**Evaluating Curriculum for Global Competence**

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**Website used:** <http://cdn.worldslargestlesson.globalgoals.org/2017/07/Reducing-Food-Waste-For-the-Global-Goals-.pdf>

**Lesson/Unit Name and Content Area:** Food Waste Investigations in Numeracy (Interdisciplinary – Geography, Social Studies, Mathematics, Global Citizenship)

**Lesson Summary:** In this lesson, students will serve the role of investigators observing the amount of food being wasted in the school lunchroom. Students will use their observations to calculate the percentage of wasted food and will present their data graphically.

**Oxfam Mathematics Global Citizenship Competence:** The lesson includes many partial mathematics global citizenship competencies. I included “Strengths/Weaknesses” together due to the lesson’s only partial ability to include real-life data, but overall it lacks on the impact on our society past, present, and its potential future. According to Oxfam, they see a Global Citizen as someone who ”is aware of the wider world and has a sense of their own role as a world citizen.” This lesson does not make students aware of the wider world, it does, however, allow students to become more aware of the food items they are consuming and wasting. In my mind, I’m hoping the lesson provides students with the realization that there are people throughout the world starving and they are wasting food, but the lesson makes no mention of doing so. Oxfam mentions the importance of offering meaningful opportunities for students to illustrate mathematical concepts and processes. In this lesson students do use and illustrate mathematical concepts, however, the lesson does not allow students to manipulate data or problem solve on real-life issues. Based on Oxfam’s Mathematics Global Competencies, there are only three that could have possibly been included in this lesson plan, but not fully.

**Strengths/Weaknesses:**

Interpreting Data: The lesson does ‘ask learners to create their own graphs and charts to represent real-life data,” but does not “compare the efficacy of different representations.” Students are all investigators and are all illustrating a before/after of their plates. Students can either draw or take a picture of their plates and calculate the percentages of the food consumed and wasted.

Percentages: The lesson fails in having students “calculate the value of 100% when given the value of another percentage.” Nor does it “reinforce this kind of calculation by comparing local, national and global statistics about Internet use.” Students are locally formulating percentages, but does not go further than the school.

Measurement and Time: The lesson could lend itself well to exploration of children affected by malnutrition depending on the percentage of the food being consumed and wasted compared to that of children in countries with limited food resources.

**Assessment of its Global Competence:** The lesson plan Food Waste Investigations in Numeracy provides a good starting point for glocalization within the students’ school, however, when evaluated against the four Global Competences it is lacking in many areas.

***Investigating the World***

**Strengths:** The lesson includes does inspire students to be mindful in their eating practices and eliminate the waste of food through investigations. The lesson tries to help meet the Global Goals for Sustainable Development by investigating amount of food waste in their school lunchroom. Furthermore, the lesson provides opportunities for students to analyze, integrate, and synthesize evidence to construct coherent responses in their food/waste investigation. Students use their data to develop argument-based evidence and can draw conclusions.

**Areas for Improvement and Recommendations:** The lesson does not allow students to investigate the world beyond their immediate environment. Students could co-investigate the same information, food consumed and wasted, in other schools in other parts of the world through email or video communication to compare the percentage of that school(s) data. I also recommend that after discussing student data findings, students generate a list of issues or questions that came to mind throughout the investigation. Teacher could guide students to think outside their own school and consider possible school community initiatives to reduce food loss and waste.

***Recognizing Perspectives***

**Strengths:** The lesson plan asks students to use the information gathered through their observations as quantitative data. Students also will gather qualitative data through school personnel interviews, such as lunchroom staff, cooks, and students. This lesson does allow students to examine others’ perspectives and possibly identify what influenced them through the interviews. Through this lesson, the teacher is ask to demonstrate to students the “If Ed Sheeran’s “Shape of You” was about Food Waste” video.

**Areas for Improvement and Recommendations:** The lesson should include more interviews, such as including the principal, teachers, school lunch delivery personnel, and other schools. The lesson does not allow students to recognize and express their own perspectives and identify influences on that perspective, explain the impact of cultural interactions, or articulate how different access to knowledge, technology, and resources affects the quality of life and perspectives. I don’t agree with the video that makes up part of the lesson because it just took a popular song and the lyrics were changed. The video does not motivate student thinking on world issues or questions. The video could be demonstrated, but I think additional videos on malnutrition, waste lands, or farms from which their food came from might make a better impact on students. Students could further extend the lesson by considering their food selections and where they came from. Students could also investigate if there is a community garden or even if it is possible to start one within their community.

***Communicating Ideas***

**Strengths:** Throughout the lesson there are multiple opportunities for student discussion, which will reinforce their speaking and listening skills. One opportunity in student discourse is after reviewing the facts and data on food loss and waste reduction according to the Food and Agriculture Organization of the United Nations. Students will discuss some of the statistics and examine a graph depicting the per capita loss and waste of food in regions of the world. After watching the video, students will discuss why a Global Citizen created this parody video to help stop the wasting of food in our world. The lesson also encourages students to share their collected data for reducing food waste on social media by using the following hashtags: #WorldsLargestLesson and #TeachSDGs.

**Areas for Improvement and Recommendations:** This lesson did not provide many opportunities for students to communicate their ideas effectively with diverse audiences. Students gathered information and were just asked to share on social media. However, teacher could ask students to generate a list on ideas on how they can share their findings. For this lesson, I recommend that students include their findings in letters written to multiple people, such as principal, district CEO, aldermen, state senators and representatives. Students could also create a short informative video of their investigation and interviews. Writing letters and creating a video will allow students to select and use appropriate technology and media to communicate with diverse audiences.

***Taking Action***

**Strengths:** As is, the lesson does not provide students with opportunities to translate their ideas into appropriate actions to improve conditions.

Areas for Improvement and Recommendations: The lesson does provide students with opportunities to create a planned action based on evidence, but does not provide students with the opportunities to assess options for potential impact. I recommend students use their data to identify opportunities for personal collative action to improve conditions within their school and other schools in the district. Students could take their collected data to sources that will listen to their evidence and come up with ideas for change so that less food could go to waste and potentially go to those that are in need of food that our school does not consume. Students could also reflect on capacity to advocate for those in need of food within their communities, the city, and even other countries.

Overall, the lesson is a good start in getting students to think about the food they are consuming and wasting, more can be done so that students learn about those that are experiencing malnutrition. Many extensions can be made to the lesson so that more people are affected by their findings. Although the lesson includes some mathematics, it lacks many of the global competences.