PRIMARY SCHOOL CHESS SINCE 1975: AN OVERVIEW

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The age at which children start to play chess has gradually declined since the introduction of junior chess tournaments, on a small scale in the 1930s and on a much larger scale from the 1950s onwards. In the 1950s the most popular age group in junior tournaments was the Under 18s, in the 1960s the Under 16s, in the 1970s the Under 14s, in the 1980s the Under 12s, and in the 1990s the Under 10s. What has the effect of this been on chess in this country? As the Director of Richmond Junior Chess Club I believe I am in a good position to judge. I have been teaching and organising chess for children in Richmond for 25 years, and in the last five years I have been working in school chess clubs through the Richmond Chess Initiative and Hampton Chess Trust. I am a member of Richmond Chess Club and have also competed regularly in the Thames Valley and London Leagues for over 30 years, so I am also able to see the changes that have come about in club chess during that period.

What has happened at Club level has been quite remarkable. In the 1960s many of the top club sides consisted largely of teenagers. In the mid 60s an Islington team all but one of whom were under 30, with many in their teens, won the London League, before the advent of the 4NCL the strongest in the country. At about the same time a Hayes team made up almost entirely of teenagers won the Thames Valley League. But since the focus of Junior Chess switched from secondary schools to primary schools in the mid 70s there have been very few teenagers competing in the London League, and there are very few outside Richmond Juniors in the Thames Valley League. Twenty years ago I was one of the older members of the Richmond first team squad. Now I am one of the younger members of the second team squad! Looking round, there are very few players below, say, 200 grade, and under, say, 35 playing club chess. Where have they all gone?

But compare England's fortunes at International level. In the sixties we were a third rate power: now we are one of the strongest countries, with several world-class Grandmasters: Michael Adams, Nigel Short and Matthew Sadler, all of whom started very young and worked their way through to the top. The next generation, Luke McShane, Murugan Thiruchelvam and David Howell, who have started even younger, may well turn out to be even better. It is ironic, is it not, that while our standing at International level has been growing ever higher, chess at grass roots level seems to be in a sorry state of decline. Public interest in chess in this country, judging from the response I get from publicity in the local press, is lower than it has been certainly since the 1950s. Tournament entries and club membership are declining. Even previously large, strong and successful clubs like Hampstead and Islington are no longer able to field teams in the London League, while London University, who used in the seventies to run numerous teams, have not played in the London League for several season. It is difficult to attract and maintain sponsors and we are unable to run the top level tournaments that our leading players deserve, so it is hardly surprising that many of them are moving abroad.

Of course there are many reasons for this sorry state of affairs: changing work patterns, new leisure interests and so on, but I want to focus on one reason which has so far been ignored: what happens to children who learn chess at primary school age.

In Richmond we have been relatively successful in developing strong players and maintaining their interest. We compete regularly against county sides at all age groups from Under 9 through to

Under 18, and, when we don't win we always come pretty close. We'd like to think it's partly because we're wonderful, but it seems to me a stunning indictment of other areas if they cannot beat what is in effect a club side. Indeed, the overall standard of chess outside the South East is, with the exception of pockets of excellence in Manchester and Birmingham, abysmal. Yes, I know there are a number of outstanding individuals around, but the strength in depth which enables us to excel is non-existent in most areas. Children who compete in regional Under 11 teams can be divided roughly into three categories: the players on the tournament circuit who are treating chess as an 'adult' activity, players at Junior Chess Clubs or strong school clubs who are on the verge of doing so, and children from most school chess clubs, who treat chess as a 'childish' activity. We usually have about 4 or 5 players in our 20 board team in the first category while the rest are in the second category. Unless an area has a network of Junior Chess Clubs most of their players will fall into the third category, and these players are doomed to give up chess at, or before, the age of 11. Let's look at what happens within Primary Schools. But first, can we try to define a successful chess club? Different schools run clubs for different reasons. Some see success in competition as an important aim, while other schools put stronger emphasis on using chess to enhance children's development, both academically and socially. But from the point of view of the adult chess community, we could perhaps describe a successful chess club as one which produces players both sufficiently strong and sufficiently interested to continue playing when they leave school.
There are two primary schools in the Borough of Richmond whose policy is to teach every child to play chess. In each case there is a long-established headteacher, a dedicated and gifted communicator, who, though not a particularly strong player, is able to teach beginners successfully. How do they measure up?

School A has a highly competitive Headteacher. The school enjoys taking part in competitions and runs many internal tournaments. Up to the introduction of the National Curriculum they pursued chess intensively and maintained a very high standard but in recent years they have been obliged to cut down their activities. Even so, they are still far stronger than most schools. Have they been successful in producing players who have continued playing? At least 8 children from this school continued playing and met with significant success after leaving. One of them is now an International Master. But all these players had two things in common: they came from chess-playing families and they were also members of Richmond Junior Club.

School B, on the other hand, sees chess basically as a non-competitive activity. They compete in the local schools league, but, unlike School A, only enter a small number of teams of 4 in the Richmond Schools Tournament. They do not take part in the London Schools League or Mike Basman's UK Chess Challenge. They see competition as a form of elitism which may lead to disillusion or even feelings of humiliation among children who are unsuccessful. Has this approach to chess provided children with the stimulation necessary to continue with chess? Sadly, the answer has to be no. Typically, the stronger children who join Richmond Junior Club continue in a desultory fashion for a year or two before gradually dropping out. To the best of my knowledge only one player from this school has achieved any significant success after leaving the school. He is now a Grandmaster.

Yet on their own terms their chess club is highly successful. The benefits of learning chess in primary school have been well documented and no doubt the children at this school, which has an excellent local reputation, gain much from learning to play chess.

We have seen this pattern repeated over and over again during the past 20 years. Children whose main focus of chess is their primary school club are, on the whole, less likely to continue playing than those whose main focus is either their family or their junior chess club. Several years ago I heard a radio interview with a man who was promoting - as I recall - folk dancing (though it could have been anything else). He was asked if he worked in schools. “No”, he replied. “What you do in school is the first thing you give up when you leave.”

Over the past five years I have spent a lot of time in school chess clubs, at first visiting as part of my job with the Richmond Chess Initiative, and, more recently running clubs, originally through the Hampton Chess Trust and now directly through the RCI. By and large, the Clubs have failed to meet my criterion for success, even those in which I have been involved in the organisation myself. In some clubs there is a teacher present, other clubs are run by parents, and in others the external teacher (usually myself, sometimes with a colleague) does most of the administration. Before I go any further I should add that most children benefit in some way from most chess clubs, even if they make little progress at chess.

I would like to focus on three issues: the age at which children should start to play chess at school, what happens at present in Primary School chess clubs, with particular emphasis on the standard of play, and what happens to children when they leave Primary School.

The Younger the Better?

I have already commented on the declining age at which children start to play chess. My own experience is typical of many of my age. I learned the moves from my father at the age of 10. I had little chess background at home: my father knew the moves but nothing else and my mother did not play at all. I had no other relations or close friends who played. As I showed an interest in the game my parents bought me a book. Over the next few years my interest increased, just by playing schoolfriends on the train to and from school or in the playground - not at the school chess club. I gradually went through every chess book in the local libraries, and by the age of about 14 I could beat everyone in my form at school. At that point my parents made enquiries about local chess clubs. I joined Richmond & Twickenham Club, where, more than 30 years later, I still play. Similar stories could be told many times over. I have three very good friends, all in their early fifties, all of whom left school at 15 with no qualifications, and all of whom are stronger players than I am, in two cases very significantly so.

Nowadays, most schools encourage children to start playing chess in Y3 - 7 years old. Some Infant Schools now run chess clubs for children aged 5 or 6. Most of the really strong players who have come through, at least in England, over the past few years have started young. We have been fortunate to have two of these players in Richmond Junior Club: Luke McShane, who joined us at the age of 5, and Murugan Thiruchelvam, who started at the age of 4. Naturally, I know both of these players - and their fathers - very well. I also had first hand experience of Julian Hodgson, a

member of Richmond Chess Club as a prodigy in the seventies. The fathers of both Nigel Short and Michael Adams have written books about their sons' early chess career, as, in a different way, has Fred Waitzkin, father of former US prodigy Josh Waitzkin, now an International Master. (Waitzkin's book, *Searching for Bobby Fischer*, has been turned into a film, called, in the UK, *Innocent Moves*.)

All these players have two things in common: an exceptional maturity for their age - they are/were able to switch off from being a child and become an adult when they sat down to play chess - and extremely supportive parents. In most cases (Murugan is an exception here) the parents became interested in chess largely as a result of their son's interest and took up competitive chess themselves. The same observation can be made to a lesser extent of other children who have reached, say, adult club standard by the age of nine.

But just because it was right for Murugan or Luke to start at 4 or 5, it doesn't necessarily mean that Johnny down the road should also start at 4 or 5. Let's not forget that, although chess is a game in which young children can excel, it is, or was, first and foremost a difficult game for intelligent adults, a game which even the best players in the world have not yet fully mastered.

Recent studies have proposed (but no doubt many teachers will disagree with the findings) that perhaps children learn to read and write in school too soon. Some children, especially boys, find it too difficult, switch off, and as a result become disillusioned, not just with school but with the whole education system. A recent Panorama documentary compared the English experience, where children start learning to read and write as young as four, unfavourably with the situation in Norway, where children remain in Kindergarten until the age of 7, only then starting on academic work. (On a personal note, I learned to read and write before I went to school because I wanted to do so. My brother did not want to learn at home, but it was he who went on to gain a degree in English at Cambridge.) This very much reflects my own experience with children in school chess clubs. Although some children who start in Y3 do well, others find it too difficult, lose interest and either drop out of the Club or become disruptive. My recent experience with a chess club in an Infant School (as it happens, the feeder school for School B mentioned above) suggests that most children of 6 are too young to be playing chess within a school club. And if children should not learn to read and write within a school environment until 7 or 8, they must surely be too young to play chess.

Several years ago, the *Illustrated London News* ran a feature on junior chess, with particular emphasis on the policy of starting children young to give them the best chance of reaching a very high level. They quoted, with apparent disapproval, a German organiser who preferred to introduce chess in schools at the age of 11 'because at that age they only need self-motivation, earlier the motivation has to come from the parents as well as the children'. Evidence suggests, that, unlike the claims for reading and writing above, the earlier you start playing the better you will eventually become. However, it is also true that the earlier you start the more likely you are to give up.

Over the past few years I have been coaching several very young players privately, and have also been able to talk to parents of other young players. This has given me an insight into why even

talented children of this age might be tempted to give up chess. One boy, for instance, has been reluctant to come to Richmond Junior Club because the previous time he came he lost all his games (he had forgotten that the previous week he had won all his games). A highly competitive child, he found it difficult to cope with defeat. Another boy is reluctant to come because last time an opponent (he believes) cheated against him. A quiet and shy child, he is unable to stand up for himself and would rather not come at all. Other children are put off by having to write their moves down or are unable to accept correction or criticism from teachers who are going through their games. Children aged 10 or 11 will be able to overcome these problems, children of 7 or 8 are often unable to do so.

Experiences such as these have made me increasingly sympathetic to the views of School B, mentioned above, which treats chess non-competitively. Nevertheless, the fact remains that children at this school rapidly get bored with chess. Most children, especially boys, are by nature competitive, and, anyway, isn't one of the main points of chess the opportunity it gives to compete against other people? (In my own case, as I was unable to compete successfully at physical activities, I relished - and still do - the chance to compete at a mental activity.)
I would conclude that there is no one ideal age to start a child playing chess. It depends partly on the maturity and intelligence of the child, partly on the child's previous games-playing experience, and partly on the amount of parental support available. In some exceptional cases children can start as young as five, but children who are intelligent enough to pick up chess at that age are potentially very strong indeed. Seven is probably a good average for a bright child, as long as he or she has some parental support, but children who are not able to play chess at home would be better advised to wait until they are nine, or perhaps even older if they wish to develop a long-term interest in the game. I strongly suspect that if I had learned the moves at 7 rather than 10 I would not have made very much progress. I'm sure the same is true of many of my contemporaries who started at that age or later.

What has happened over the past 20 years is that we have produced a system that is reasonably efficient at producing potentially world-class players by starting them young and providing them with a network of tournaments through which they can make rapid progress. It is also true that many children gain a lot of pleasure and benefit from playing chess at school, but without making very much progress. Two groups of people, perhaps with very different aims in mind, have supported the policy of 'catch them young', firstly the chess organisers and journalists who measure the country's success at chess purely by what happens at International level, and secondly, schoolteachers, who see the benefits of chess within their school, but usually have little idea of what happens to children when they leave their school. From the point of view of both these groups the policy has been successful, but it has happened at the expense of a whole generation of 'average' players. Has it been worth it?

The Ratings Game

The ELO system is a way of measuring the ability of chessplayers. A beginner would have a rating of 0: someone who plays perfect chess a rating of 3000. This system is used by almost every chess organisation in the world, including, in a modified form, Richmond Junior Chess Club, but with one notable exception: the British Chess Federation.

(In fact, the BCF Grading System is based on a major fallacy. Using the standard conversion factor, a rating of ELO 0 would be the equivalent of BCF -75, while a grade of BCF 0 (the lowest possible) would be the equivalent of ELO 600. In fact, about 10% of rated US players have a rating below 600. This, together with our own internal experiences, demonstrates that the BCF system is fatally flawed. The result of this is a) a concertina effect at the bottom of the BCF Grades, and b) many players who have competed at a very low level - U8 or U11 Girls events, have grades which are far too high. For this reason, this section will use ELO figures throughout.) Just how good are the players in an average Primary School chess club? Let's take School C as an example. This Primary School was recently placed at the top of the Government League Table for Primary Schools in Richmond, which probably puts it in the top 1% of schools in the country, so perhaps it is not so typical. The school had a large and thriving chess club, but in terms of results it was only moderately successful. The teacher who had been running the club for the last 5 years left, so in September 1997 we took over.

At that point, the strongest player there, a Y6 who had been a member of Richmond Junior Club for a couple of years, had a rating of about 600. The next best players, about 3-4, had ratings of about 400. A couple of these had also been members of Richmond Junior Club for a time. Most of the remaining players - about 70 - in the Club were below 200 strength. For comparison, a weak adult club player would have a rating of between 1200 to 1400. We would not usually advise players below 800 strength to compete even at the lowest level of adult competitions.

In fact, very few children who are doing no more than playing once a week at Primary School and perhaps a bit at home will reach much more than 400-500 strength by the age of 11. The methods in use at Richmond Junior Club enables us to take children further than this, perhaps up to about 800 strength. I suspect that any bright child who starts chess at the age of 7 is capable, given the right opportunities and parental support, to reach 1400 strength by the age of 11 - half way towards being one of the best players in the world. But in reality only about 20-30 players in the country reach this level every year. To reach this level you have to play in tournaments on a regular basis, and also, either to read books written for intelligent adults, or to have private tuition by a strong player who is also a good teacher, a course which most parents are unwilling or unable to take.

Primary Problems

My experience in working in Primary School chess clubs over the last five years have given me a revealing insight into what is really happening to children who are learning to play chess. I should point out here that the schools I have worked in so far have been entirely in the State sector. I have long been sceptical of the value of the majority of primary school chess clubs. Was my scepticism misplaced? It is certainly true that running a school chess club is a lot harder than running Richmond Junior Chess Club. Let's outline some of the problems.

- Many children who start chess in Y3 (age 7) fail to grasp the basics - by which I mean not just how the pieces move but the significance of check, checkmate and, with any luck, stalemate. Some children drop out during the year, finding the club either too hard or too boring. Of those who are left, there are always some who still fail to understand that two

kings cannot stand next to each other. My evidence suggests that those children who are playing at home with someone who knows how to play will succeed: those who are not will fail. 'Check' and 'Checkmate' are abstract concepts which children of that age often find difficult to grasp. Young children, by and large, need constant reinforcement to understand something of this nature. If you tell a 7-year-old something one week, they will probably have forgotten it, or, which is perhaps worse, half remembered it, by the following week.

- It is very difficult for a teacher to supervise children who cannot play and children who can play at the same time. Ideally a school will be able to run two separate groups in separate rooms or at separate times.

- The adult/child ratio in most clubs is too low. Ideally the ratio should be no worse than 1:8 for children who cannot yet play fluently, 1:16 for children who can play fluently and 1:24 for children who are writing their moves down (primary school chess clubs are very unlikely to have more than a few children at this level so the figure is rather academic).

- Most Primary School chess teachers do not have enough knowledge of chess to teach very much more than how the pieces move. Most parents also have little knowledge of chess, and frequently impart misleading advice to their children.

- Chess players who teach chess in schools usually lack some of the necessary teaching skills: classroom control, the importance of preparation.

- Children see their Chess Club as 'playtime' - the chess equivalent of kicking a football around in the playground as opposed to a proper match - somewhere where they can chat with their friends, throw things around the room and generally have a good time while occasionally playing a few moves of chess in between. Teachers, and perhaps parents too, have other ideas. (Personally, I accept that any sort of chess club, school, junior or adult, has an important social function. I have no real problem if the children are fairly noisy as long as they are working seriously at chess at home, which at Richmond Junior Club many are, but in a school club very few are.)

- Most chess clubs take place after school. Children who have been working hard all day at school are not always receptive to instruction at that time of day. Children often resent being told what moves to play, or being given quizzes to do – “his is like being in school” is a frequent reaction.

- Many parents use the after school chess club as a crèche - it's convenient for them to pick up their children an hour later from school so they sign them up for the chess club. Other parents vaguely feel that it would be good for Johnny to learn how to play chess, but, as they can't play themselves they are unable to help them at home. It's a frequent occurrence at school clubs that, when I tell a child off for misbehaving they reply “I don’t want to be here. My mum makes me come. I don't like chess because you have to be quiet. I prefer making a noise”.

- On the other hand, many parents find the idea of the ‘chess prodigy’ unsettling. It was reported back to me that a parent (whose son I am now teaching at school), on seeing some 8-year-old children at the top end of a tournament where his son was competing concentrating hard on their games, playing slowly and writing their moves down, commented 'That's awful', or words to that effect. But, in my view - and I'm sure most other serious players would agree with me - that's what chess is all about. If you don't want your child to approach chess in that way, or think he or she is too young to do so, I believe they should not be playing competitive chess at all. (Of course, this is all relative. The father of one of our strongest young players - who may have been in the group mentioned above - felt very much the same way when he saw David Howell being intensively coached between rounds of a junior tournament. But, on seeing David playing happily with other children between rounds of another event he happily retracted his previous comment.)

North Bridge House School, a prep school in North London, is currently far and away the most successful school in the country at teaching chess to young children *en masse*. I asked Russell Fell, the teacher in charge of chess, for his advice on how to run school chess clubs. “If you only meet once a week you're wasting your time”, he said. I would rephrase that slightly: "Children of Primary School age who only play chess once a week are wasting their time”. In Richmond, children have a chance to play twice a week by joining Richmond Junior Club.

It has long seemed to me, both from observation and from talking to children, that the Primary School chess system was failing. My experiences over the past few years have shown me why. The basic fact is that most seven-year-olds who join their Primary School chess club, usually having picked up same vague idea of the moves from their parents, and play there for an hour a week make very little progress. Even those who grasp the fundamental idea that you should try to take your opponent's pieces and then mate him find it difficult to get beyond that level. Typically, a few of the brighter players will eventually remember Scholar's Mate and start winning games with it. The same players will fall for it week after week. No matter how many times you tell them how to stop it they will have forgotten by the next week because there is no way it can be reinforced in the meantime. And because winning in four moves is, for young children, much more satisfying than winning in forty moves, they will continue to try it. At School C, I told a boy (one of the stronger players) to start his game with 1. e4 e5 2. Nf3 Nc6. Resenting this, because he wanted to play for Scholar's Mate, he played 3. Ng1. His opponent played Qh4 and rapidly mated him on f2 herself. Since then he has argued with me every week that e3 is a much better first move than e4 because it prevents Scholar's Mate. Even beyond this, children frequently get stuck. To understand why we need to look more closely at the nature of chess.

An Adult Game for Children?

What skills are required to play chess successfully, and at what age do children typically acquire these skills?

- The ability to look at a chess board. This sounds obvious, but perhaps it isn't. Our experience suggests that it takes a beginner of any age a year or two to develop a good 'sight of the board'. But is there an age factor as well? In a study, children were shown pictures of

two houses with six windows, each window containing a different image. Children were asked to determine whether or not the two houses were identical. Children aged 5 or 6 were unable to perform the task, but those aged 8 or 9 were able to do so. But the eye-brain co-ordination required of a chess player is more complex than this, involving, even at an elementary level, the ability to see relationships between pieces in different sectors of the board. For instance, to notice that your opponent is threatening Scholar's Mate you have to see that the queen on h5 and the bishop on c4 are both attacking your pawn on f7. Perhaps an age of 9 or 10 is reasonable to expect the majority of children to do this.

- The ability to think logically. According to Piaget, a child starts to develop complex logic and judgement between the ages of 11 and 15. Of course we know, from the performances of players like Luke McShane and Murugan Thiruchelvam that some children are capable of using complex logic and judgement at a much earlier age, but these are the exceptions. It is possible that chess can be used to teach logic - maths courses in use in parts of Canada have done just this - but within a Primary School chess club there is very little evidence of logical thinking. If they haven't been taught it they will find this important aspect of the game too hard.

- The ability to calculate. By this I mean chess calculation, not mathematical calculation. Most children calculate chess positions - if at all - by saying ‘I go there, then I go there, then I go there’ instead of ‘I go there, then he goes there, then I go there’. In other words, they are considering only their own plan, not their opponent's plan or how he might frustrate their plan. This is probably a chess-specific skill, and again one that most Primary School chess players find beyond them. However, my experience is that it can be taught, but again a Primary School chess club is not the right environment to do this.

- The ability to comprehend abstract concepts. Many young children find the concepts of ‘check’, ‘checkmate’ and ‘stalemate’ very difficult to grasp. In books for adult beginners these concepts are frequently dismissed in one sentence, but many young beginners play for a year or more without having gained any real understanding of the meaning of these words. And, if you don't understand ‘checkmate’ and ‘stalemate’ you will have no idea whether you've won, drawn or lost your game.

- The ability to ‘read to learn’. Up to a certain point young chess players can develop naturally, but they eventually reach a stage where they need to acquire technical knowledge - for instance opening theory - to make significant further progress. Most children are not able to read and learn from books in this way until they reach secondary school age.

- The ability to concentrate. Again, this is a skill that develops as children grow older, and one that can, to a certain extent, be developed by playing chess at a fairly serious level. In a tournament game, in, for example, an EPSCA competition, children may have to concentrate for up to an hour and a half on one game. But in an after-school chess club, surrounded by 30 or 40 friends, after concentrating hard all day at school, can one

realistically expect any sort of concentration at all? And lack of concentration frequently leads to disputes about whose move it is, or which square a piece is on.

- So far we have been considering mental skills, but other skills are also necessary. I have seen some, admittedly very young children who lack the physical skills to play chess. They frequently, through clumsiness, knock the pieces on the board, and, of course, cannot remember what square they were on and replace them on different squares. Young children who play with clocks often find it difficult to make their move and press the clock in one movement. This can lead to forgetting to press the clock and losing on time.

- Games playing also involves social skills, which might mean anything from being able to take it in turns to move to behaving in a sporting manner. A few years ago we banned one of our players from our teams because whenever he lost a game he claimed that one of the pieces was really on a different square. He eventually, by the age of about 9, overcame this problem and is still playing for us. Chess players are notoriously deficient in social skills, but the more serious problems, in most cases, have been resolved by the age of about 9.

- Finally, chess players, especially those playing in tournaments, require emotional skills. We have lost several highly promising younger players over the years because they have been unable to cope with losing all their games in a tournament or at the Club. By the age of about 8 or 9 children can accept defeat, at least in the long term, But younger children sometimes cannot take the blow to their self-esteem and develop some sort of irrational fear which prevents them returning to the Club or playing in another tournament. We've also had problems with young children who are not able to stand up for themselves in the inevitable disputes that arise in games between younger players and drop out of the Club, or of chess completely for this reason.

So we see that chess requires a wide range of skills, mostly mental, but physical, social and emotional skills are also involved. Most of these skills are acquired, typically, between the ages of 8 and 11. Yes, some children have all the requisite skills as young as five, and that, together with parental support and encouragement, produces the 'prodigies' (a word I dislike). But is it really right to encourage children of six or seven to play chess *en masse* in school? Everything I have seen over the past few years leads me to think not. It is vital that facilities should be available for parents who wish to fast-track their children, and who are certain they have all the required skills (especially emotional skills), but these facilities should, I believe, be available through a network of Junior Chess Clubs, chess teachers who specialise in working with young children, and tournaments, NOT through school chess clubs.

Finally, if you're a chess player, why do you play chess? I'll tell you some of the reasons why I play chess. Because of the history of the game. Because of its heritage. The feeling that, in some small way, you're contributing to something which has been going on for hundreds of years, and will continue to do so into the foreseeable future. The feeling that by playing a good game or spectacular combination, or, in my case, by teaching a future star, that in some way you are achieving immortality. The literature of the game. The ability to play through and study games by

the great players of the past and present. The scope for research. The aesthetic beauty of the game. The worlds of problems and endgame studies. How much of this can children of primary school age really appreciate? Very little, I would say.

In the past, chess was an activity for adults which you took up in your teens when you had acquired or developed the appropriate skills. Now it is used by schools, sometimes consciously, sometimes not so, as a way of developing those skills. This is certainly underselling chess, and, arguably, exploiting children as well.

Secondary Priorities

So, we have an 11-year-old who has been playing chess for several years at primary school. He is keen, has not, as so many of his friends have, been frustrated by his slow progress, but is not yet strong enough to compete in adult tournaments. What happens when he gets to secondary school? Will there be a chess club for him to join. Perhaps what happens in Richmond is typical. One or two schools have clubs, but they are little more than a teacher sitting in the classroom during the lunch hour while children play friendly games. Other schools have no club at all. One comprehensive school has a teacher in charge of chess, but he does not run a club. In another school, the children were asking for a club, the responsibility was passed round between three teachers: the third one left the school suddenly so nothing happened. Several years ago, one of our members went along to the chess club at his Comprehensive School. There was no one there except the teacher, but he couldn't play!

What happens in the Independent sector? Let's look at School Z, an academically successful Independent Day School for boys aged 11-18. They have a thriving chess club with two teams in the local schools league. Last year they finished third in the Times Schools Championship. The teacher who has been running the club for many years is himself a strong club player. But, if you look more closely you'll see that almost all their successful players over the past few years were already very strong for their age when they started at the school; in many cases they had come through Richmond Junior Club. While these players usually improve fast and go on to greater things, the weaker players in the second team seem to make little or no improvement. They don't seem to have the incentive to study the game and 'get good' as I and many of my friends and contemporaries did in the sixties.

And here we hit another problem, one of image. In the past few years I have had several reports of children being teased or bullied at secondary school because they play chess, something again that didn't happen in the sixties. Chess is no longer seen as an appropriate, 'cool' activity for teenagers. It has been relegated to the status of a childhood game like Ludo or Snakes and Ladders. Chess players are portrayed in the press and elsewhere as 'nerds', 'anoraks' and 'train-spotters'. Unless they are already strong by the age of 11 they do not WANT to improve.

The biggest indictment of what has happened in chess since the mid seventies came to me some years ago when I heard Michael Rosen, the well known broadcaster on literature and childhood, giving a talk on the radio. “When my son was young we did childish things together like playing chess. Now he's older we do grown-up things together like watching football matches.” Quite. And

if you want to know where all the adult chess players have gone, there's your answer. The same thing happened to draughts years ago, and now, at least in this country, it's happening to chess as well. It's becoming a game which you play for a few years between the ages of, say, 7 and 10, and then give up.

At Richmond Junior Club we get very few members, no more than one a year, joining in their teens, but those who do seem to get a lot out of the club. One, for example, although not an outstanding player, is currently editing the Cambridge University chess magazine. Another, now in his first year at University, has only been playing a couple of years (he learned the moves when he was much younger but only really took the game up in his teens) has rapidly reached about 1600 strength.

Summary

I am firmly convinced that the traditional primary school chess club, in which children are encouraged to spend an hour or so playing chess after school or in their lunch break, is not effective in producing players who are sufficiently strong or sufficiently interested in chess to continue when they leave school. This is not the fault of the schools, the teachers or the children, but of the system.

Yes, many children do enjoy their chess club, and they do, in most cases, get something out of it in terms of a few years of enjoyment, but I'm not convinced that they would get any less out of it if it were, say, a Ludo club instead. I find it hard to imagine that most of the children in the school chess clubs with which I am involved gain any long-term academic or social benefit from the club. And yet we have seen how schools like to encourage as many children as possible to join the chess club, and how parents sign their, sometimes reluctant, children up for the club under the vague idea that 'chess is good for you'. In my long experience, the parents who tell me how much their child has benefited from chess are not the parents of younger children but the parents of teenagers, who only started competitive chess at the age of 9 or later. Parents of younger children often tell me how much their children enjoy chess but not how much they've benefited from it.
Personally, I'm not to happy about encouraging children to play chess 'because it's good for you'. In my experience there are too many children in school chess clubs who don't want to be there. They probably have to spend a lot of time doing things they don't want to anyway. Chess should be encouraged because, in the words of Dr Tarrasch, 'Chess, like love, like music, has the power to make men happy'. If it provides other benefits as well, so much the better. As Tim Krabbé wrote in *Chess Curiosities*, “Strangely, in many prefaces to general books on chess, there is some remark about the desirable traits of character chess develops in the young individual. So it seems there is always an excuse needed, although never more than one pretence upwards. These pretences are false. Chess problems, or chess as a whole, do not need excuses to be savoured - who wants desirable traits of character anyway?”

Until a couple of years ago, when I was asked at what age a child should start learning to play chess, my reply was always 'as soon as possible'. I don't think there's any harm in children learning at home as soon as their parents feel they're ready. But with every week that passes I realise that the main problem with primary school chess clubs is that they encourage children to start playing

in a competitive environment too soon. And, no matter how hard you try to make your school club non-competitive, children will still, because it is in their nature to do so, compare and compete. We have seen that the mental skills required to play chess to a reasonable level are typically developed from the age of 8 or 9 upwards. Studies designed to determine the benefits of school chess have generally involved children starting at that age or above. The 1978 Belgian study followed children in the 5th and 6th grade (Y6 and Y7, ages 10 to 12). A more recent study in Texas involved students in the 4th and 5th grade (Y5 and Y6, ages 9 to 11). If we look at the most successful instruction manuals for beginners we see the same thing. Volume 1 of the *Comprehensive Chess Course*, by Pelts and Alburt, is written for children aged between 8 and 12. We have seen that the director of Schools Chess in Germany believes that the correct age to learn is 11.

Let's stop for a minute and play with some numbers in a rather politically incorrect way. I admit that the following has been designed to prove my point, but I think it still merits consideration. In his book *Genius in Chess*, GM Jonathan Levitt speculates that there is a strong correlation between chess talent and IQ. He then proposes what he modestly called the Levitt Equation: ELO ~ (10*IQ)+1000, where ~ means 'given many years of intense effort, will tend to equal approximately'. IQ is, at any rate hypothetically, a scale following the normal distribution with a mean of 100 and a standard deviation of 15. ELO is, again hypothetically, and as far as I understand it, a scale following the normal distribution with a mean of 1500 and a standard deviation of 200. Using Levitt's equation, a vegetable with an IQ of 0 would be able to reach a rating of 1000, which, as we have seen, is far above the level of achievement of almost all primary school chess players. So let's try something simpler: ELO ~ IQ*15, where ~ means 'given a reasonable amount of effort, will tend to equal approximately'. Of course this is absurdly simplistic, even for fans of IQ tests, but we might find it useful. It's also far more pessimistic than Levitt's equation, which will surprise nobody who knows me, but I've always found it wise to err on the side of caution.

My experience over the years suggests that a child who is able to pick up chess and play reasonably well (say to about 400 level) at the age of 7, will, if he continues playing without interruption, have the potential to reach 2200 strength. And a child who, like Luke and Murugan, can play reasonably well at the age of 5 is potentially 2600 strength - a strong Grandmaster, who will, if he chooses, be able to make a reasonable living from playing chess. So let's make this into an equation. I'm no mathematician, so no doubt someone who is will come up with something simpler and more elegant. A~(((ELO+400)/200)-20)*-1, or, to put it another way, ELO=((20-A)*200)-400, where ELO is one's potential rating given a reasonable amount of effort, A is the age at which one starts to play a reasonable game of chess, and ~ means 'will tend to equal approximately'. Substituting our previous equation ELO~IQ*15, we then get: A~((((IQ*15)+400)/200)-20)*-1, or, less usefully, IQ=(((20-A)*200)-400)/15. This would suggest that a child of average intelligence would be able to start playing a reasonable game at the age of 10½. Given that chess is more likely to appeal to children of above average intelligence, it might be reasonable (ignoring for the moment the important factors of parental and self-motivation) to start encouraging chess in schools a couple of years younger than this. And schools with selective intakes might possibly like to go younger still.

All the evidence, then, points to sometime between 8 and 11 being the best time for schools to start encouraging chess. At 8 or 9 they will probably need some sort of adult help while at 10 or 11 they may be able to teach themselves. This ties up with everything from my own personal experience of learning chess - I suspect that had I started at 7 rather than 10 I would have made no progress and probably been put off from learning the game later - to my experience within school chess clubs. Some schools have had success with younger children by using intensive methods - putting chess on the curriculum or allowing children to play several times a week - but the typical school chess club would, I think, be well advised only to allow children below Y4 to join under special circumstances.

The reason is not just that some children will find chess too hard below the age of 8. In my experience, many school chess clubs (not just the ones where I have taught) have problems with older children becoming disaffected with chess and, as a result, behaving badly. They see chess as a game for younger children which they will soon give up, and this will be reinforced by their lack of progress caused by insufficiently developed thinking and learning skills. But the effects are more subtle and more far-reaching than this. If chess is generally seen as a game for younger children it will be difficult for teenagers, who perhaps have not been exposed to chess at Primary School, to take up the game.

The second problem is one of attitude towards chess. For most people who learn the game it's just that - a game. But to make progress - and to benefit from the game - you need to study in some way, most usually by reading books. But reading to learn is, as we have seen, a skill that most children only develop at secondary school. In my experience, most children see a chess club simply as somewhere where they can go and play chess with their friends and generally have a good time. If you try to introduce lessons or quizzes children frequently show resentment. “When can we start playing?” and “Why do we have to do this? It's like being in school.” are common reactions. Furthermore, the school clubs in which I have been working frequently comprise between 30 and 50 children aged between 7 and 11 with widely differing levels of experience, talent and playing strength. It is very difficult to pitch a lesson or quiz to appeal to everyone at the same time.

Contrast this with the aforementioned *Comprehensive Chess Course*, which recommends, firstly, a maximum class size of 15, where I have two or three times that number. It also assumes that everyone starts at the same place, whereas, even with a group of Y3 beginners, some will have played quite a lot, others will vaguely know the moves, and a few will know absolutely nothing. It also assumes a lesson of 30-35 minutes to introduce the new material. In my experience, children in chess clubs are unable to concentrate on a lesson for more than 10-15 minutes. Finally, homework is set and marked every week. I have been repeatedly told by schools that giving homework is not acceptable. I have no doubt that, using a course such as this, children will develop into reasonable chess players, and will benefit both educationally and socially. But I really see very little benefit, apart from the short term enjoyment of the club, from most school chess clubs in their current form.

It's not clear what can be done about the situation, though, since it only reflects prevailing attitudes towards childhood. When I was growing up you developed mental and physical skills at Primary

School, and, at Secondary School, took up hobbies which reflected those skills which you were good at or enjoyed using. But now children of primary school age are subjected to a frenetic whirl of extra-curricular activities - sport, arts, crafts, music, chess. Some parents are in revolt against this: India Knight, writing in *The Times* (21/5/98) is typical: “Every day, outside my eldest son's school, mothers are dragging their exhausted five and six-year-olds to ballet, French, drama, pottery, riding, percussion and so on.... The Nineties obsession with forcing small children ... to perform intellectual feats is repellent and counter-productive.” I don't necessarily agree with the second sentence (although, as we have seen, even some parents with children in school chess clubs do), but she has a point. This was echoed in a letter from Una Markey, a piano teacher from Dublin, in a letter in *BBC Music Magazine* (June 1998) “Too much active participation can be exhausting. When I see the pale, tired face turning up for a piano lesson at 5pm, having done an hour's ballet or swimming practice between the end of the school day and travelling to a piano lesson, I query the perceived benefits.”

Meanwhile, when children get to secondary school they find the amount of homework and project work so great that it is very difficult to keep up their hobbies. Up to the mid seventies, most teenagers were able to play chess up to within a month or so of their O-Levels and A-Levels. This is now no longer the case. Many players ranked in the top 20 of their age in the country have to all but give up chess. You can only keep going if you are really very committed to the game. But despite the ever increasing homework load, standards at GCSE and A-Level are, according to some experts at any rate, declining. Surely one purpose of education is to produce well-balanced individuals with a wide range of interests. If children are being forced to give up their outside activities (it's not just chess that's suffering: teachers and administrators involved in music and sport report the same phenomenon) then this is not happening.

Anyway, this is where we are. I believe that the concept of the Primary School Chess Club, in which, typically, there is little instruction beyond, perhaps, how the pieces move, and which is seen by the children as a purely social club where they can have a good time with their friends, is flawed. In order to make primary school chess worthwhile, schools, teachers, parents and children all have to change the way they look at chess.