

#### Sqord and Physical Activity in the Anchorage School District

Sqord is a wearable activity-tracking device made specifically for children. It couples the device with an online platform, where children can set up avatars and challenge one another as well as track their activity levels.

Sqord awards points for various activities. Providence Alaska and the Anchorage School District have worked together to provide SQORD to teachers and students. The Institute of Social and Economic Research (ISER) is studying whether using SQORD is helping children become more active. The principal investigator is Mouhcine Guettabi.

This presentation is of preliminary findings from the first year of the study.

Background Individual Level General usage trends Feedback Questions?

# SQORD in ASD (a short overview) Preliminary findings from year 1

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#### Outline

- Background
  - Number of SQORDs activated
  - Summary
- Individual Level
  - How many points are students earning and when are they earning them?
  - What about variation?
- General usage trends
- Feedback
  - Fall survey
- Questions?



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- In the Fall of 2015, around 6,000 SQORDs were activated and distributed to 36 schools.
- 13 of the schools were part of a study investigating the effect of feedback on point accumulation, while the rest designed their own programs.
- Another 16 schools were added in the Spring of 2016.

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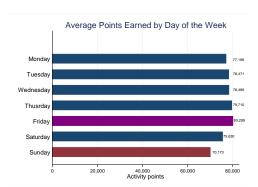
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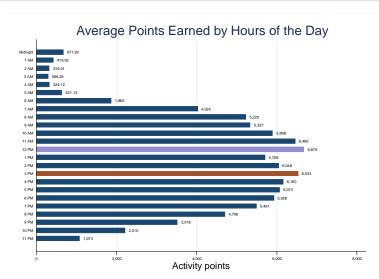
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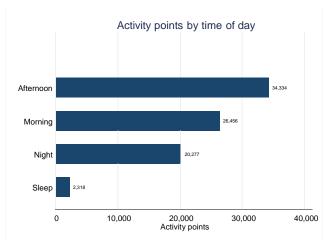


## Points by day of the week

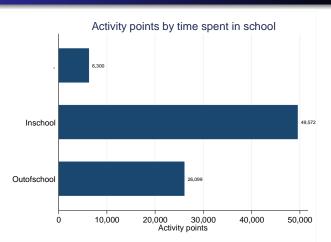




## Acitivty points by time of day



### In school?



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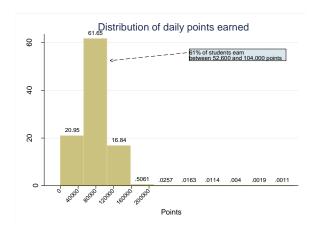


#### How much variation is there?

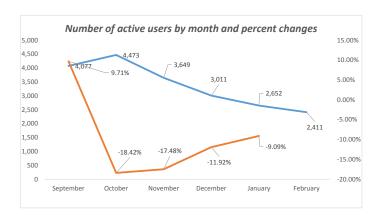
#### Percentiles

	<u>25th</u>	<u>50th</u>	<u>75th</u>	<u>90th</u>
15 minute increments	117	838	1,704	2,676
Hour increments	807	3,913	6,629	9,498
Day increments	57,074	77,925	97,552	115,488

## A bit more regarding the distribution of points earned



## How has the usage of SQORDs changed overtime?

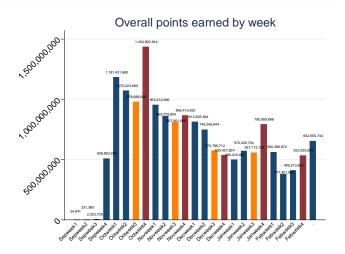


## Does it look any different if we narrow it to just students?

Month	SQORD users	Percent decline
September	3,866	
October	4,211	8.92%
November	3,375	-19.85%
December	2,777	-17.72%
January	2,460	-11.42%
February	2,258	-8.21%
Ratio of Feb/Oct	53.62%	

## Overall points earned by month





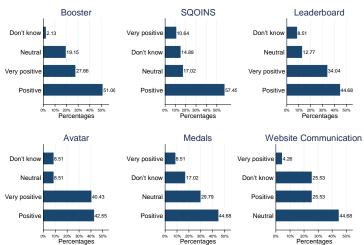
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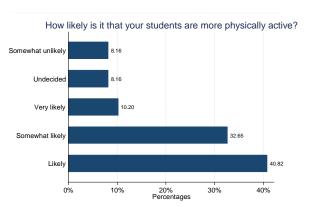
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- In the fall of 2015, we administered a survey to schools in the Anchorage schools district who used SQORD but were not part of our ongoing study.
- The survey asked teachers (both classroom and physical activity) about their impressions regarding the device, its effects on children and their general thoughts.







- Reasons for implementation varied but most mentioned improvement of physical activity as a driver.
- The majority mentioned their favorite aspect of SQORD is that it motivates students.
- Teachers think SQORD has the potential to increase physical activity in children.
- SQORD does not seem to be associated with negative classroom behavior.
- The Leaderboard and the Avatar are viewed as positive motivating tools.



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## A quick note on the studies

- We have tested the role of feedback on physical point accumulation last fall. Preliminary analysis indicates that the lack of computer access did not adversely affect physical activity.
- In the spring, we tested the effect of general benchmarks relative to personal goal improvements
- Next year, we are intending to look at the effect of incentives.

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#### Thank You

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