

Time for a break

CHILDREN'S break time in Britain and the USA has been relegated by current educational policy to a place of unimportance in the school curriculum. Allotting less time for break, or even eliminating it completely, is common practice. The popular press in both the UK and the US have highlighted the problem. Academic research has provided some indication of the low regard schools seem to have for break; a national survey conducted in 1995–1996 (Pellegrini & Blatchford, 2000) showed that in England lunchtime break has been reduced, relative to 1990–1995, in 38 per cent of the junior and secondary schools and 26 per cent in infant schools. Further, afternoon breaks had been eliminated altogether in 27 per cent of junior, 12 per cent of infant, and 14 per cent of secondary schools. Reasons given for this stance typically relate to issues of academic achievement and negative peer relations and aggression – educators think that break time detracts from an already limited instructional time budget and provides opportunities for children to exhibit antisocial behaviour. But are they missing the point?

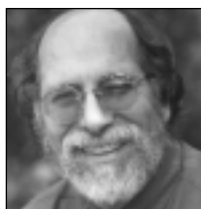
Maximising the good life

The issue of the pros and cons of taking time out is not entirely new; perceived 'non-productive time', in the form of 'idleness', was discussed 70 years ago by Bertrand Russell. Russell argued for a balance between idleness and work, believing that such a balance was necessary to maximise economic, social, and spiritual well-being in modern society:

I think there is far too much work done in the world...that immense harm is caused by the belief that work is virtuous, and that what needs to be preached in modern industrial countries is quite different from what always has been preached.

(Russell, 1932/1972, p.9)

Similarly, Maynard Keynes in 1930 saw the task of economic management as one of maximising the 'good life', where workers had increased leisure time and fewer working hours (Sidelsky, 2000). These provocative ideas from two of the



ANTHONY D. PELLEGRINI and **PETER BLATCHFORD** discuss the developmental and educational significance of break time in school.

leading scholars of the 20th century are an appropriate manifesto to begin this article. Is there any empirical support for the view that idleness can be productive and fulfilling in the long run?

Break time and academic achievement

The empirical record, in stark contrast to current educational policy, indicates consistently that break time does have positive 'educational value'. Specifically, in four field experiments conducted in American primary schools, we found that the longer children worked on standardised tasks without having a break time, the less attentive to the task they became (Pellegrini & Davis, 1993; Pellegrini *et al.*, 1995). Second, children were more attentive to classwork after break time than before.

These positive effects of break time on classroom performance can be explained in at least two ways. The first follows massed vs. distributed practice theory, where breaks inserted between periods of intense work serve to distribute effort and increase cognitive performance. Experiments have been conducted in this area from at least the time of Ebbinghaus (1885/1964), and the results are consistent. Participants, independent of age, learn better and more quickly when their efforts are distributed compared with when they are massed.

A more developmental explanation, in the form of the cognitive immaturity (CI) hypothesis (Bjorklund & Pellegrini, 2000), states that cognitive interference occurs when children are exposed to a series of demanding cognitive tasks, with a resulting fall in performance. Learners of different ages are released from this interference in qualitatively different ways. For young children, non-structured breaks seem to be particularly effective. For older learners, merely changing tasks may result in release. The competing hypotheses

associated with each theory should be tested and results should guide school and workplace policy.

Break time and peer relations

Break time may be one of the few times during the school day when children can interact with peers on their own terms and learn and practise important social skills. Games, in particular, seem to serve an important role for young children to the extent that they provide a familiar routine or scaffold (Bateson, 1976), around which unacquainted children can interact. These interactions form the basis for subsequent social relationships in school, as shown by two of our studies of the development of playground games and peer relations. The first involved Guildford schools in the junior playground study (Blatchford, 1998) and the other involved six-year-old children in primary schools in Minneapolis, USA.

Research in Guildford showed that pupils considered break time a significant and generally enjoyable time, when they could play and make and meet friends. In Minneapolis we found that children's break time was spent in co-operative interaction, much of which involved rule-governed games with peers. Importantly, and consistent with other work (Pellegrini, 1988), very little aggressive behaviour was observed. Being good at games on the playground was especially important to both general social competence (an aggregate measure of positive peer nominations) and adult-rated social competence. Children's facility at games during the first part of the school year predicted their social competence at the end of the year.

This importance of school play in social competence should not be surprising, as establishing peer relations is an important developmental task for junior school children, and the way peers of this age

interact with each other is through play and games (Pellegrini & Smith, 1998). Expertise with the sorts of games played on the playground results in high peer status, as children of this age choose to affiliate with others with whom they share play activities (Hartup, 1983). Children who are leaders in these activities are especially sought out by others, as they provide opportunities for sustained activity with a group of peers.

Playground games are particularly important at the start of the school year, when peers are not familiar with each other. Shared knowledge of a game can be used by relatively unfamiliar children as an initial basis for interaction. After repeated interactions in games, children become familiar with each other and then interact in other domains. Similar arguments for the role of other routinised scripts have been made in children's language learning (Snow, 1989).

We found, however, that children's roles in games changed across the school year. In Guildford, children came to school with knowledge of games that they had learnt from an adult or an older sibling. But in the course of interacting with their peers, they changed and adapted the behaviour to their specific interactional contexts and relationships. In the early stages of school, games appeared to support new social contacts – entry to and suggestion of games could be seen as opening gambits in emerging social relationships. After the initiation phase, children used games to consolidate existing social groups and friendships, rather than to seek new friends.

There are, however, probably individual differences in children's willingness and ability to initiate and sustain playground

games. Results from the junior playground study suggest an important role for a few pupils in suggesting, maintaining and terminating games. These 'key players' appeared to have a crucial role in the development of friendships and games. Case studies indicated that key players are likely to be popular and to be seen by peers as group leaders, but differences within this group were also apparent – particularly between boys and girls. Boys seemed to have a key role because of physical prowess, girls because of social skills and imagination, possibly associated with academic progress.

These results were replicated with Minneapolis children. Children nominated by their peers as game leaders were also the most socially competent. Game leadership was also correlated with, and predictive of, peer popularity. Game leader status was also positively related to the size of the play group in which children were observed – the bigger the group the higher the game leader's status. Size of play groups was in turn correlated with social competence. It is probably the case that game leaders are attractive to their peers, as indicated by their receipt of peer nominations and by their being observed in large play groups. Their leadership skills probably attract other children, and leaders gain additional skills to boost their social competence by practising and learning their social skills.

Positive peer relations, as indicated by playground behaviour, also predict adjustment to school more generally. Successful peer relations in school and academic success are linked (e.g. Coie & Dodge, 1998). Using preliminary data from our Minneapolis sample we also found

a positive association between children nominated by their peers as being good at games and sport and school adjustment (attendance level and happiness at school as rated by teachers and researchers). Specifically, after controlling for beginning of school year adjustment, game leader status predicted adjustment to school at the end of the first year. It may be the case that the efficacy that children experience at games in the playground during their first year of schooling transfers to more general feelings of competence in school. This sense of efficacy in a school context, albeit an informal one, may have resulted in children having a more positive attitude to school. Future research should examine the extent to which these social emotional processes relate to attitudes to school in later school years, when the academic regimen becomes markedly less social and more solitary.

These results are especially interesting given the ethnic diversity of the children in the Minneapolis sample. In the two primary schools studied in Minneapolis, the majority of children were of African American, Latino, or Asian American (Vietnamese and Hmong mostly) backgrounds, not of European American backgrounds. A major developmental task for children of this age, of course, is adjustment to school. This task is more difficult for culturally diverse groups, as school culture is, generally, different from their home culture (Heath, 1983). For example, children in schools are expected to have experience with books. This is more common in European-American than African-American children. Our results suggest that when children are valued by their peers for facility in one dimension of school (playground games), it has a positive influence on their adjustment to this new institution.

At a more global level, playground games are also important in the development of heterosexual relationships for older youngsters. Differences between boys and girls in play and break time activities and social networks are well documented (e.g. Maccoby, 1998; Pellegrini, 2001). For example, primary school boys generally play with other boys because they enjoy physically vigorous activities; girls segregate themselves from boys' play groups because they do not enjoy rough play (Pellegrini & Smith, 1998).

Boys and girls do, however, begin to interact with each other on the playground during early adolescence. For example,

Pellegrini (2001) found that as boys progressed across an American middle school (for youngsters aged 11–13 years), they engaged less frequently in physically vigorous play and more frequently in sedentary social interaction during break times. Mixed-sex interaction was in turn associated with sedentary activity. Adolescent boys seemed to adjust their play styles so as to include girls, and they used these opportunities to explore heterosexual relationships. For example, boys and girls alike used forms of ‘poke and push courtships’ (Maccoby, 1998) to interact with opposite-sex peers. They would push, play hit and tease opposite-sex peers as a relatively safe way in which to broach cross-sex interaction. These forms of early courtships are ‘safe’ because they are ambiguous: if there is a positive response to the overture, fine; interaction with an opposite-sex peer is initiated. If the overture is rebuffed, the initiator saves face with their peers because it was playful.

An extended classroom... and laboratory

So break time is crucial for academic achievement, peer relations, and more general school adjustment. The importance of this conclusion should not be underestimated – we should consider the fact that school breaks provide opportunities for children to learn and practise social skills with their peers in the context of decreasing opportunities for peer interactions in children’s lives. Important venues for peer interaction are disappearing – Hillman (1993) found that London students are now far less likely to walk to school than were their counterparts 20 years ago. Further, after school, many American children return to empty homes, waiting for their parents to return from work (Steinberg, 1988).

The importance of peer relations and social skills in school is relevant to American and British political debates. In both countries there is concern with antisocial youth behaviour, particularly in schools. By way of solutions, many American politicians are calling for special programmes to teach social skills. But we suggest that most children learn social skills by interacting with their peers in meaningful social situations – interaction with peers during break time is one of those meaningful times. Break time provides an ‘extended classroom’ in which children can learn important social skills, and these skills should be considered ‘educational’. Benefits can even be taken

back into the classroom – spaced break times directly improve children’s attention to class work. Further, the social skills learnt on the playground relate to more general school adjustment.

While research in this area has been generally limited to educational and developmental psychologists, the study of children and adolescents in the school playground provides interesting, and under-utilised, opportunities for psychologists of many varieties. The playground at break time is a place where students of a variety of ages interact with each other on their own terms with minimal adult interference. Further, it is a venue in which children, generally, must participate. From this view it is a natural laboratory – and youngsters cannot generally opt out of it.

This is an ideal place for the social psychologist, for example, to study social behaviour and relationships of individuals

and groups. Similarly, clinical psychologists could use the playground as a very interesting and useful venue for the study of dealing with problems by externalising (e.g. aggression) and internalising (e.g. loneliness and depression). Cognitive psychologists could study the effects of breaks on subsequent cognitive performance. Hopefully this article will stimulate multidisciplinary psychological research on break time, and persuade policy makers not to cut any further into this valuable childhood resource.

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References

- Bateson, P.P.G. (1976). Discontinuity in development and changes in the organization of the play in cats. In K. Immelmann, G. Barlow, L. Petronovich & M. Main (Eds.), *Behavioural development* (pp.281–295). London: Cambridge University Press.
- Bjorklund, D.F. & Pellegrini, A.D. (2000). Child development and evolutionary psychology. *Child Development*, 71, 1687–1708.
- Blatchford, P. (1998). *Social life in school*. London: Falmer.
- Coie, J.D. & Dodge, K.A. (1998). Aggression and antisocial behaviour. In N. Eisenberg (Ed.), *Handbook of child psychology* (Vol. 3, pp.779–862). New York: Wiley.
- Ebbinghaus, H. (1964). *Memory*. New York: Dover. (Original work published 1885)
- Hartup, W. (1983). Peer relations. In E.M. Hetherington (Ed.) *Handbook of child psychology* (Vol. 4, pp.103–196). New York: Wiley.
- Heath, S.B. (1964). *Ways with words*. New York: Cambridge University Press.
- Hillman, M. (1993). One false move. In M. Hillman (Ed.) *Children, transport and the quality of life*. London: Policy Studies Institute.
- Maccoby, E.E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA: Harvard University Press.
- Pellegrini, A.D. (1988). Elementary school children’s rough-and-rumble play and social competence. *Developmental Psychology*, 24, 802–806.
- Pellegrini, A.D. (2001). A longitudinal study of heterosexual relationships, aggression, and sexual harassment during the transition from primary school through middle school. *Journal of Applied Developmental Psychology*, 22, 119–133.
- Pellegrini, A.D. & Blatchford, P. (2000). *The child at school: Interactions with peers and teachers*. London: Arnold.
- Pellegrini, A.D. & Davis, P. (1993). Relations between children’s playground and recess behaviour. *British Journal of Educational Psychology*, 63, 88–95.
- Pellegrini, A.D., Huberty, P.D. & Jones, I. (1995). The effects of recess timing on children’s playground and classroom behaviours. *American Educational Research Journal*, 32, 845–864.
- Pellegrini, A.D. & Smith, P.K. (1998). Physical activity play: The nature and function of a neglected aspect of play. *Child Development*, 68, 577–598.
- Russell, B. (1972). *In praise of idleness*. New York: Simon & Schuster. (Original work published 1932)
- Sidelsky, L. (2000, 25 November). Ideas and the world. *The Economist*, 83–85.
- Snow, C.E. (1989). Understanding social interaction and language acquisition: Sentences are not enough. In M. Bornstein & J.S. Bruner (Eds.) *Interaction in human development* (pp.83–103). Hillsdale, NJ: Lawrence Erlbaum.
- Steinberg, L. (1988). Latchkey children and susceptibility to peer pressure. *Developmental Psychology*, 22, 433–439.