

Lightyear Federation
Physical Health and Mental
Wealth Life Skills Curriculum
Project.
Baseline Report – Term 2

Report developed on behalf of Lightyear Federation by
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Physical Activity – focus for term 2

Baseline Approach

A baseline approach was taken to term 2 to understand the children's steps and intensity levels of the movement. According to Tudor-Locke et al. (2011) 60 minutes of moderate to vigorous physical activity (MVPA) in primary aged children appears to be achieved on average within a total volume of 13,000 to 15,000 steps / day in boys and 11,000 to 12,000 steps / day in girls.

The intensity levels that are reported by the MOKI tracker are those of moderate to vigorous physical activity (MVPA). According to the NHS (2021) what counts as moderate level intensity activities are "those that raise your heart rate and make you breathe faster and feel warmer." One way they recommend of being able to see this, is that children will be able to still talk as they do moderate activities, but not able to sing as well. They recommend the following activities as examples of moderate level intensity:

- Playground activities including jumping, running and catching.
- PE lessons
- Sports, like football / tennis
- Swimming
- Skipping
- Dancing
- Active travel
- Swimming
- Running / walking
- Climbing
- Playing

Wheels based activities - Skateboarding / rollerblading / cycling

They also recommend that children accumulate 60 minutes of MVPA throughout the day as being physically active will build confidence and social skills, develop coordination, improves concentration and learning, improves health and fitness, maintains healthy weight, improves sleep, makes you feel good.

According to the childhood obesity plan for action chapter 2, from the Government (2016) states that schools "have a fundamental role to play in helping equip children with the knowledge they need to make healthy choices for themselves". And that it is the Government's commitment that all children should "receive 30 minutes of physical activity per day while at school" (p.10). Therefore there is a need to know – can the children achieve 30 minutes of MVPA and 5000 steps a day within school time (8.30am – 2.30pm).

30 minutes per day of MVPA and 5000 steps per day were the target for school, as children on average are awake for 14 hours and 7 of which are spent within school time, therefore half the daily targets were deemed appropriate to target towards.

Happiness Data – this is our focus for term 4

Sport England reported that boys' activity levels were most impacted during the pandemic, but has largely improved post lockdown, with 50% of boys now doing the average 60 minutes a day compared to 45% of girls. But they air caution as they found an increase in the number of children and young people doing no activity up by 3.3% since pre-pandemic. And the universal recovery is not being showing in children in year 3 – 4, most likely due to them being the impacted the most through lack of physical development in their learning. They state that active children are more likely to be happy and less likely to feel lonely often or always compared to those who are less active. In their active lives 2022 report they highlighted that happiness scores have been gradually falling since 2017 for junior aged children. They also found that there was a positive association between levels of physical activity and levels of individual development, what they meant by this is those who strongly agree with the statement if I find something difficult I keep trying until I can do it, is higher for those who are active than those who are fairly or less active, this measure is still down for junior age phased children.

Greatstone Data

Steps Summary – Baseline.

The number of steps were collected from 8.30am until 2.30pm, Monday – Friday. Only data was used for children within the class who attended all days to prevent the data from being skewed.

Figure 1 shows the percentage number of steps against the target (in blue) and it shows the percentage number of steps against the targets that is over or under the target (in orange) of 25000 steps per week, 5000 steps per day. The data is grouped per the class per gender, to consider their baseline recorded during their MOKI week in term 2.

The data indicates that all classes were able to go beyond target as a class, except the year 5 Orca girls who were just 1% under target.

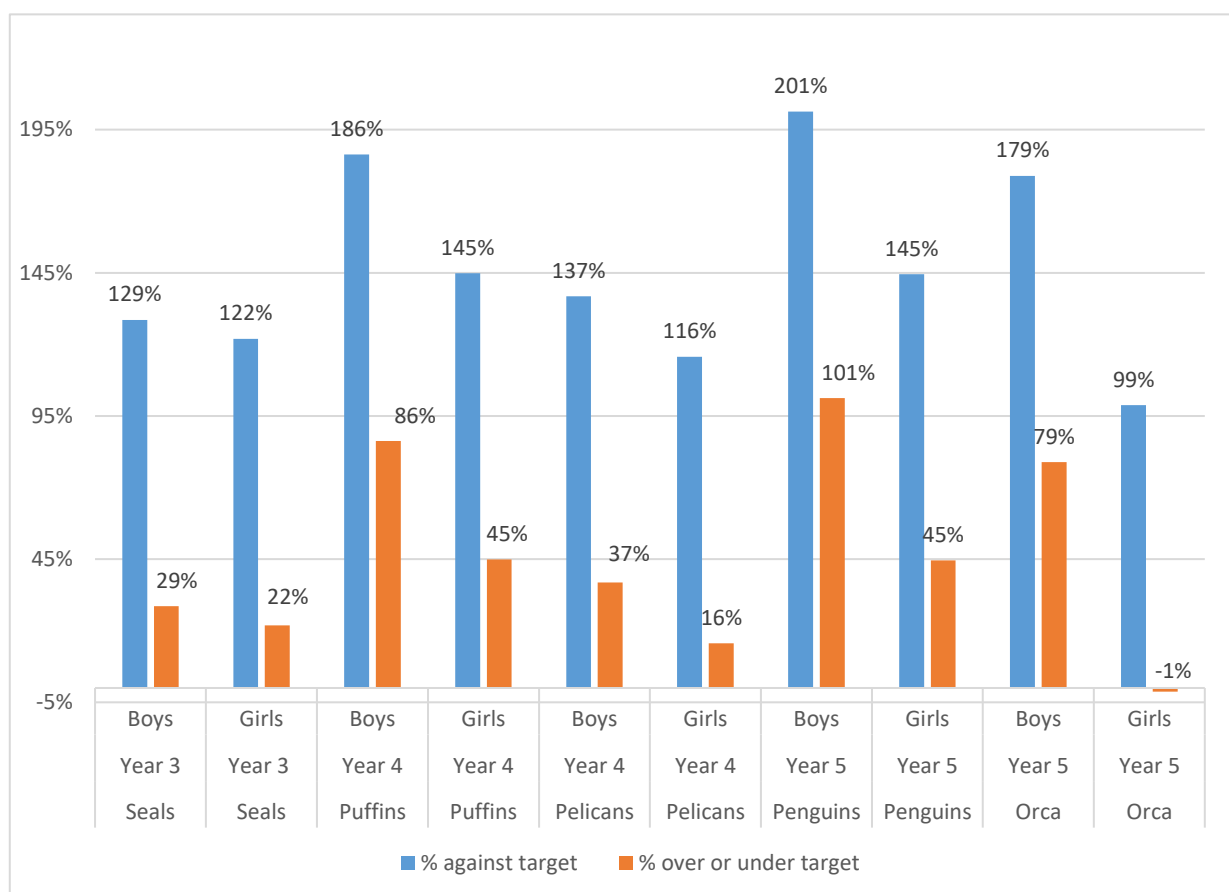


Figure 1. Step summary compared to against the school target.

MVPA Summary – Baseline.

The total number of minutes of MVPA were collected from 8.30am until 2.30pm, Monday – Friday. Only data was used for children within the class who attended all days to prevent the data from being skewed.

Figure 2 shows the percentage number of minutes of MVPA against the target (in blue) and it shows the percentage number of minutes of MVPA against the targets that is over or under the target (in orange) of 150 minutes per week, 30 minutes per day. The data is grouped per the class per gender, to consider their baseline recorded during their MOKI week in term 2.

The data indicates that not all classes were able to achieve target of 30 minutes of MVPA, but Year 5 Penguins and Year 4 Puffins did achieve *beyond* target.

The Orca girls were a little off the daily target, whilst Orca boys achieved way beyond target. There are consistent differences between boys and girls across all years. Year 3 Seals and Year 4 Puffins have the smallest differences according to gender. More of a focus on intensity levels is recommended for most years and lessons to be learnt from the Year 5 Penguins and Year 4 Puffins

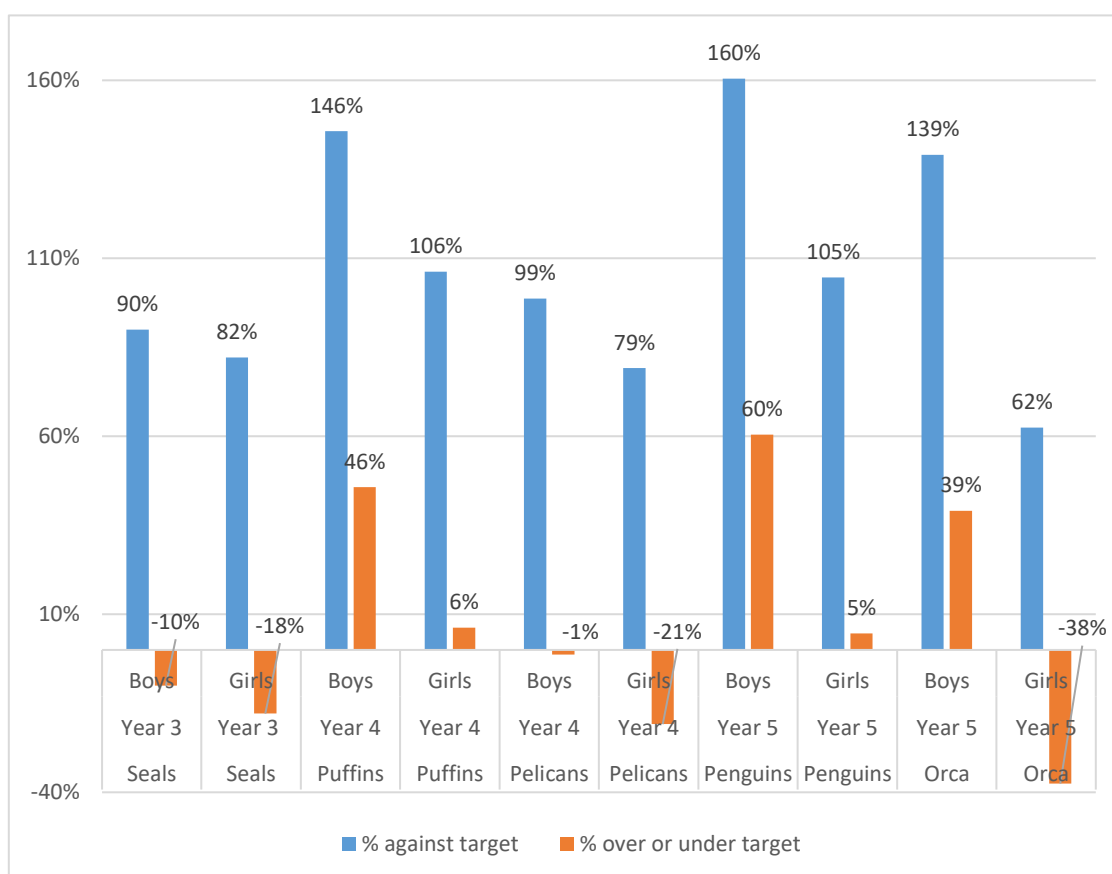


Figure 2. MVPA summary compared to against the school target.

Summary for Greatstone

Overall Greatstone children are relatively very active both in terms of steps and MVPA, it is important to examine why and how this high level can be sustained.

Year 1 and 2 need a baseline at the start of term 4 to compare their future data.

Repton Data

Steps Summary – Baseline.

The number of steps were collected from 8.30am until 2.30pm, Monday – Friday. Only data was used for children within the class who attended all days to prevent the data from being skewed.

Figure 6 (year 3 – 5) and 7 (year 1 and 2) shows the percentage number of steps against the target (in blue) and it shows the percentage number of steps against the targets that is over or under the target (in orange) of 25000 steps per week, 5000 steps per day.

The data is grouped per the class per gender, to consider their baseline recorded during their MOKI week in term 2.

The data indicates that all classes were able to go beyond target as a class, except the year 4 Elizabeth Garrett girls who were 3% under target.

(Please note the class names have been shortened to fit on the graph).

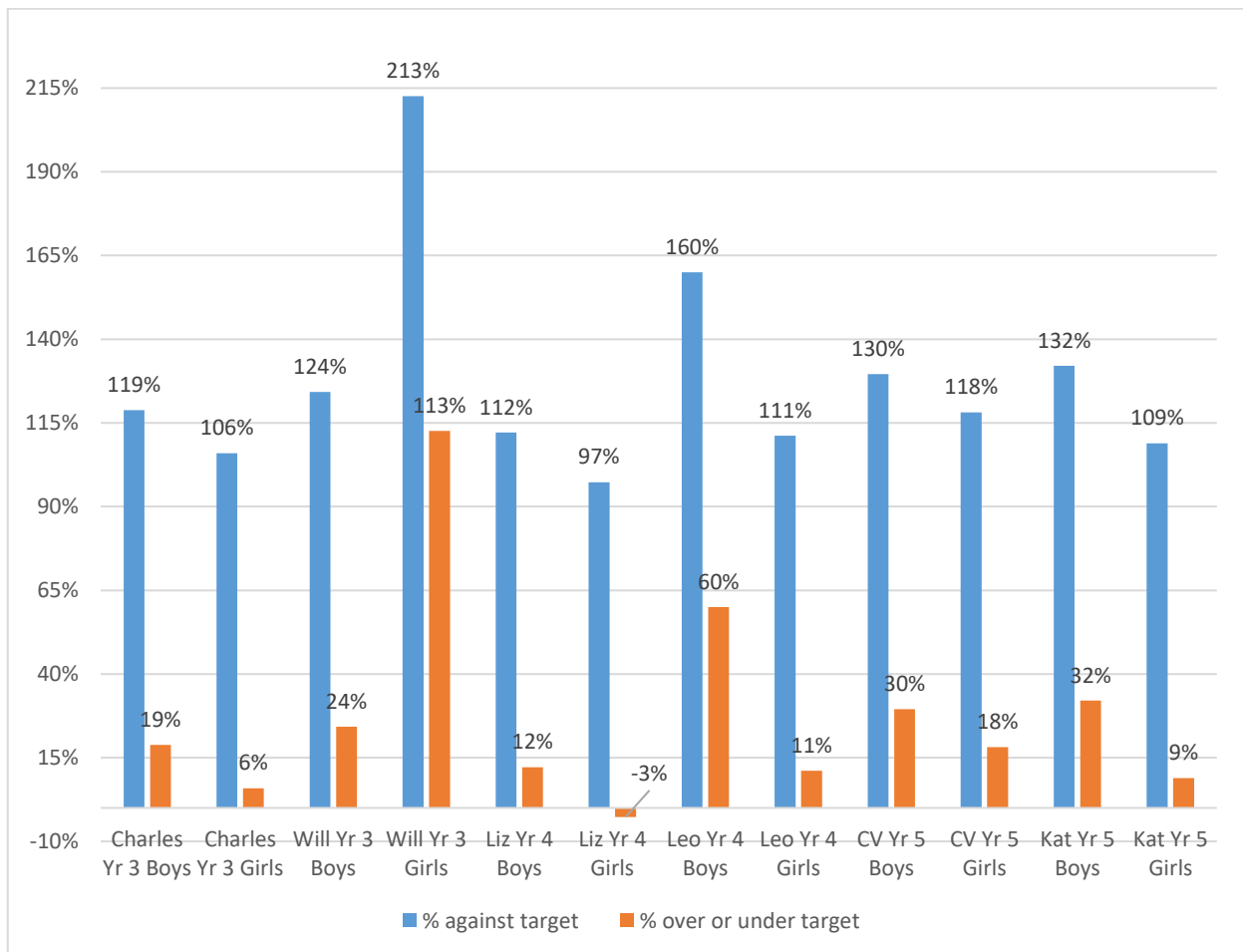


Figure 6. Year 3 – 5 Step summary compared to against the school target.

Figure 7 shows that both years and both genders were able to achieve beyond the school step target. However it is important to know the large differences in boys vs girls in year 1 Mary Seacole and year 2 Marie Curie, whilst the other two year 1 and year 2 classes have very similar results for boys and girls. It is recommended to review what the boys vs the girls are accessing within and outside of the classroom, can these opportunities be promoted more to the girls.

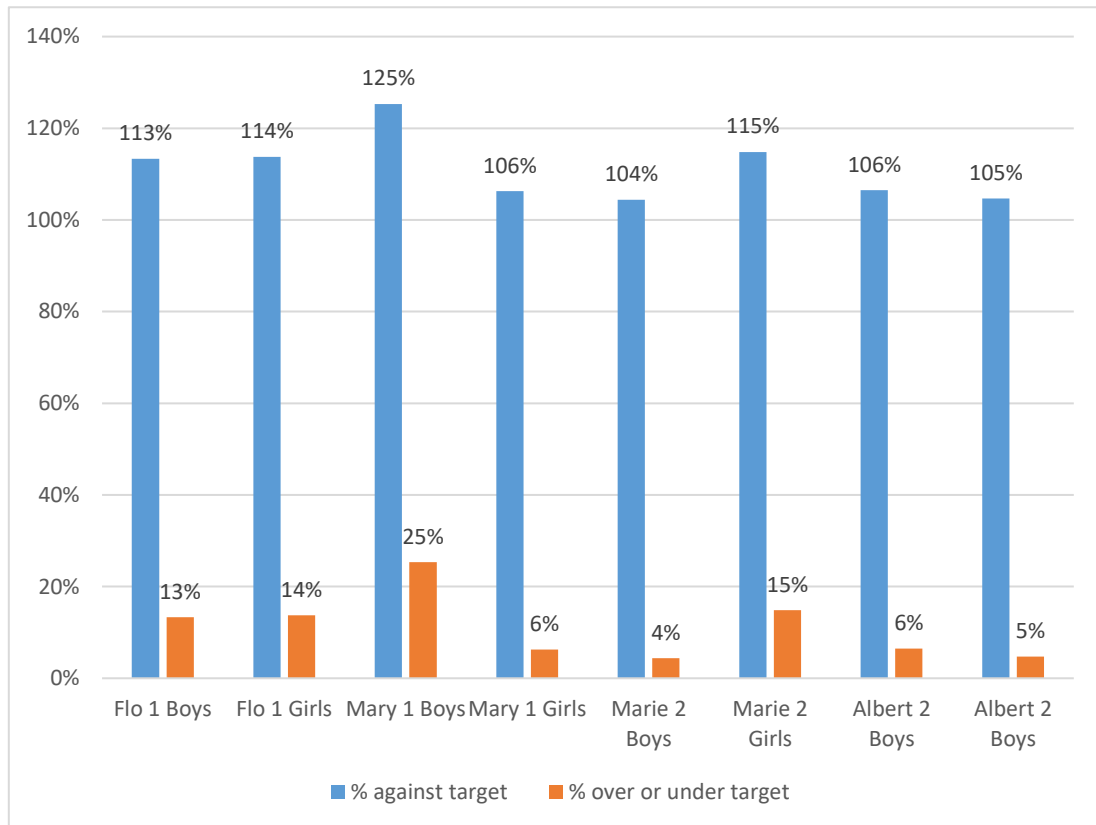


Figure 7 – Year 1 and 2 Step summary compared to against the school target

MVPA Summary – Baseline.

The total number of minutes of MVPA were collected from 8.30am until 2.30pm, Monday – Friday. Only data was used for children within the class who attended all days to prevent the data from being skewed.

Figure 8 (year 3 – 5) and 9 (year 1 – 2) shows the percentage number of minutes of MVPA against the target (in blue) and it shows the percentage number of minutes of MVPA against the targets that is over or under the target (in orange) of 150 minutes per week, 30 minutes per day. The data is grouped per the class per gender, to consider their baseline recorded during their MOKI week in term 2.

The data indicates that **only** year 4 ‘Leo’ boys were able to achieve the school target of 30 mins of MVPA within the school day. The data highlights that one of the greatest discrepancy between boys and girls to be that of the year 4 ‘Leo’ class. The other is found in year 3 ‘Will’ class. It is recommended as to review what the boys vs girls are undertaking as their activities at say lunchtime and play times. And overall as a school the intensity levels of movement needs to be considered.

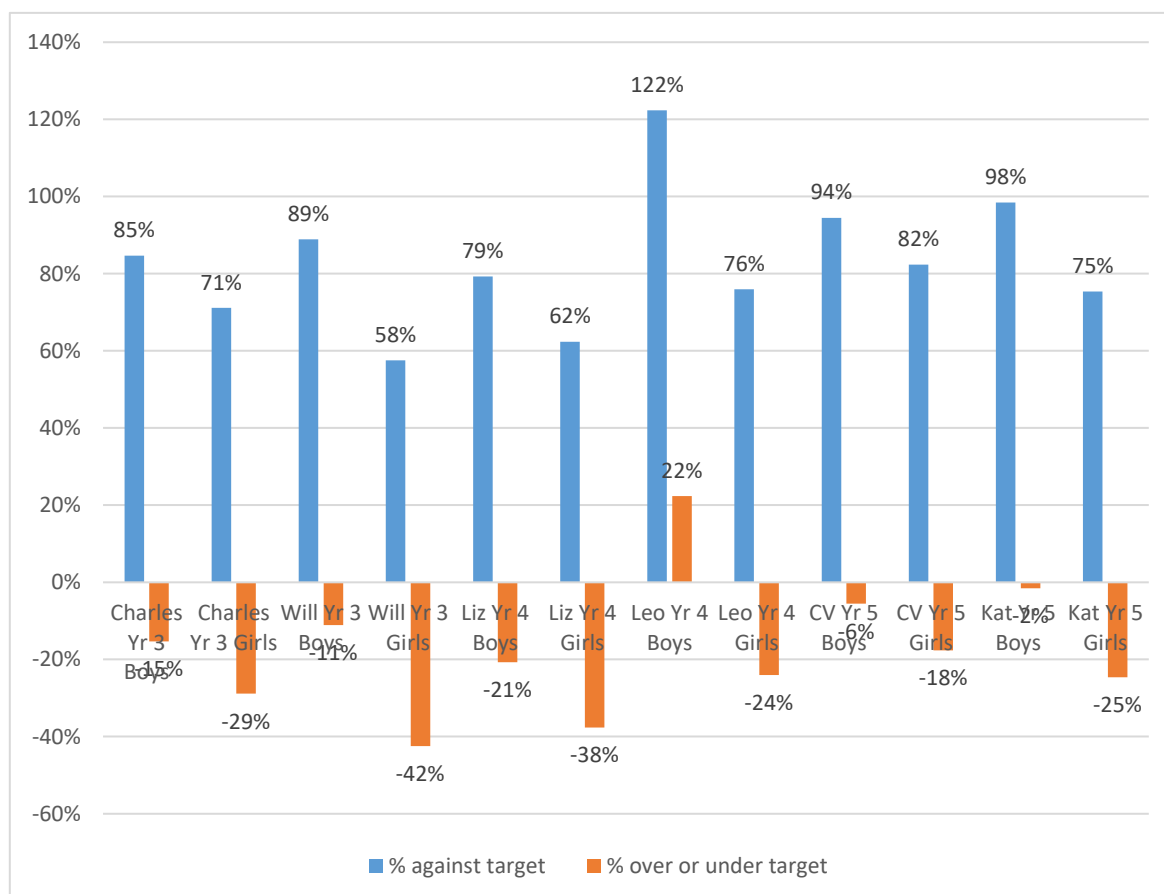


Figure 8. Year 3 – 5 - MVPA summary compared to against the school target.

Figure 9 shows no year group or gender meeting the school target of 30 mins of MVPA within the school day.

Recommended for both year 1 and 2 to consider the intensity of activity, not just the amount of steps being completed.

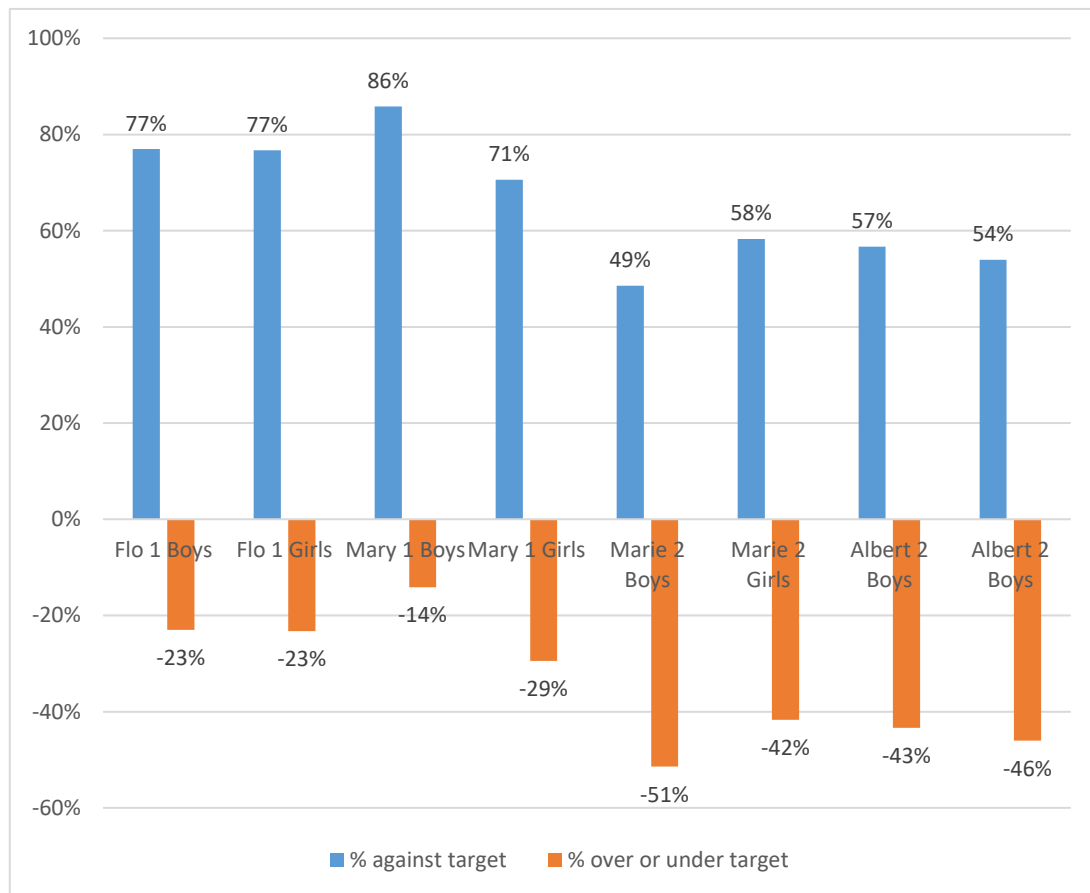


Figure 9. Year 1 and 2 MVPA summary compared to against the school target.

Overall summary

There are considerable differences between the two schools in terms of steps and MVPA.

Wonderful lessons could be learnt from each other to help support each other as a federation.

It is recommended that PE coordinators work together to look at how physical activity is implemented currently and what changes would like to occur.

Term 3 was used as a time to reflect on the data, all data was shared with PE coordinators, who shared it with the class teachers. Term 3 has also been a time and place to trial new physical activity interventions or keep current ones and consider sustainability.

Term 4 is planned for another round of data collection to see if the physical activity interventions have been implemented successful or if the current interventions are being able to be sustained. An extra layer of analysis will be implemented in term 4 to consider the impact of PE lessons within the overall physical activity levels so we will compare PE vs Non PE days.

Term 4 will also have a focus on happiness data.

During term 3 and half term, all the MOKI batteries have been updated so none should run out during term 4. Both schools also now have spares, so if a child is absent they can catch up and not feel left out or sad that they missed out.

Any questions please contact Kristy on: Kristy.howells@canterbury.ac.uk