazer (2011) and Alexander et al (2007) argue that summer holidays are the predominant causes of the social class achievement gap in schools pointing out that whilst middle- and higher-income children spend their summers engaged in activities and enrolled in programs that strengthen and reinforce learning such as camps, visits to museums and libraries and family trips the vast majority of children in low-income communities are denied such opportunities. This leads to boredom, inactivity and isolation and by the time school begins each year, low-income children's lack of access to enriching summer activities results in their falling weeks, if not months, behind their more advantaged peers.

Cooper at al. (1996) reviewed 39 studies of children's learning over the summer months and conducted a meta-analysis on 13 of the highest-quality studies. All the studies related to summer learning loss at pre-secondary level. The three main findings of their meta-analysis were:

- 1) Summer learning loss affects different subjects differently. For example, it was revealed that summer learning loss was more pronounced in maths than in reading. All students, regardless of income level, lost approximately equal amounts of maths skill (an average of 1.8 months of progress) over the summer. For individual language skills such as spelling, there was a reported loss of up to 4 months.
- 2) Summer learning loss was worse for older students. In the lower primaries the loss was significantly less than in upper primaries.

Low-income students were subject to a larger amount of summer learning loss. The reading comprehension scores of all income groups declined, but low-income children lost twice the amount of ground than their more affluent peers. Cooper et al. (1996) speculated that maths skills declined more than reading skills over the summer because children's home environments tend to provide more opportunities to practice reading than maths. In addition, the researchers found little evidence to suggest that students' prior achievement levels, gender, or ethnicity had a consistent influence on the amount of summer learning loss they experienced.

Further evidence for summer learning loss is provided by Alexander et al. (2007) using data from the Baltimore Beginning School Study. Their sample drew on a representative random sample of 790 school children whose educational progress was monitored from first grade through to age 22. The researchers analysed data from reading comprehension tests administered to the same students twice yearly (autumn and spring), enabling them to isolate gains made during the school year from those made during the summer. Alexander et al. (2007) found that when test scores reflected mostly school year learning, low-income students kept pace with their higher-income classmates. In contrast, higher-income students' reading skills continued to improve during the summer, while lower-income students lost ground. By the end of fifth grade (Primary 6 for Scotland / Year 5 England), summer learning among students in higher-income homes had added a total of about 47 points to their test scores; the test scores of students from low-income homes were reduced by about two points over the same time period. The researchers concluded that by ninth grade (Secondary 4th Year in Scotland / Year 10 in England), more than half of the achievement gap between lower- and higher-income youth was explained by unequal access to summer learning opportunities during the elementary school years.

Downey et al. (2004) used data from 20,000 children included in the Early Childhood Longitudinal Study, to examine high- and low-income students' learning rates during the

school year and over the summer months. Students' reading and maths test score gains were split into seasons so that differences between the school year and the summer months could be analysed. Results indicated that the attainment gap was already present before school began and continued to increase after school started. However, the attainment gap between low and high income children grew much more rapidly over the summer months than it did during term time. Summer learning loss is cumulative, in that low-income children fall further and further behind their more affluent peers year on year (Terzian et al., 2009).

# **Preventing Summer Learning Loss**

There have been a number of attempts to try to tackle summer learning loss and they can be loosely grouped under two approaches: changes to the school calendar and the promotion of summer activities. Calendar reform has been advocated by many as the easiest and most cost effective way to tackle the issue (Winters, 1995; Cooper et al., 1996; Kerry and Davies, 1998, National Association for Year Round Education 2013). Typical rearrangements aim at a greater number of shorter terms punctuated by shorter holidays. Examples of calendar reform are the '45-10 calendar' in which students work for 9 weeks, have a 2 week break or the '45-15 calendar' in which the 9 weeks of learning are followed by 3 weeks holiday. The learning sessions can be interspersed by inter-sessional activities like summer school or extracurricular games/sports (Kerry and Davies, 1998). This type of term time or calendar reform means that there are no prolonged periods of academic 'down time' for students and it is often referred to as Year Round Education (YRE) (Winters, 1995).

Evidence on the effectiveness of YRE is however not conclusive, with some claiming that it actually disrupts the learning process (Rasberry 1992). Earlier evaluations of YRE provide some evidence to suggest that it is good and effective way of reducing summer learning loss and that calendar reform benefits not just students from low income backgrounds but all students (Kerry and Davies 1998). Winters for example (1995) brought together the findings from 19 different studies which looked at the attainment impact in schools which had made the transition from tradition calendars to YRE. In these 19 studies, 41 areas of school performance (including attainment in maths, reading and literacy) were examined with 36 of the 41 areas showing improvement. In addition to attainment other benefits of YRE include reduced student and teacher stress as term time is no longer a 'marathon' but a series of 'short sprints'. Other research syntheses carried out by Palmer and Bemis (1999) and Kneese (2000) also reported small but significant improvements in educational attainment where schools have adopted YRE, with Kneese claiming that more recent studies have produced more significant improvements. The use of inter-session time for extracurricular activities with time for play inbuilt into the curriculum has also, it is claimed, improved school attendance and improved student attitudes towards coming to school (Brekke, 1996).

YRE when first mooted did not meet with universal approval although most of the concerns voiced from some in the education community were based on misconceptions. Some teachers and policy makers have seen YRE as an attempt to make teachers or students work longer with shorter holidays and have warned that this would be met by stiff opposition. However, when explained that YRE calendar reform is simply an alternative way of rearranging and spreading out the school year, that it was underpinned by good pedagogic evidence and that the actual days spent in class were exactly the same some of the opposition reduced (Winters, 1995; Kerry and Davies, 1998).

This early research led to a strong movement in the US for YRE calendar reform (Kerry and Davies, 1998) and McMullan and Rouse (2012) claim that by 2004 nearly 2.3 million children in the US were taught in schools that had adopted YRE, up from 360,000 in 1986. However as the roll out of YRE has continued some of the claims made about its ability to tackle summer learning loss have been called into question. Cooper et al (2003) in their meta-analysis of studies on YRE make the point that the quality of the data in this area "leaves much to be desired" (p36). They conclude that the evidence on YRE is ambiguous and that whilst the quality of the data available is not very robust they any effect of YRE on achievement is small (approximately 0.05 standard deviation) and any effect could be described as 'trivial' (p43). Macmillan and Rouse (2012) have carried out a large scale natural experiment, taking advantage of the implementation of YRE across Wake County, North Carolina, a policy implemented to meet the growing need for school places. In total 46 schools took part in the study. They concluded that:

the achievement of students in YRS is very similar to those using traditional calendars. Our results imply that dividing a long summer break into more frequent shorter breaks does not have a positive impact on achievement as measured through standardized test scores. (p251)

More recently McMullin et al (2015) have re-examined these data looking closely at the impact of YRE on the lowest performing students and suggest that for this group there is some evidence of benefit. For the lowest decile in maths achievement students performed statistically better under YRE with statistical significance seen in the lowest quartile for reading. They tentatively suggest that if this is the aim of this intervention is to target the lowest performing students the reform of the school year and the adoption of all year teaching may be of benefit and could be considered.

Despite the paucity of evidence and the ambiguity recently in England there have been moves to achieve more balanced term times and proposed changes to term time were discussed in the draft Deregulation Bill (2013). This legislation will move responsibility for determining term dates in community, voluntary controlled and community special schools and maintained nursery schools from the local authority to the schools' governing bodies (Pg. 212, Section 473, Paragraph 3, Schedule 14). The Government have argued that the

deregulation of school term dates gives school management the autonomy to respond to the needs of their community and the families they serve. Despite opposition from NASUWT the Teachers' Union, the deregulation of all schools in England will take effect in September 2015 (The Independent, 2015). These changes may give school management the necessary freedom and agency to tackle many issues, including summer learning loss, which may or may not have the potential to bring about long term benefits for all children especially those living in areas of social and economic deprivation. Some schools in England have implemented policies aimed at tackling summer learning loss and in the survey the carried out by The Key (Key Insights 2014) 70 per cent of schools reported that they had established voluntary summer reading schemes, 27% moved pupils to next year's class for the last two weeks the summer term and 11% of secondary schools had introduced compulsory summer programmes to help students who might otherwise have to be held back a year.

Some however have argued that YRE is neither effective or necessary and that summer learning loss is better addressed through the provision of summer learning camps and other enrichment activities. As we have described above it is well documented that children from areas of high social deprivation are less likely to participate in summer enrichment activities. Cooper et al. (1996) concluded from their research that the key to closing the attainment gap was to provide children with access to summer learner camps or activities rather than to engage in full scale calendar reform.

In the US high quality summer programs are emerging in some States as the preferred solution and are seen as an important strategy to prevent summer learning loss. Blazer (2011) suggests that children's participation in summer programmes not only addresses academic attainment, but also promotes character development and interpersonal skills. She argues that for summer programmes to be successful they must be:

- Affordable and accessible
- Offered to children at all grades but should particularly focus younger children as these appear to benefit the most (Miller 2007)
- Different from normal school programmes, complementing the school curriculum both in terms of content and style
- Blend education and instruction into physical, recreational and cultural activities. Summer programmes are not the place for academic instruction.
- A safe place for children
- Run by experienced staff with best results achieved when programmes are designed and delivered by well qualified and experienced graduate teachers (Terzian et al 2009).
- Based on small group work

- · Relationship focused
- Involve parents
- Linked into other community groups who can act both as a resource providing staff, finances, space and technical assistance.

Graham (2014) in her review of programmes aimed at tackling summer hunger in US suggests that summer activity programmes are best placed to summer holiday meals for children who receive free school meals. She argues that holiday provision should blend community food provision, learning, sport and enrichment activities and that to do so would help close the inequality gap experienced by low income and Free School Meals pupils. Examples of summer learning programs that could be adapted to this process include summer school sessions, summer reading programs, outdoor adventure camps, arts and music camps, sports camps, apprenticeships, and paid internships (The Wallace Foundation, 2010; McLaughlin & Smink, 2009; National Summer Learning Association, 2009b; Terzian et al., 2009)

In the UK, the Education Endowment Foundation (2012) outlined a £200,000 pilot project which was used to introduce American style summer schools to the UK. The summer school was piloted for 4 weeks in the summer of 2012 in Edmonton, North London for Year 5 and 6 students. The aim of the project was to improve numeracy and literacy measurably, and to prevent summer learning loss for disadvantaged pupils who tend to regress academically over the summer holidays. The findings from an evaluation by Birmingham University of this pilot project were favourable, however due to the small scale of the project, the conclusions were said to be unreliable (Education Endowment Foundation, 2013).

#### Conclusion

One clear conclusion that can be drawn from the literature is that for many children and families with low income the summer holidays are a difficult time. Not only are they unable to participate in many of the activities which should be considered normal to family life and which enrich the children but their children also face increased risks of malnourishment and damage to health. These disadvantages arise as a result of a range of different issues including poverty, low wages, welfare reform and unsuitable, unavailable or unattainable child care provision during the summer with the latter impacting on particular parents' ability to take on employment that may help them move out of poverty. These factors all combine and reinforce each other and as a result children form low income families experiences a much greater a degree of summer learning loss, or 'backsliding' than their more affluent peers (Alexander 2007). The effect of summers without meaningful learning opportunities is cumulative and the achievement gap between economically advantaged and disadvantaged students grows wider and wider with every passing year (Terzian et al.,

2009; Blazer, 2011). Whilst all families with low income are affected by this there is some evidence to suggest that that lone parent families are more disadvantaged.

The evidence would suggest that if we aim to tackle the inequalities and inequity in education we need to take steps to try and ameliorate these problems. Whilst there are a number of ways this can be tackled and there is no clear, unmistakable way to go about it, the literature would suggest that there are a number of key areas that need to be addressed First, and perhaps most immediately, steps need to be taken to ensure that children from such families do not experience periods of malnourishment during the school holidays and services should be put in place to provide meals both at lunchtime and if appropriate breakfast during school holidays for those children who normally receive free school meals.

Second good, accessible, reliable and flexible childcare must be provided and this is particularly important for lone parent families and those with older children. Poor holiday provision is not only affecting children's educational achievement it is also impacting on their parent's ability to work and to take on better paid and more secure employment.

Third, whilst there is a substantial body evidence to support the claim that summer learning loss is real and that children from the most disadvantaged homes are most affected by it there is a paucity research on how best this can be tackled and what policies work best. The evidence on calendar reform of the school year is patchy, to say the least, but there is a suggestion that the most disadvantaged gain most from calendar reform. If this is to be the target group the possibility of YRE teaching could be looked at and a pilot run.

Fourth, the area where there is the most compelling evidence for action is around the provision of high quality summer programmes and we would argue that this is the area where Glasgow Life should focus its attention and that they should become a significant and well-resourced part of activities for young people. Research indicates that summer learning programs can help all students maintain or even increase their academic skills over the summer months (Graham 2014, Cooper et al., 1996). In financial terms, if nothing else this should make economic sense, with estimates that approximate 2 months of the year is lost to re-teaching children skills they had learnt prior to the holiday (Fairchild and Bouley 2002). Summer programmes also provide the best opportunity to tackle food poverty during the school holidays and providers of such initiatives could work in partnership with existing school meal providers and so minimize costs (Graham 2014). If Glasgow Life is to develop policies and programs that provide services to close achievement gaps and improve academic attainment whilst also addressing summer food poverty this would appear to be the most cost effective approach. Not only would such programmes be able to blend educational, cultural and physical they could also help meet children's nutritional requirements and fill the gap left by the absence of free school meals.

# **Appendix: UK holiday initiatives from included reports:**

Initiative	Further details	Assistance provided
Holiday Kitchen	Housing association initiative Evaluation by O'Connor, Wolhuter et al. (2015) http://ashrammoseleyha.org.uk/holiday_kitchen	meal, play and learning activities
Kid's Company	Children's charity www.kidsco.org.uk	meal, play and learning activities
Kirklees Neighbourhood Housing Summer Play Scheme	Housing association initiative www.knh.org.uk	meal, play and learning activities
Kellogg's Pilot Holiday Breakfast Club	evaluation in progress by Northumbria University	meal
Greater Manchester housing providers: Holiday Hunger Projects	Housing association initiative Multiple initiatives	various: meal, play activities
Hope 4 Summer	Charity initiative www.cuf.org.uk/blog/hope-4-summer- holiday-activities	meal, play activities
Make Lunch	Charity initiative www.makelunch.org.uk	meal
North Ayrshire	Mentioned in Graham (2014)	
East Renfrewshire	Local authority initiatives www.eastrenfrewshire.gov.uk/activities	meal, play and learning activities

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