Running Head: RECYCLING PROGRAM

Recycling Program for Camas High School

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Abstract

The category that my team has chosen to make into a reality is the recycling program for Camas High School (what). This is a program that would persuade classrooms and people at lunch (who) to recycle by strategically placing recycle bins and hanging visual aids around the school (where) to inform students of the importance of recycling. In order to find out if this idea is truly possible in the first place, we are surveying students during lunch (when) to find out if they would participate in this activity that would hopefully run for multiple years. The survey will take place at all lunches and run for two days. It will be placed at an attractive table and will be taken electronically. When the survey is completed, a treat will be given out to students who participated. It is our hypothesis that if we survey students at our high school it will be easier to gain their attention after finding out the amount of peers who would support our program. We will pay extra attention to ensure that everyone takes the same survey, a table is set up at each lunch, and our manipulated variable is to survey different people. Our responding variable is the amount of students at CHS who would participate in a recycling program that reached the cafeteria. The purpose of our recycling program (rationale) is to reduce the amount of waste that Camas High School produces in order to help the environment, reduce the size of landfills, and save money.

Recycling Program for Camas High School

First of all, it is imperative to convince people why having a recycling program at our high school is beneficial to CHS. Go Green Initiative did not only serve as an online resource for information on recycling and shocking facts, but it also has step by step exercises that can be used to turn your school into a green atmosphere. It was shockingly

found that, “For every ton of paper that is recycled, the following is saved: 7,000 gallons of water; 380 gallons of oil; and enough electricity to power an average house for six months” (What’s the problem? 2007). This is a perfect way to convince people why recycling is so important. Paperrecycles.org provided the information of how paper is recycled, and how to contact a paper recycling center closest to our school. Additionally, it gave the statistics of how much paper the United States recycled in 2005, which was an astounding 51.3 million tons of paper, only 51.5 percent (Frequently asked questions about paper recycling,, 2008). Our goal as program trying to start a recycling trend is to increase this percentage in the city of Camas.

A simple recycling program could easily start at a high school, and then spread to its community. The Roanoke Times published an article about the students of Cave Spring High School who undertook the task of establishing a recycling program at their school. Jacki Lucki, the marketing class teacher at Cave Spring High School stated, “Without help from sponsors and hard work from the students, the project wouldn't be as successful” (Anderson, 2007). It is clear, then, that our project is going to have to receive some type of funding, either from the community, our ASB, or a recycling company that we can reach here in Clark County. In another article by Shirley Jinkins (2007) the importance of recycling is emphasized even more when she displayed the statistics of how much money one elementary school was spending to haul trash to a landfill. During the 2005-2006 year the school was spending $605,000 for every twenty- four tons of paper, and they drastically reduced this by $100,000 the next year by simply recycling. In this article I also found the idea of having a competition in our school by bringing magazines and phone books to class because most people don’t recycle these items on a

regular basis but rather throw them away or let them lie around their house. Another segment in the Chicago Tribune by Lisa Black (2007) portrayed what one school district thought of replacing their Styrofoam lunch trays with cardboard ones. Officials from Dewey Elementary School said, "That although they embrace the idea, it will take time to overcome obstacles, such as the additional cost and weight of cardboard trays." It also stated in the article that cardboard trays would add about three cents more to daily lunches, and not everyone is willing to pay the extra costs. So even though certain things may be better for the environment, cost is a huge road block that we must find a way around. Finally, in the last article that I cited by Susan Holaday (2007) I found that the smallest changes save big sums of money, like in this instance when, "The schools began shutting off all cafeteria lights when natural lighting could suffice, for an estimated savings of $175,000 annually." This goes to show that almost anything to improve recycling at CHS will benefit the school.

Methods/Materials

In order to carry out this recycling program, the steps of an experimental design have been completed in the form of a survey that we will have students take at each lunch for two days. The steps that will allow us to accomplish our experiment include six steps: Creating a survey that includes the questions of what gender the student is, what grade they are in, and whether or not they would support a recycling program at Camas High School. Next and most importantly, is to get the survey approved by Mrs. Anderson. Additionally, a table will be set up during all three lunches. After this, during the lunches an announcement will be given in order to get people to take the survey. Finally, candy or some other treat will be given to those who complete the survey. These steps will be

repeated for one more day, giving the total of two days at all lunches that the survey will be available for students to take. The data will then be graphed and analyzed depending on the students' age, gender, and if they would support a recycling program. Materials needed for this experiment will be access to a computer to make the survey, an empty lunch table to set up our area, and a laptop to place on the table during lunch for people to take the survey on.

Results

The results that we collected from the survey gave numerous implications, from comparing how much each grade recycles, to looking at how much males recycle compared to females. One hundred and fifty-eight students were surveyed at Camas High School, 56.33% of them were male, and 43.67%of them were female. When we looked at our data it was found that 70% of females recycle paper most of the time (8-10 range), 26% recycle sometimes (4-7 range), and 4% almost never recycle paper (1-3 range). In comparison, 53% of males commonly recycle paper (8-10 range), 30% recycle sometimes (4-7 range), and 17% recycle paper almost never (1-3 range). Only 44% of the males surveyed responded that they recycle bottles most of the time (8-10 range), 34% recycle sometimes (4-7 range), and 22% recycle bottles almost never (1-3 range). On the other hand, 55% of females said that they recycle bottles the majority of the time (8-10 range), 37% recycle sometimes (4-7 range), and 8% almost never recycle (1-3 range). Of the females surveyed, 33% stated that they would recycle more if there were more receptacles for recycling , 45% would recycle exactly the same, and 22% would recycle less if more bins were provided for recycling. On the contrary, of the males surveyed only 7% responded that they would use the receptacles provided to recycle

more, 61% would recycle exactly the same, and 32% would recycle less if additional receptacles were provided for recycling.

Next, we compared our data to see how much each grade level recycled paper and bottles. Out of all the students surveyed, 62% of Freshman, 58% of the Sophomores, 54% of the Juniors, and 4% of the Seniors responded that they recycle paper most of the time (8-10 range). Also, of all the students we surveyed at lunch, 15% of the Freshman, 46% of Sophomores, 46% of the Juniors, and 46% of Seniors said that they recycle bottles most of the time (8-10 range). Our fourth question on the survey asked how much the student would recycle if more receptacles were provided, and our results came back saying that 35% of Freshman, 9% of Sophomores, 9% of Juniors, and 42% of the Seniors surveyed would actually use the extra bins to recycle more than they already do.

Discussion

From our data we formed conclusions that the results satisfied. For example, the statistics demonstrate that more girls currently recycle bottles and paper compared to boys surveyed at Camas High School. The females at CHS also would recycle more than boys if additional bins were provided. When the recycling ratings for each grade level were contrasted, it was easy to see that the Freshman were more conscious of recycling paper than any other grade level. Yet, it was a tie between the Sophomores, the Juniors, and the Seniors for the grade level that recycles bottles the most. Furthermore, when our data to see which grade level would recycle the most if extra bins were added was evaluated, Seniors showed to be the most promising with the highest percentage of students responding that they would recycle more, while the Sophomores and Juniors were tied with the least. This at least explains why the Seniors do not recycle as much

compared to the other grade levels, because the receptacles are not set in convenient spots and there are not enough of them. As for why the Freshman seem to recycle more paper, it is possible that the middle schools are more modern nowadays then they used to be, and have given students better habits for recycling. It is unexplainable why the Sophomores and Juniors recycle bottles the most except for the possibility that their classes could have received better education on the recycling of plastic bottles. (*Evaluation*) Although we hope that our data is completely valid, it was brought to our attention that our survey was not random and therefore is not the best set of results that we could have found. This is because we used candy as a bribe to get students to take our survey. Despite this problem, there could have been others that also affected our results. An appropriate example is the fact that our whole group is made up of Freshman, meaning we could have interested more Freshman into taking the survey than upper classmen. Also, we set up our survey table downstairs during lunch, and this gives the possibility that students who eat upstairs missed their chance to take the survey. (Suggestions for further research) In the future our group could undertake a study to see why females recycle more than males, and see if we could get more boys interested in recycling. If we were to do our experiment, the survey, again, we would need to keep it completely random. This would include two stations with places to take the survey both upstairs and downstairs without the giving away of candy. The results, if done correctly, would be more professional and completely valid. (*Plan for the future*) Our plan for the future is to continue to spread the knowledge of recycling throughout Camas High School by the use of posters, flyers, and labels on recycling bins. Also, we would like to buy and use a large mobile recycling bin that the janitors can use to collect paper or plastic bottles

to guarantee that the recycling is truly being recycled and not mixed in with the trash. Finally, we would like to buy more recycling bins because of the efficiency and convenience that they would bring to our school.

Conclusion

In conclusion, from our survey it was found that females in general recycle more than males, Freshman recycle the most in terms of paper, Sophomores, Juniors, and Seniors all recycle more bottles, and Seniors would recycle the most if extra containers were supplied. Our data illustrates many conclusions, and from each one we can learn something. Yet, the most efficient way to act is to target the groups of people who seem to recycle the least, and give them that extra little push that they need to help them realize that recycling really does benefit our environment. Creating a recycling program at Camas High School would be extremely beneficial for the community. It would reduce the amount of pollution put into the air by landfills, and save money for our school in the long run. Not only could CHS become a role model for other schools, but students at our high school would become more educated on our environment and become more aware of their surroundings, which is something that they can take with them even after they graduate.

Recycling Survey Results

	Question 1				**Question 3**						**Question 4**		
					Paper			**Bottles**					
	9th	**10th**	**11th**	**12th**	**Low (1-3)**	**Mid (4-7)**	**High (8-10)**	**Low (1-3)**	**Mid (4-7)**	**High (8-10)**	**Low (1-2)**	**Med (3-4)**	**High (5)**
Mon													
M	36	13	5	10	15	27	22	16	19	28	1	45	18
F	19	5	1	1	3	18	5	5	14	8	3	16	7
Tues													
M	6	6	0	1	0	0	13	2	7	4	0	5	7
F	11	3	2	8	0	0	25	0	9	15	8	9	7
Wed													
M	7	3	1	1	0	0	12	2	4	7	5	4	5
F	9	3	4	3	0	0	19	1	3	15	4	6	9
Total													
M	49	22	6	12	15	27	47	20	30	39	6	54	30
F	39	11	7	12	3	18	49	6	26	38	15	31	23

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