

EXEMPLAR 1

Making healthy food using local know-how and selling it and/or sustaining the household. An entrepreneurship project

LESSON PLAN CONTENT

What should the teacher teach to prepare the learners for the problem analysis and solution development? Potentially the following ...

Problem addressed 1a:

The first problem is the cost of a healthy meal in times of unemployment or under-employment. These are persisting problems of the economy that were especially exposed during the Covid-19 hard lockdown when many 'breadwinners' lost all income sources other than grants. Families/households could not afford to buy enough food.

Problem addressed 1b:

Unhealthy eating habits (rich or poor); based on what is advertised and what is available, and what we teach our taste buds to love, we drink and eat too much unhealthy, refined sugar and starch like store bought bread, and our gut bacteria suffer; this weakens our immune system and we get sick more often and for longer; allergies, obesity, Type II diabetes may also be linked to unhealthy diets. We can balance this out by adding fermented foods, homemade bread and homegrown vegetables to our meals. This way we draw on indigenous knowledge that people around the world and in Africa have about how to stay healthy by eating fermented foods made only out of natural ingredients (e.g. unpasteurised milk + culture + fruit = healthy yogurt).

Solutions to both problems

Unhealthy eating habits (rich or poor); based on what is advertised and what is available, and what we teach our taste buds to love, we drink and eat too much unhealthy, refined sugar and starch like store bought bread, and our gut bacteria suffer; this weakens our immune system and we get sick more often and for longer; allergies, obesity, Type II diabetes may also be linked to unhealthy diets. We can balance this out by adding fermented foods, homemade bread and homegrown vegetables to our meals. This way we draw on indigenous knowledge that people around the world and in Africa have about how to stay healthy by eating fermented foods made only out of natural ingredients (e.g. unpasteurised milk + culture + fruit = healthy yogurt).

Activities and Items for Assessment

Analyse the problem

Plan the solution

Budget for the project

Make the food

Sell the Food

Account for income and expenditure

Teachers to develop an interview guide for learners to use? Learners to find out what foods people are already making, etc.

- Planning:** What skills/competencies do I need for this project? (e.g. obtain info, time management, research, budgeting)
- Planning:** What information do I need for this project? (e.g. what are people's food preferences, what can they afford, who has knowledge of making yogurt, healthy bread, etc).
Teacher helps learners with an interview guide.
- Accounting:** How much do I think it will cost? (my initial budget)
What did it actually cost to make the food keeping in mind the use of:
Ingredients
Electricity, Premises, Advertising, Packaging, Distribution, logistics etc.
How much did I sell (how many units)? How much did I sell it for (price per unit)?
What was my profit or loss?

Reflect on the outcomes:

- Did I produce healthy food? Could I eat it?
- Could I share it with others? (addressing hunger)
- Healthy foods that could be sold? Did I make a profit or a loss? (Earning money)
- What would I do with this money if I want to maintain the business? (Money flows)
- How did I clean up and what did I do with the waste (if any)?
- Did I reduce/reuse/recycle? (See also Exemplar 2.)
- Did we consult with our community members to possibly bring indigenous knowledge into the production process?
- Did I use information / knowledge from my community / elders / documents?
- What can I do differently next time?
- What skills (competencies) did I learn from doing this project?

How to teach this lesson and assess the learning:

See rubric below for just one example, which teachers could adapt according to their own needs. The rubric is somewhat generic, but could be made more specific for the “Healthy Foods” activity. Either way, teachers need to let learners know which aspects of their project will be assessed, and how. In particular they will need to understand that much of what will be assessed will happen before and after the big “Entrepreneurs Day”, even though the learners’ focus may be on the day itself.

SDG links: 1, 2, 3, 8, 9, 11, 12

Other activities that could be similarly used to identify and solve a problem

- Vegetable gardens - home based, school based or communal
- Making compost from suitable kitchen or garden waste to ‘feed’ the veggie garden
- Selling from the vegetable garden
- Budgeting and accounting for the vegetable garden
- Links to existing feeding schemes (supplement pap with sauce from vegetables e.g., or leaves for sandwiches)
- Links to soup kitchens in the community

Other problems: Soil erosion, lack of shade

Solution: Tree planting, growing tree saplings as an entrepreneurial activity

Note : A steady supply of water is needed for this activity

RUBRIC 1: FOR ENTREPRENEURSHIP PROJECT ASSESSMENT

In EMS Grade 7, the assessment of the Project work is 40% of the final assessment.

TASK	ASSESSMENT (MARK / COMMENT / BOTH)	CRITERIA (TEACHER TO ADD TO OR DEDUCT FROM THESE DEPENDING ON OWN CAPS CONTEXT AT THE TIME)
1. Problem Identified		<p>Is this a real problem in the learner's context?</p> <p>Was lesson content or given materials used to better understand the problem?</p> <p>Was further research done to identify and/or better understand the problem? (e.g. interviewing elders or reading up about it)</p> <p>Are the social aspects of the problem clear?</p> <p>Are the environmental aspects of the problem clear?</p>
2. Solution proposed		<p>Is this a practical, interesting or creative solution proposed by the learner?</p> <p>Is the solution linked to the problem?</p> <p>Are the social aspects of the problem addressed by the solution?</p> <p>Are the environmental aspects of the problem addressed by the solution?</p>
3. Planning		<p>Is there evidence that the learner has carefully planned the activity?</p> <p>Were the practical aspects planned for?</p> <p>Were the financial aspects planned for?</p> <p>Did the learner(s) manage their time well?</p>
4. Execution		<p>Was the activity carefully executed?</p> <p>Degree of independence / group work / identifying help needed for execution</p>
5. Environmental considerations		<p>How much waste was produced? Were efforts made to avoid or reduce waste production?</p> <p>Is there evidence of re-use of materials, and/or recycling?</p> <p>Is the environment better off or worse off after this project?</p>
6. Budgeting		<p>Is there evidence that the learner carefully budgeted for the project/activity?</p> <p>Does the learner understand the basics of budgeting?</p> <p>What is the range of items included in the budget (e.g. materials, electricity, water, distribution, cleaning up, etc)</p>

7. Accounting		<p>Does the learner understand the basics of accounting?</p> <p>What is the range of items included in the accounting (e.g. materials, electricity, water, distribution, cleaning up, income, etc)</p>
8. Reflections / Evaluation		<p>Did the learner reflect thoroughly on ..</p> <p>The nature of the problem?</p> <p>How the activity helps to solve the problem?</p> <p>Whether a profit was achieved or not?</p> <p>The environmental impacts of the activity (e.g. waste produced vs waste reduced or avoided)?</p> <p>Why the project was worth doing as a business activity, or not?</p> <p>What they have learnt and how they would do it differently next time?</p>

Discussion on Assessment

Discuss Rubric 1 with reference back to the presentation on active learning and higher order learning outcomes.

1. How does this assessment encourage activity learning? It is focussed on a project that learners themselves have to do, and they are encouraged to learn from doing the project, through the kinds of tasks that are given. This includes deliberate reflection on what they have learnt. Therefore, the assessment is not just on whether they have done a successful entrepreneurs day project, but on what they have learnt from it, too.
2. Which aspects of the rubric looks at basic content knowledge? (Example: Task 1)
3. Which aspects of the rubric assess generic competencies? (Example: Planning, problem-solving)
4. Which aspects of the rubric assess subject-specific competencies? (Example: Budgeting, accounting)
5. Which aspects of the rubric assess values? (Example: Environmental considerations, reflections: Why the project was worth doing or not)
6. Which questions/criteria in the rubric assess higher order thinking? (Example: Reflections / Evaluation)