

**NORTHFIELD PUBLIC SCHOOLS**  
**Office of the Superintendent**  
**Memorandum**

**TO:** Board of Education  
**FROM:** Matt Hillmann Ed.D., Superintendent  
**RE:** Table File Items for October 9, 2017, Regular School Board Meeting

VI. Items for Discussion and/or Reports.

1. Heart Zone Monitors.

The High School Physical Education Staff has provided the enclosed power point presentation.

VII. Superintendent's Report

B. Items for Consent Grouping

2. Personnel Items.

a. Appointments.

10. Joseph Jorgensen, One Act Play Advisor at the High School, beginning 12/04/2017; Level I, Step 5
11. Tania Will, 1.0 FTE 46 weeks/year, Student Activities Director at the High School, beginning 01/02/2018; \$108,925/yr. Prorated for the remainder of the 2017-18 School year.

b. Increase/Decrease/Change in Assignment.

14. Nancy Ivers, EA at the Middle School, add Crossing Guard at the Middle School, effective 09/26/2017-06/07/2018.
15. Micah Schultz, ALC Teacher at Longfellow, add ALC Independent Study Teacher for up to 30 hours for the 2017-18 school year at Longfellow, effective 10/06/2017-06/07/2018;
16. Micah Schultz, ALC Teacher at Longfellow, add Targeted Services BLAST Teacher for up to 5 hours/wk Mon.-Thurs. at the Middle School, effective 10/6/2017-05/10/2018; Yr. 4-\$27.73/hr.
17. Melissa Shepard, Teacher at Bridgewater, add Targeted Services PLUS Teacher for 1.25 hours/day Mon.-Thurs. at Bridgewater, effective 11/7/2017-03/22/2018; Yr. 2-\$27.11/hr.
18. Megan Wheelock, Special Education Teacher at Greenvale Park, add an overload effective 09/05/2017-11/21/2017.
19. Rick Wilmes, Custodian at the High School and Bridgewater, change to Custodian at the High School, effective 10/17/2017.

*\* Conditional offers of employment are subject to successful completion of a criminal background check and Prewrite screening (if applicable)*

# IHT Spirit

Northfield HS Physical Education



## IHT Wearable Devices



## IHT Implementation Timeline

### Spring 2016

Teachers went to SHAPE National conference in Minneapolis  
Specifically looking for heart rate technology

Wrote a proposal to obtain Adidas IHT Spirit Wearable Technology  
Targeted PE, HS, District budgets

Pooled money from PE, HS, & District budgets to obtain 40 devices

## IHT Implementation Timeline

### Spring 2016

Matt Hillman found a grant through Northfield Hospital

### Fall 2016

Northfield Hospital awarded the grant to NHS  
Grant included training

## IHT Implementation Timeline

### Fall 2016

- IHT Spirit devices arrived mid-October
  - One set of 40 devices for each teacher
  - 2 card-readers, 5 charging cases
  - IHT software

## IHT Implementation Timeline

### Fall 2016

- Web-based & On-site training
  - Web-based "Go To Meeting" October 12, 2016
    - Login, importing data, creating groups (classes)
  - On-site training December 20 and 21, 2016
    - Troubleshooting, fitness assessments, goal setting, changing the zone, lesson additions, and improvements

# IHT Capabilities

## Spirit System

- Instant feedback
- Software & database
- Printable reports
- Student & teacher materials



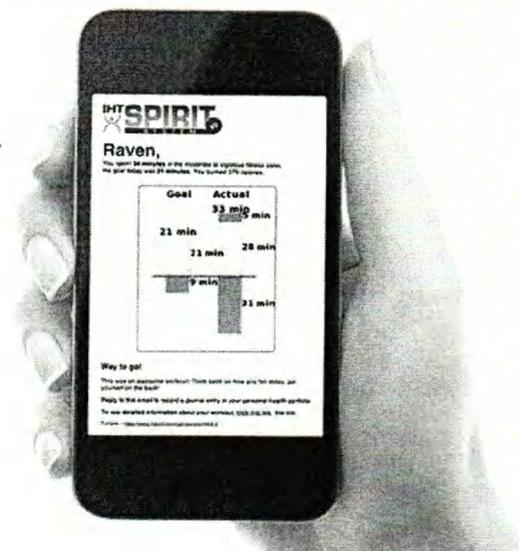
## IHT CAPABILITIES

### Instant Feedback

Within minutes of completing class an email can be sent to the student, guardian or both.

The email includes a bar graph that shows the goal for the day and how the student performed compared to the goal.

It also includes a line graph that shows the students heart rate during class.



# IHT CAPABILITIES

## Software & Database

### Software

Teachers are able to create their own assessments and rubrics or use material provided  
FITNESSGRAM

### Database

Student ID numbers are used to store information over time creating the opportunity for longitudinal data collection

# IHT CAPABILITIES

## Printable Reports

All assessments outcomes can be created in one report to be given to each individual student.

Reports can also be created by grade level or by district.

Assessment Area	Level of Assessment	Level 1	Level 2	Level 3	Level 4
Date	10/10/13	[Redacted]			
	10/10/13	[Redacted]			
Officer/Designer	10/10/13	Level 1	Level 2	Level 3	Level 4
	10/10/13	[Redacted]			
Designer	10/10/13	Level 1	Level 2	Level 3	Level 4
	10/10/13	[Redacted]			
Location	1	2	3	4	
	10/10/13	[Redacted]			
	10/10/13	[Redacted]			

## IHT CAPABILITIES

Student & Teacher  
Materials

IHT Spirit System

Spirit System



## Improvements & Additions to PE

Know Your Numbers

Objective assessment - Time in the Zone

Reports - emailed and printable

Longitudinal data collection

# IMPROVEMENTS & ADDITIONS

## Know Your #'s

Students studied vocabulary surrounding blood pressure, BMI, and resting heart rate.

Terms: artery, diastolic bp, risk factors, sedentary, systolic bp

Students measured or calculated their blood pressure, BMI, and resting heart rate. All of these #'s are directly related to overall physical health.

Name: \_\_\_\_\_

PE Hour: \_\_\_\_\_

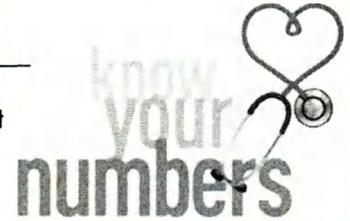
### Know Your Numbers Recording Sheet

#### BLOOD PRESSURE

	Number #
Systolic	
Diastolic	
RHR	

#### HEART RATE MAX

	Number #
220-Age=	



#### BMI (Body Mass Index)

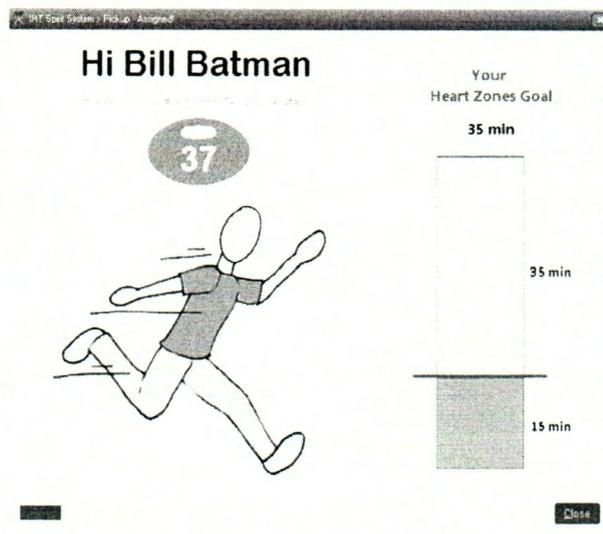
	Number #
Height	
Weight	

# IMPROVEMENTS & ADDITIONS

## Time In the Zone "TIZ"

When students check-in their device the computer shows them the goal for the day.

The students are expected to meet the TIZ for the day. As they check their device during class they know how to change their activity, and therefore, their heart rate to meet the goal.



## IMPROVEMENTS & ADDITIONS

### Blended Focus

The IHT devices easily create opportunities for more fitness for health based activities; moving physical education to a blended focus on fitness for health and traditional sport activities.

**Build  
A  
Better  
Body**



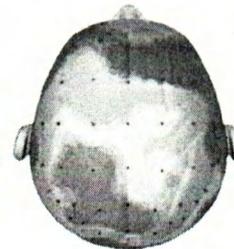
work



rest



AFTER SITTING QUIETLY



AFTER 20-MINUTE WALK

## 2017-18 School Year

PLC SMART Goal:

By repeatedly experiencing "time in the zone," we will increase the understanding of the benefits of exercising in the target heart rate zone and aerobic activity of PE students so that 80% of students will meet the time in the zone goal when assigned as measured by the Adidas Zone Monitors by January 12, 2018.

## Looking Forward, More Room to Grow

Journal responses

What does my fitness look like?

More lessons that are focused on student fitness

How does this apply to my life now? In the future?

## Questions?

