

E-4 Annual Report to the Board of Directors -

From: Jeff Loupas - Assistant Superintendent

Purpose: Annual Report to the Board of Directors. Ends Policy Number 4 – Physical Health and Fitness

FYI

Report

Action Requested

Health and Fitness E-4

During the 2021-22 school year, schools began a shift back to more “normal” patterns of instruction. In physical fitness classrooms, however, these patterns were slower to return. For the first half of the year mask mandates remained in place. Spacing and physical distancing, both in PE and in the cafeteria/gyms, required most of the PE activities to take place outdoors. We appreciate the flexibility, creativity and dedication of our staff as they endeavored to help return students to higher physical fitness and activity levels.

As we saw with measures and evidence related to academic achievement (E-2), and social emotional health and skills (E-3) the 2021-22 school year was a time for students to return and begin to recover. We are reminded of the important role that schools, and the consistent structure and expectations they provide, play in the lives of students. As in these other areas, 2021-22 provides us a new baseline against which we can measure students’ overall recovery. Performance indicators for health and fitness were, in some cases, well below typical levels. Overall, I would estimate health and fitness scores to be approximately 10% lower on average across all measures when compared to 2019. Similar to results and progress in academics this year, there is clear evidence of recovery within the system. I don’t typically report on increases from Fall/Winter to Spring on FitnessGram, because many students are in only semester classes, take it only once in the Spring, or are not continuously enrolled, so it’s not an apples-to-apples comparison. But, we can look at the group of students (458) who have entering and exiting scores to see an approximation of growth patterns. While overall ending (Spring) performance on FitnessGram is about 10% down, the change from Fall/Winter to Spring is about 4% greater than the same average change from 2015-19. Students are performing at lower levels, but are making up ground.

The first section of this report contains available data from historic measures related to health and fitness. Some of these include fitness-related Curriculum Based Assessments (CBAs) - *Fitness Planning* (grades 8-9) and *Get Fit Summer* (Intermediate). Other typical measures are health and nutrition, or substance abuse related CBAs, including: *Mrs. Trimble’s Muffins* (Intermediate) and *Sarah’s Story* (grades 8-9). We also continued to utilize an important overall fitness measure in grades 5-12, FitnessGram, which provides us a quantitative measure of students’ general fitness levels by measuring an established set of skills and abilities and then comparing these results to a normed sample group. These combined measures represent thousands of data points during the year.

Health and fitness CBAs and CBPAs have been updated at the state level and we have begun to transition to some of the newer measures. This transition will continue throughout 2022-23, until all grade levels are utilizing the most up to date state resources. One of the new CBAs we piloted this year for fitness was *Concepts of Health & Physical Education* (grades 10-12), which measures students' knowledge about personal health and fitness practices and the ramifications of diet. The high school also piloted a new health CBA, *Dear Stressed and Depressed*, which focuses on knowledge and awareness of the signs of depression, health strategies and identification of local resources for support.

This year's report is consistent with past years in which we have evaluated the district's progress toward meeting the goals of E-4 through a series of assessments typically taken at benchmark grades (5, 8 and 10) as well as annually assessing all students in grades 5 through 12 enrolled in PE using FitnessGram. Tenth graders enrolled in required health classes take the health CBA. We believe that the district is making reasonable progress towards E-4 as evidenced by the 2008-2022 Fitness and Health Classroom Based Assessments (CBAs) and FitnessGram. The following report provides our interpretation of each section of the policy and a brief summary of progress made.

All UPSD students are healthy and physically fit, and demonstrate the knowledge, skills, habits and attitudes of a healthy and fit lifestyle that will successfully carry them into adult life.

1. UPSD students are physically fit.

Interpretation - Students will reach the Healthy Fitness Zone (HFZ) standard on a series of assessments as defined by FitnessGram. FitnessGram, an external source for the collection and storage of research-based assessments, provides information to students, parents, and the community (Board). The available FitnessGram results are enclosed within this report (grades 5-12), as well as brief narratives for the overall scores in compliance with E-4 Number 1. To receive comprehensive scores from the FitnessGram system, four of the FitnessGram assessments are required and three are optional (Back-Saver Sit and Reach, Flex Arm-Hang and Shoulder Stretch). District-wide, we asked teachers to provide data in five of the six areas, plus cardiovascular data. For each measure, you will find the title for the given assessment, the student ages listed along the bottom, and the overall percentage of students reaching the Healthy Fitness Zone (HFZ). These charts provide the board with specific as well as system-wide data.

Please recall that the HFZ within FitnessGram *“uses criterion referenced standards to evaluate fitness performance. These standards have been established to represent a level of fitness that offers some degree of protection against diseases that result from sedentary living”* (FitnessGram Reference Guide for Parents). Upon completion of an assessment, students are found to be meeting the standard or in need of improvement. Working with their teachers, students can and often do make significant gains in their performance over the course of a single school year.

Current progress

Curl-Ups (Required)

The Curl-Up (also known as the sit-up) gives students an opportunity to demonstrate abdominal strength and strengthens both the upper and lower back. This year UPSD student performance was below the previous year with 78.6% reaching their HFZ (Expectation - 75 curl-ups with specified cadence; three seconds per repetition). Data continues to suggest that older students have an easier time meeting this standard.

Trunk-Lift (Required) - Meeting the Trunk-Lift standard certifies that students have a modicum of "...strength of the muscles in the back and the flexibility of the back..." (FitnessGram Parent Guide p. 22). Scores are consistent with previous years with overall 98.5% meeting or exceeding standard. As expected, younger students and older students rate at a higher level of proficiency.

Push-Up (Required) - Students are encouraged to do as many 90 degree push-ups as possible to maximum effort. Proper form is required to count as one push-up. This year 66.7% are in the HFZ. This is well below typical performance.

Back Saver Sit & Reach (Not Required) - This test measures flexibility. This year 63.8% scored in the HFZ, a sizable increase. Like in previous years, proficiency on this measure at the intermediate level (37%-59%) is lower than at junior high and high school levels (avg. 80+%).

Shoulder Stretch (Not Required) - This assessment measures the flexibility of the shoulder. As previous data has shown, most students can achieve standard with one arm, but when both are at play they have a more difficult time "reaching" standard. Data indicates 73.2% of students were in the *HFZ*, which is in line with historical results.

Flex-Arm Hang (Not Required) - Not scheduled to be recorded this year

VO₂max ~ Aerobic Capacity (Required) - What is aerobic capacity? According to FitnessGram, it (VO₂max) "...reflects the maximum rate that oxygen can be taken up and utilized by the body during exercise. The magnitude of VO₂max depends on the capacity of the lungs to exchange oxygen between the air and blood in lung capillaries, the capacity of the cardiovascular system to transport oxygen to the muscles, and the muscles' capacity to use oxygen. The highest rate of oxygen uptake and use reflects the upper limit in the ability of the body to supply energy via aerobic metabolism to the active muscles during strenuous exercise. Aerobic capacity is most commonly expressed relative to body weight to account for differences in body size and to reflect a person's ability to carry out weight-bearing tasks" (FitnessGram Reference Guide p. 98). First, teachers will derive an approximate Body Mass Index (BMI) from each student by measuring height and weight. We are cautious to preserve the students' dignity when ascertaining weight. For example, at the middle level, we integrated the assessments into the health screening. Then, students participate in the Pacer and/or the mile run. Scores obtained from that assessment, combined with BMI produce an overall score for Aerobic Capacity – VO₂ max. 70.3% of students scored within the HFZ this Spring. These results are significantly higher than both last year's data and than the students with Fall/Winter data. However, they are 11.2% lower than the Spring of 2019.

2. UPSD students demonstrate knowledge of a healthy and fit lifestyle.

a. UPSD students know nutritional guidelines for healthy children.

b. UPSD students know that the choices they make both at school and at home with regard to physical activity and nutrition impact their ability to learn in school, their physical fitness, longevity, disease prevention and quality of life.

Interpretation - We define *knowledge of a healthy and fit lifestyle* as students' ability to express the link between nutrition, physical activity and overall health. The state of being fit assumes that a person has made choices that led to physical fitness. To demonstrate proficient knowledge for both 2a (nutrition) and 2b (choices related to activity and nutrition, and their impacts on health) students will successfully complete and score at proficient levels on state CBAs and CBPAs described within this section.

Classroom Based Assessments (CBAs) for Health are typically given to all students in grades 5, 8, and 10 (high school) Health/Fitness classes, and serve as our best indicator for student achievement in terms of demonstrated ability to understand the components of a fit and healthy lifestyle, as well as avoiding the consequences for not making healthy choices. I have enclosed graphs of the Health and fitness CBA scores. The assessments with nutritional components align with the *American Heart Association's Dietary Recommendations for Healthy Children* in terms of eating a balanced diet, monitoring caloric intake and getting enough exercise.

Participation rates for students in Health CBAs were back to typical levels for 2021-22 at 85.9%. Proficiency rates for the Health CBAs were near, or at, historic levels:

80.4% – 5th Grade

86.2% - 8th/9th Grades

88.9% - High School

3. UPSD students demonstrate the habits and attitudes of a healthy and fit lifestyle.

The Fitness CBAs for 5th grade, junior high and high school all require students to know and understand the elements of a healthy lifestyle, planning for health and fitness and how these elements integrate to improve long term health. The expectations increase in terms of the depth and complexity of expectations as students age. By high school, the CBA, *Concepts of Health & Physical Education*, assesses a broad range of health and fitness ideas. Students who are proficient at this level have demonstrated knowledge that will serve as a useful guide as they pursue life-long health goals.

Fitness CBA participation rates for 5th grade, junior high and high school were 85.4%, 98.6% and 98.5% respectively. As is true with most CBAs and CBPAs, the district seeks consistency in scoring that reflects consistency in expectations. The results for grade levels are as follows:

70.1% – 5th Grade
85.6% - 8/9th Grades
91.3% - High School

Conclusion - The available evidence from measurable sources indicates that students within the district are making reasonable progress toward the goals outlined in E-4 for health and fitness. I would like to thank the staff and administrators who worked tirelessly to navigate the obstacles presented by the pandemic and maintained their dedication to student health and fitness. Specifically, numerous PE teachers spent additional time outside this year in order to successfully navigate Covid restrictions.