Considering age or maturity levels to support fair competition and foster social connections

Theme 6

The Premier League: Bio-banding

Young people grow and mature at different rates, which has been shown to impact on their performance in sport. For example, being taller and stronger may give some young people an advantage over their peers who have grown and matured at a slower rate. Young people can be grouped together based on attributes associated with growth and maturation instead of simply age.

Biological maturation is known to be a predictor of player fitness and performance; young people who are advanced in maturation are likely to be more successful players. However, young people who are early maturing are likely to play to their strengths (i.e. size, strength and power), and meaning that they are less likely to develop their tactical and technical skills.

In response to this, the Premier League developed a football tournament that grouped players for competition by their maturation, rather than age; a process known as bio-banding. Young people aged 11-14 years old and between 85-90% of predicted adult stature participated in the tournament (based on measures of height and weight).

What were the benefits?

All participants reported a positive experience of the tournament. For early maturing players, they felt that the bio-banding challenged them more and encouraged them to develop their technique, teamwork and tactics, rather than just relying on their physical strengths. This helped to prepare them for playing against older and/or equally mature players in the future.

“You learn a lot more playing like this than you would normally playing with your own age group.”

Early maturing player

For late maturing players, the bio-banding gave them an opportunity to apply their technical and tactical skills and helped to overcome a temporary disadvantage that they believed their later maturity afforded them. It also gave them an opportunity to have greater influence on the game and take on greater leadership or mentoring roles within the team, particularly with younger players.

“It gives us more freedom...we get a chance to prove ourselves that when we are up against people our size, we’re good. We’re really good...and make an impact on the game.”

Late maturing player

In general, players involved in the bio-banded tournament developed a better understanding of their strengths and weaknesses, enhanced their creative problem-solving skills, adopted new roles and responsibilities, and made new friends.
How could this be used in the School Games?

The LeAF Academy in Bournemouth specialises in education for aspiring athletes and performing artists.

There was one afternoon per week when students in years 9-11 were all available for sport at the same time. Instead of delivering separate activities for each year group, they had a go at mixing the students up. Initially, they grouped the students based purely on height; the tallest group undertook sports activities that developed their hand-eye coordination, the middle group focussed on speed and power and the shortest group of students focused on agility.

They then developed the process further and grouped the students based on their maturity levels. This was calculated using the height of the young person, their parents’ heights and their predicted heights to create three different groups: those that were at 85-90% of maturation, those at 80-95% of maturation, and those at 95%+ of maturation. Having a process to allocate the young people to different groups meant that the stigma of playing with a younger age group was removed.

In consultation with the young people, three sports were identified: football (a team sport), badminton (an individual sport), and dodgeball (something that the young people identified as being fun and something new). Every six weeks, the groups rotated between the three sports. The competitive angle was important for some students, so for these pupils, the competition was retained, but for others they focused on their own individual development, e.g. skills, time etc.

Not all students engaged with the process straight away, but Jon Fortescue, a teacher at the school described their approach…

“Start with the inner circle, which in turn affects others, and then gradually they all join in as they see the others taking part.”

Jon Fortescue, Teacher at the LeAF Academy

What are the benefits?

Jon also shared that the “transformation was huge”. The approach delivered a number of benefits for the young people involved:

- Young people from different year groups were more integrated which enabled them to get on better with others at the school and encouraged them to make new friends.
- The students developed their communication skills by talking to different groups of students.
- It helped young people adapt to transitions within school, for example moving into the next year group.
- More timid students came out of their shell and started to lead, particularly the older students who were engaging with younger students. They had an opportunity to take on leadership roles; something that they wouldn’t necessarily have done with students in their own age group. The young people also appreciated the mentoring from the older students.
- Students experienced greater enjoyment from taking part in the sports, for example students that felt they were always the ‘slow one’ were now playing in a group where they were all slower.
- The approach also enabled the students to just have a chance to play and enjoy sport, without having to concentrate significantly whilst playing; this meant that they were more prepared to sit and study afterwards.