

Hood Canal School District ESSER Plan

ESSER Committee: Nikki Grubbs, Ryan Causgrove, Vernon Bruni, Elizabeth Porter, Alicia Johnson, Kelsey Greenwood, Jason Tremble, Jamie Allwine

Title I Parent Survey Results used to inform ESSER Plan, Presented to the Board of Directors, input from 7th and 8th grade students.

Funding Source	Allowable Expenditures	Planned Expenditures
ESSER I- 7/21/20 Fp=975, 2020-21 Indirects- \$41,430 Program- \$145,217	Coordination of preparedness and response efforts of local educational agencies with State, local, Tribal, and public health departments Providing principals and others school leaders with the resources Activities to address the unique needs of low-income children or students, children with disabilities, English learners, racial and ethnic minorities, students experiencing homelessness, and foster care youth. Implementing procedures and systems to improve the preparedness and response. Training on sanitation and minimizing the spread of infectious diseases. Purchasing supplies to sanitize and clean Planning for and coordinating during long-term closures Purchasing educational technology (including hardware, software, and connectivity) for students Providing mental health services and supports. Planning and implementing activities related to summer learning or online learning during the summer months.	\$37k for PPE, thermometers, standing thermometer, nurses' beds, masks, shields, gowns. Planning for closures- Safety team met every week and published a COVID safety handbook. \$6400 Chromebooks and Verizon Hotspots- \$133k Coordination and Preparedness- 10k
ESSER II- Fp= 120, 2020-21 Indirects \$123,762 Program- \$433,797	ALL in ESSER I And Inspection, testing, maintenance, repair, replacement, and upgrade projects to improve the indoor air quality in school facilities, including mechanical and non-mechanical heating, ventilation, and air conditioning systems, filtering, purification and other air cleaning, fans, control systems, and window and door repair and replacement. School facility repairs and improvements to enable operation of schools to reduce risk of virus transmission and exposure to environmental health hazards, and to support student health needs.	Replace/upgrade HVAC system and ensure it meets new energy efficiency standards-\$433,797
ESSER III- Fp159- 2020-21 Indirects- \$218,573 Program- \$895,426	All in ESSER I AND-Inspection, testing, maintenance, repair, replacement, and upgrade projects to improve the indoor air quality in school facilities, including mechanical and non-mechanical heating, ventilation, and air conditioning systems, filtering, purification and other air cleaning, fans, control systems, and window and door repair and replacement. School facility repairs and improvements to enable operation of schools to reduce risk of virus transmission and exposure to environmental health hazards, and to support student health needs.	Replace/upgrade HVAC system and ensure it meets new energy efficiency standards-\$895,426 Total for HVAC -\$1.3 million
American Rescue Plan- 20% of ESSER III for Learning Loss Fp 153 2021-22 Indirects- \$54,605 Program- \$278,306	To address learning loss through the implementation of evidence-based interventions, such as summer learning or summer enrichment, extended day, comprehensive afterschool programs, or extended school year programs, and ensure that such interventions respond to students' academic, social, and emotional needs and address the disproportionate impact of the coronavirus on each major racial and ethnic group, children from low-income families, children with disabilities, English learners, gender, migrant students, students experiencing homelessness, and children and youth in foster care.	Literacy professional development, Classroom leveled readers for Tier II and Tier III interventions, summer school costs for non-Title eligible students in subgroups. Social/emotional learning curriculum

		costs. Some counselor & nurse time. \$278,306
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Description of HVAC system upgrade:

Brief synopsis:

The Daiken VRF system will utilize outside air temperatures in the mornings before school employees are scheduled to start. Bringing in warmer or cooler fresh air as needed.

The DDC system is a computer with a dedicated program to control the school's complex system of controllers. This computer will communicate with the new Comfort Point and Energy software. Honeywell will install (16) Energy Recovery Ventilators (ERV's) engineered to meet the Dedicated Outside Air requirements. The installation of new thermostats / CO2 sensors will control the varying levels of CO2 being admitted throughout the day. These CO2 sensors will control the ERV's bringing in fresh air and exhausting inside air to control air quality and temperatures.

Daiken: Energy Savings & Environment

R-32 is a next generation refrigerant that efficiently carries heat and has lower environmental impact.

Refrigerant is a medium for conveying heat.

Air conditioners transfer heat while circulating refrigerant between the indoor and outdoor units.

Although there are various types of refrigerants, R-32 is a new refrigerant currently receiving

the most interest.

Because R-32 efficiently conveys heat, it can reduce electricity consumption up to approximately 10% compared to that of air conditioners using refrigerant R-22. Furthermore, compared to the refrigerants widely used today such as R-22 and R-410A, R-32 has a global warming potential (GWP) that is one-third lower and is remarkable for its low environmental impact.

Not directly Comparing CW/HW to VRV. BUT here is some info.

But here are some numbers from 2012 comparing to ASHRAE 90.1

☑ 800 Ton CW/HW utilizing Screw Chillers:

☑ .488 KW/Ton & .294 NPLV

☑ Energy savings around 14.2 % better than ASHRAE 90.1 for current systems with boilers chillers

According to the University of Washington

https://www.energy.wsu.edu/Portals/0/Documents/Good_Ventilation_is_Essential.pdf

If too much OSA (Outside Air) is brought in, the HVAC system will have to work harder to heat or cool the OSA to the appropriate temperature, resulting in wasted energy and excessive utility payments.

If too little OSA is brought in, the CO2 concentrations will rise throughout the day, as will concentrations of pollutants and odors. These impacts are exaggerated in buildings where the HVAC system re-circulates 70 to 80 percent of the indoor air.

If just enough OSA is brought in, the levels of CO2, pollutants, odors, and moisture will more likely be within appropriate guidelines and the HVAC system will not have to work harder than necessary to maintain a comfortable temperature.

This article by Daiken is worth reading, and has some references linked to further studies.

<https://www.daikinapplied.eu/news-center/how-ventilation-systems-can-prevent-the-spread-of-coronavirus/>

The Coronavirus pandemic shows that the risk of infection in public confined spaces is of the utmost importance and cannot be ignored.

Recent studies, clearly demonstrate that SARS-CoV-2 can be spread via bioaerosols generated directly by patients' exhalation. Also, there have been many studies suggesting that insufficient ventilation can increase the possibilities of transmissions. Therefore, ensuring proper ventilation in indoor environments such as offices, classrooms and public spaces is essential to reduce the risk of infection.

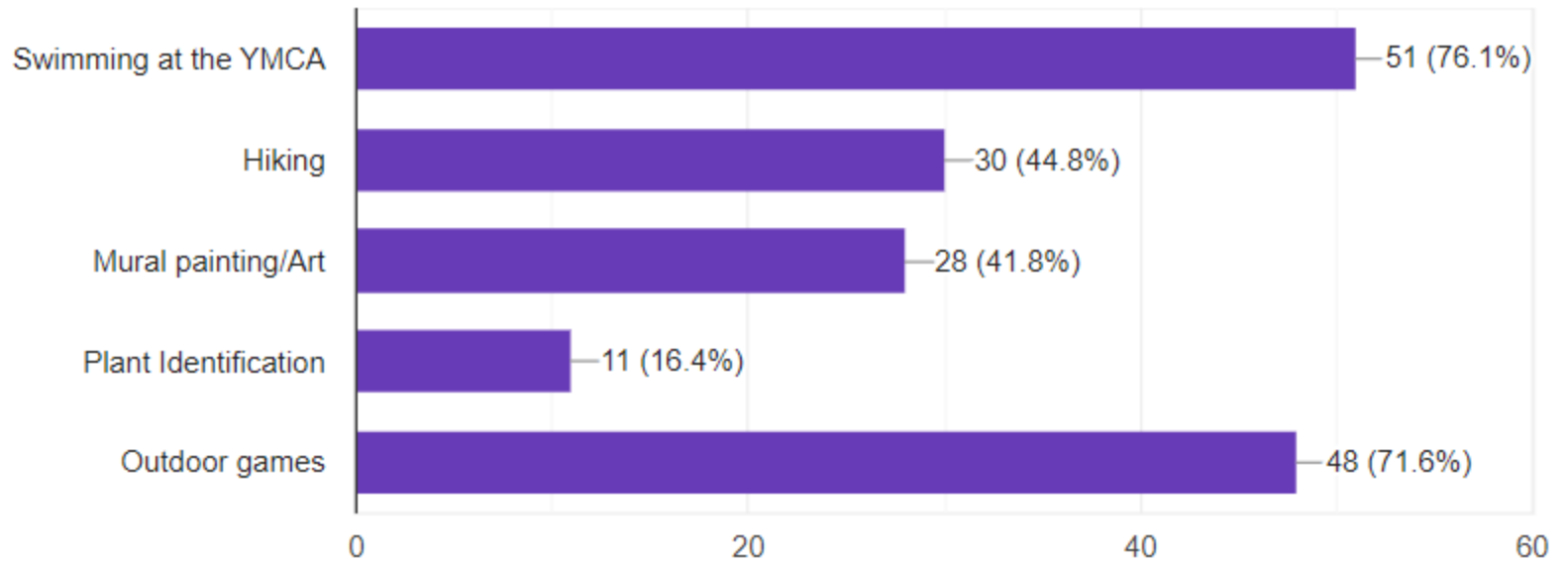
More specifically, the study "Association of infected probability of COVID-19 with ventilation rates in confined spaces: A Wells-Riley equation-based investigation", employed a mathematical model to estimate the correlation between infection probability and ventilation rate. This study shows a close correlation between the ventilation-rate and infection possibility.

In fact, the study clearly shows that the higher is the ventilation rate per hour in a room, the lower is the possibility of infection for the occupants.

Student survey results regarding ESSER summer school:

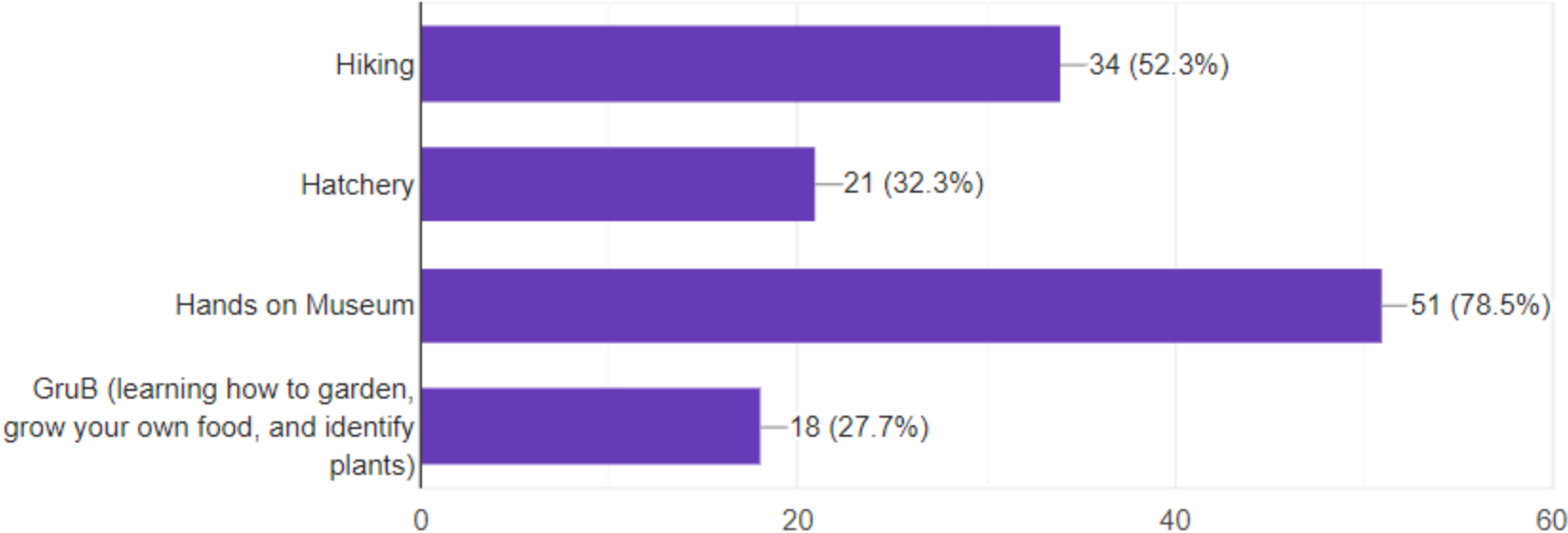
Which of the following would you be interested in? Check all that you would like!

67 responses



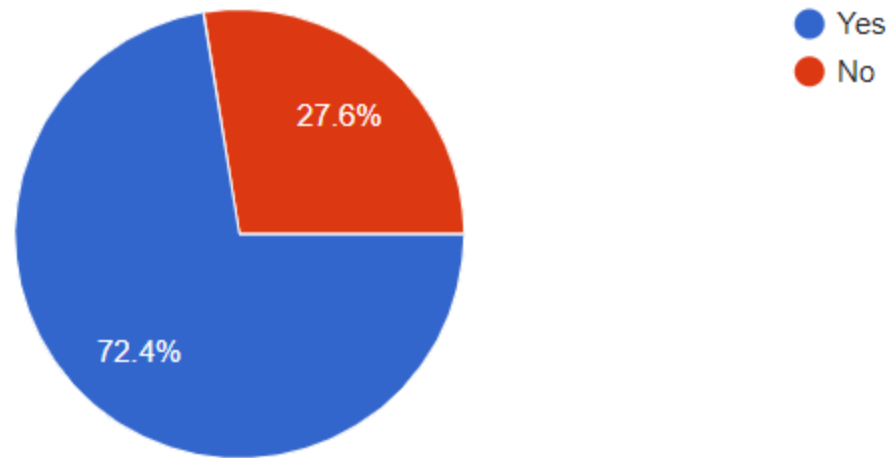
What Field trips would you like to go on? Check all that you would be interested in!

65 responses



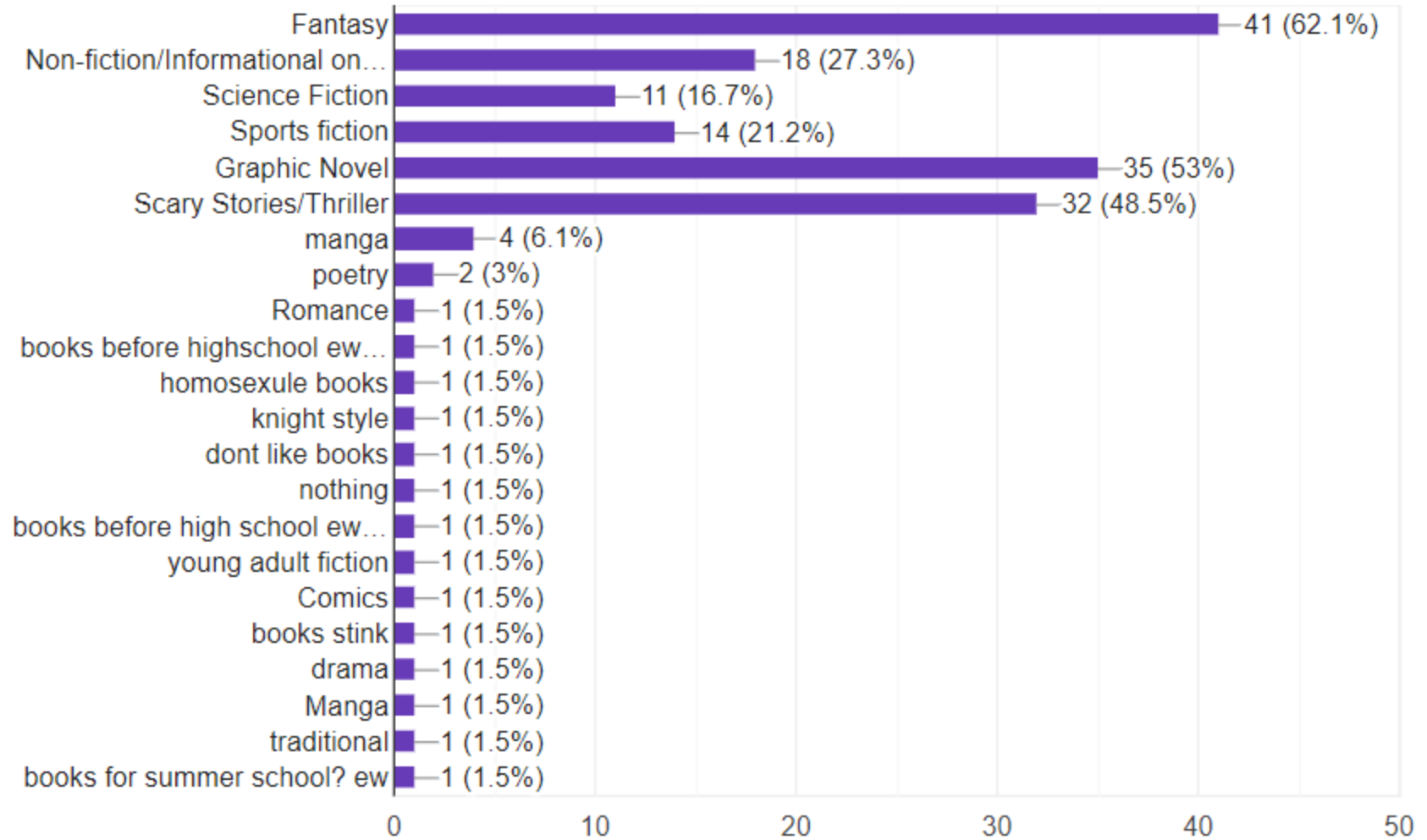
If you're an 8th Grader, would you be interested in a program that helps you transition into 9th grade to get you ready for High school?

58 responses



What types of books would you be interested in reading? CHECK ALL THAT APPLY

66 responses



Title I Family Input Survey Results Fall 2021

Family Input:

1= Strongly DISAGREE	4= Agree
2= Disagree	5= Strongly Agree
3= Undecided	

The district seeks family input.

1	2	3	4	5
1	2	2	10	10

I feel invited to be involved in my child's education.

1	2	3	4	5
1	1	4	9	10

I feel comfortable in asking for a meeting to discuss my child's progress.

1	2	3	4	5
0	2	1	9	12

I am informed about what my child is expected to learn in each subject.

1	2	3	4	5
0	3	5	9	7

Teachers ask me about my child's strengths.

1	2	3	4	5
1	3	7	8	6

I prefer to have my child in remote learning from home right now due to the risks of COVID 19.

1	2	3	4	5
10	7	5	1	1

Title I Funds:

1= Very unimportant	4= Important
2= Not important	5= MOST important
3= Undecided	

Internet access for all students

1	2	3	4	5
1	1	2	10	11

School counseling services

1	2	3	4	5
0	1	1	11	13

A full-time nurse

1	2	3	4	5
1	0	2	12	10

A music teacher

1	2	3	4	5
0	1	3	11	10

Summer school

1	2	3	4	5
0	2	3	10	10

An online teacher for students who want to be full-time remote

1	2	3	4	5
4	1	9	6	5

Share any questions or concerns: Unmask our children

Grade levels of your child/ren:

Preschool	K	1	2	3	4	5	6	7	8
0	7	2	7	2	3	3	2	7	2