

Chillcrest School

Plan for Interdisciplinary Learning and Evaluation

Situation: Fundraiser Dinner		
Teachers: Ashley Gagné Nina Vuong	Cycle: 3	Year: 6
Subject Areas: Mathematics and Language Arts		
Mathematical Competency 1: To solve a situational problem related to mathematics		
Cross-Curricular Competencies: <i>Intellectual Competencies</i> ⇒ <i>Competency 2: To solve problems</i> <ul style="list-style-type: none">○ Students will develop this competency through the mathematical problems presented in this ILES. Students identify the elements needed and the strategies to be used in order to complete this situational problem. Moreover, they will have to consider the guidelines while solving it. ⇒ <i>Competency 3: To exercise critical judgment</i> <ul style="list-style-type: none">○ Students will develop their critical judgment in two different areas. First, students will have to take into account the Canadian Food Guide to elaborate their menu. The food choices should be healthy and balanced. Second, students will develop the value of community outreach. They will discuss the importance of this fundraiser and how they can help less fortunate people around the world.		
Broad Areas of Learning: ⇒ Health and Well Being <ul style="list-style-type: none">○ Adoption of a healthy diet ⇒ Citizenship and Community Life <ul style="list-style-type: none">○ Concern about social issues○ Involvement in community project		
Essential Knowledges: <i>Mathematics:</i> ⇒ <i>Arithmetic: Meaning of Operations Involving Numbers</i> <ul style="list-style-type: none">○ Natural Numbers<ul style="list-style-type: none">▪ Operation sense: multiplication (e.g. repeated addition, Cartesian product), product, factor, multiples of a natural number, division (repeated subtraction, sharing, number of times x goes into y), quotient, remainder, dividend, divisor, set of divisors of a natural number, properties of divisibility		

- Decimals
 - Operation Sense: Multiplication and Division
- ⇒ *Arithmetic: Operations Involving Numbers*
- Decimals
 - Written computation: multiplication whose product does not go beyond the second decimal place, division by a natural number less than 11

Language Arts

- ⇒ *Writing System: Understanding Language*
 - Writing to a familiar audience (peers, family, trusted adults) in order to express meaning(s)
 - Identification of purpose for writing
- ⇒ *Profile of Self as Writer*
 - Personal contribution to the development of a writing community in the classroom through:
 - Initial research of a relevant issue, experience or event in own life in order to: think about a problem, make decisions or inform peers as an expert, e.g. deciding to buy a pet, choosing a camp, taking on a new responsibility, exploring a pressing school- or community related problem.

Learning Intentions and Rationale

Through completing this situational problem, students will develop their knowledge of health and wellbeing by referring to the Canadian Food Guide, as well community outreach by attempting to fundraise for less fortunate people. Students will elaborate a menu by using proper operations (+, -, x, ÷) and strategies. They will also practice their English language arts. They will write a letter to a specific audience and will inform them about an important issue.

At the end of this ILES, students will be able to:

- Refer to and use the Canadian Food Guide
- Identify the four main food groups
- Make healthy food choices
- Elaborate a menu within a budget
- Apply appropriate operations and strategies (repeated-addition, partitioning, etc.)
- Understand and recognize the value in helping people in need
- Write a letter with a real purpose to a specific audience
- Use an appropriate vocabulary to convey a message to the targeted audience

Professional Development Goal

Professional Competency 3

To develop teaching/learning situations that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the programs of study.

This professional competency will be developed through the design of this ILES. The teacher creates this situation to support students' acquisition of different

competencies. The teacher will be integrating two subject areas connected to two broad areas. This ILES demands both the collaboration between the teacher and the students. In reality, the teacher will serve as a guide while students will carry out and complete this project. As well, the teacher will also attempt to link students' prior knowledge to this situation, e.g. Canadian Food Guide, and build on it. Finally, the teacher will reflect on the complexity of this teaching/learning situation by looking at students' understanding.

Materials	
Teacher's guide	Calculator
Students' booklet	Project information
Canadian Food Guide	Computer (to show the website; optional)

Time	
Class period 1 (45 minutes)	The teacher will introduce the ILES. The organization, World Vision, is presented to students. Students will engage in discussion and their prior knowledge activated. Finally, they are given an overview of all the different activities.
Class period 2 (50 minutes)	Students will start the ILES. Students will identify the important elements to begin the situational problem. Then, they will start making menu choices by respecting guidelines provided in the booklet.
Class period 3 (45 minutes)	Students will calculate the menu item choices and determine how many item needs to be ordered. They will revise their choices, if needed. A new mathematical concept is introduced, multiplication of decimals.
Class period 4 (50 minutes)	Students will explain their choices by answering reflection questions. Afterwards, students will compose an invitation letter to the guests.
Class period 5 (60 minutes)	The teacher will wrap up this ILES by asking students to share their menu and to vote for the top 3. Students are also asked to fill out a self-evaluation sheet.

Teacher's Guidelines – by Ashley Gagné and Nina Vuong
Interdisciplinary Learning and Evaluation Situation

Introduction Phase

During the introduction phase, the teacher will set the context and the purpose of this situational problem. The teacher will engage students by probing their knowledge through questions and discussion. At the end of this phase, students will have an overview of the situation problem and where they are heading with it.

The teacher will begin by presenting the Interdisciplinary Learning and Evaluation Situation by introducing the organization, World Vision. The teacher will ask students why organizations, such as World Vision, exist. Then, students will be informed that they can too take action to bring change. The teacher will provide students with project information took from the organization website. In small group, they will read the information and discuss the importance of contributing to social issues. Afterwards, they will be informed about their participation to the selected project, which is to raise 650\$ to help 100 children in Ghana. Finally, the teacher will present the situational problem to the students.

10 minutes – Presentation of the organization and its purpose

The teacher will introduce World Vision to the class. Through class discussion, questions are asked to investigate students' prior knowledge:

- What do you think is World Vision's mission?
- Can you name other organizations that have the same objectives?
- Have you ever volunteer for such organization?

10 minutes – Read the project information and discuss its importance as a team

Students will read the project information. They do not know that they will participate in the project yet. In small team of four or five, they will discuss the importance of community outreach.

- Are these types of organization important? Why or why not?
- Think of a kind gesture you offered? How did it make you feel? How did the other feel? How about helping a whole group of people?

The teacher walks around and takes a minute or two to sit down and listen to each team's opinions.

15 minutes – Presentation and explanation of the fundraiser

The teacher will then inform students that they will take part in the project. They will raise 650\$ by organizing a fundraiser dinner. The teacher will give an overview of the situational problem by explaining briefly all the activities in this ILES. Also, the teacher will explain what is expected from them. They will be evaluated on the strategies used to complete this ILES; the organization of their work; whether they have followed the guidelines and requirements in order to host a successful fundraising dinner; and their ability to explain their choices and final menu.

MATERIAL USED: Essential Nutrition in Ghana (World Vision)

Development

Throughout the whole ILES, students will be performing individually on their student's booklet. However, they are encouraged to sit with one or two classmates to exchange ideas and/or justify their choices. The teacher will circulate to see how students are working. The teacher should remind them to revisit and revise what they have done so far and encourage them to make budget estimates, as all these activities build on one another, and the correction of a mistake or change of a choice will avoid further mistakes in subsequent steps.

ACTIVITY 1: THE MENU

PART 1: GETTING STARTED (20 MINUTES)

To get started on the situational problem, students will fill out the “What You Know” and “What You Need to Know” sections (p. 4). To do this, students will sit in groups of two or three and read the project description together, determining what the important facts to be recorded are (“What You Know”), and what other information they may require in order to complete the situational problem (“What You Need to Know”). The teacher will circulate and listen to different groups for one or two minutes each, and will answer any questions that may arise.

PART 2: MAKE MENU ITEM CHOICES (30 MINUTES)

Before students begin to plan their menu, the teacher will begin a discussion about the Canadian Food Guide. He/She will ask students what they already know about the food guide/food groups. This is a good opportunity to engage students by encouraging them to share their prior knowledge about the different food groups. The teacher will encourage students to give examples of what can be found in each food group, providing

examples if students are not sure, or to add to their knowledge (ex: the Meat & Alternatives food group is not only made up of meat but servings of this group can also consist of beans, nuts, and/or tofu!). Teacher will also stress the importance of a balanced diet that includes elements of each group and remind students that their menu must include at least one food item from each food group. The teacher will also talk about the importance of portion/serving sizes, informing students that they will soon have to figure out the servings included in each item on their Good Food Catering Services Menu.

Students will then begin to choose the food, drinks and supplies necessary for the fundraising dinner, keeping all of these facts in mind, as well as that they have a \$500 budget to feed 100 guests, and that each item on the Good Food Catering Services Menu has a different number of servings (the exact amount of which they will later be calculating). The teacher should encourage the use of the Canadian Food Guide while students decide which foods they would like to include in their menu, and there is a chart provided in the student booklet (p. 6) in which students can record their food choices to ensure they have included dishes from all food groups.

Students will be working in their own student booklet but the teacher will encourage them to sit with one or two classmates and share ideas with each other. While students make menu decisions, teacher will circulate the class and look over students' work and answer any questions that may emerge.

MATERIAL USED: Student Booklet
 Canadian Food Guide

ACTIVITY 2: MAKE CALCULATIONS (45 MINUTES)

Once the students decide which dishes they would like to include in their menu, they can begin doing calculations to see how many quantities they will need of each dish to serve the 100 guests, as well as to determine if they are within their \$500 budget. The “This is How I Calculated My Budget” (p. 7-8) is provided for the students to perform these calculations.

This activity will be performed individually, as students have different menu choices and will therefore be performing different calculations. The teacher will again be circulating the classroom to observe students’ work, help with any difficulties (point out any wrong calculations and help students determine the correct answers), and answer questions. This activity will include a mathematical operation that is new to students (multiplication of decimals) and students will explore this new concept on their own. After about 10-15 minutes, teacher can ask a few students who got the correct answers to share their strategies.

Students will be required to make sure that their food choices fit the budget. If so, they can move on to the next step, which is to fill out the Price List chart. If not, they will be required to modify their choices to be within budget.

MATERIAL USED:

Student Booklet

Canadian Food Guide

Calculator

ACTIVITY 3: LANGUAGE ARTS

PART 1: WRITE ABOUT YOUR MENU (20 MINUTES)

For this activity, students are required to answer a few questions on their menu choices. The questions are provided on page 10 and will allow students to reflect on their menu choices and will also remind them of the reason they are completing this situational problem, causing them to ponder its importance.

These questions will be answered individually, as answers are personal. The teacher can circulate the classroom, taking a look at students' writing, asking prompting and reflective questions to students who seem stumped.

PART 2: LETTER TO GUESTS (30 MINUTES)

After they answer these reflection questions, students will be asked to read the information about the World Vision program in Ghana to better comprehend the importance of this fundraiser. If a Smart Board or computer is available, the teacher may want to show the students the World Vision website to engage them, and so that students can familiarize themselves with the site and explore it themselves at a later time if they wish. After having reflected upon a few questions, having read about the organization, and perhaps having explored the website, students will be able to write a letter to their parents and other possible guests. The teacher will explain that the letter is to briefly describe World Vision and the fundraising program for children in Ghana, and that the goal of the letter is to encourage people to come participate in our fundraiser!

The students will then write the letter to be shown to their parents and anyone else they may wish to invite. As students do this individually, the teacher will supervise by walking around the classroom and reading some of the students' work. Of course, the

teacher will answer any student questions and help students who may be having trouble writing in a personal letter format. The main goal of this letter is to encourage parent participation while allowing students to practice writing skills.

MATERIAL USED: Student Booklet Computer (World Vision website)
Project Information

ACTIVITY 4: CONCLUSION – VOTE – SELF EVALUATION

After all of the menus have been prepared and calculations are done, the students will be doing a short and informal presentation (about two minutes each) to the class about their menu choices and the rationale behind their choices. The teacher will listen to the presentations and take note on whether the student made appropriate menu choices and whether the student is able to communicate their choices and the importance of these to the class. Once all students have presented their menus, the class will take a few minutes to vote on their top 3 menu choices. They will have about 5-10 minutes to write why they have chosen each menu and then will hand in their voting sheet to the teacher.

Finally, the students will complete the self-evaluation sheet to reflect upon the situational problem. This activity will act as a conclusion for this ILES and can help students realize what skills they may need to focus on or may need help on during the next situational problem they complete.

While students complete the self-evaluation, the teacher will tabulate the votes to determine which menu will be used for the fundraising dinner, and will make the announcement to the class once they have all completed their self-evaluations.

MATERIAL USED: Student Booklet

**Please note that, as each step in the situational problem must be completed to move on to the subsequent one, if any students do not finish the activities within the allotted time, they will continue it during the next class period devoted to the situational problem or when they have another period of free time.*

Conclusion/Follow up phase

Languages Arts is the complementary subject matter proposed in this ILES. The last activity of this ILES helps students reflect on their choices. Students will be asked to share their final menu in consideration to the Canadian Food Guide and the budget of 500\$. This allows students to hear other points of view and reflect on the steps of this ILES. Afterwards, students will be asked to vote for the best menu, which will be used for the fundraiser dinner. Through these discussions, the teacher will be in a better position to assess students' understanding and reasoning without evaluating them in a formal way. He/She will understand better how students approached this situational problem. Finally, students are asked to self-evaluate their work. A self-evaluation will give students time to identify their strengths and weaknesses, as well as to review the whole process of this situational problem. Based on students' self-evaluation, the teacher could also assess the complexity of this ILES and prepared better future ILES.

After the completion of the students' booklet, the fundraiser dinner will be organized. The students' will see the concrete result of their work. Moreover, World Vision informs us that semi-annual progress reports are sent to the participants. Students will be able to see the benefit and the value of their actions through these reports. They will truly acknowledge the power that they have in their hands, as an individual or as a community.