

The next big thing!

Key Stage 4 CFA New Product Development

Suggested presenter	Someone with a level of technical knowledge specifically around sensory science and a good understanding of the process of food production “from field to fork” with training skills that include presenting/facilitating a group
Lesson Information	This session is aimed at Key Stage 3 pupils (Year 10 and 11 – age range 11-14 years)
Duration	Up to a full day
Aim	The purpose of this lesson is to introduce pupils to the process of new product development
Learning Outcomes	<p>The students will be able to;</p> <ul style="list-style-type: none"> • Understand the process of new product development • Be able to identify where food products come from • Understand consumer groups • Work with a design brief • Present their ideas
Key Points	This lesson plan is a guide only. As the person delivering the lesson you are encouraged to adapt it to suit the class you are teaching. It is important to remember that the main point is to inspire and introduce young people to the food sector.

Please refer to the “How to guide – Preparing for the lesson”

Lesson Format

1. Introduction
2. Tasting
 - a. Discussion
 - b. Video
 - c. Activity
 - d. Mini plenary
3. Break
4. Creating a sandwich
 - a. Discussion
 - b. Activity
 - c. Mini Plenary
5. Jobs the word
 - a. Discussion
 - b. Activity
 - c. Plenary
6. Finish

Resources Required

- ✓ A-List Airlines Brief (Downloadable)
- ✓ Chilled Food Products List (Downloadable)
- ✓ Field 2 Fork Presentation (Downloadable)
- ✓ Fit for a king (Downloadable)
- ✓ Food Labels (Downloadable)
- ✓ Taste Panel Evaluation (Downloadable)
- ✓ Traceability Sheet (Downloadable)
- ✓ Any company products for demonstration or gifts

Introduction

Introduction (10 minutes)

It is important that students understand the format of the lesson they are about to participate in, spend a minute explaining how the session will run, the activities and things they will be learning.

Aim to spend about 8 minutes talking about yourself, your role and the company you work for. Consider using some pictures to show the place you work, or bringing in some produce that the students may have seen before.

This introduction is the opportune time to demonstrate real enthusiasm for your role and sector, enthusiasm is infectious.

***NOTE:** Each group of pupils you work with will be at a different ability, Key Stage 4 pupils will range between the ages of 14 to 16, you will need to gage their ability and how technical/scientific you make this lesson.*

Project Outline (10 minutes)

Set the scene right from the beginning with the students;

A-List Airlines is a transatlantic airline that flies celebrities around the world. Their airplanes are the best in the business, made to meet every diva's demands; from cinema screens showing the latest block busters, to star treatments they really are the preferred choice for any celebrity who can afford it.

They are experiencing some catering problems, their current supplier has let them down on a number of occasions, the celebrities are complaining about the quality of the food, the calorie and nutritional content and its freshness.

A-List Airlines has decided to invite four new food companies in to propose a new product that could meet the needs of the ever so demanding passengers.

The class will split in to four teams to undertake this challenge. If possible it would be good to offer an incentive for the team whose menu is chosen by A-List Airlines (you).

The day will follow this brief;

- Business formation
- Customer brief
- Consumer group
- Product Design
- Taste test
- Production – Field to fork
- Cost
- Packaging and Logo
- Label
- Pitch

NOTES

Business formation (15 minutes)

The students in their team will need to decide on a company name, select a student to be the main spokesperson for the group, it will also be important for them to record their findings as they go along, if available they may be able to do this by video/camera. Ask them to decide on the methods they will use to record. Allow them time to sort out the recording equipment.

Customer brief (15 minutes)

Explain to them how your own organization takes its brief from your customers, the demands that they place on you in respect to quality, quantity, timescales, cost, presentation etc.

Whose role is this within your organisation.

Look at the company brief with the students; the students today will be working on the lunch menu, do they have any initial ideas, questions that they have about the brief?

If they had the opportunity what questions would they ask A-List Airlines before they got working on the brief?

Consumer group (10 minutes)

Discuss with the students the type of consumers that the brief has described, why do they think it is important to understand the consumer? What can we glean from the brief, what other things could we assume; age, sex, taste, preferences etc.

This would be a good time to take a break if the school has timetabled breaks

Product Design (70 minutes)

Discussion (10 minutes)

The students are working on a lunch menu, this must include; Main Course, Pudding and a Drink.

Explore the Chilled Food Products sheet, this sheet lists some of the chilled food produce the pupils will be choosing from. Discuss any food items they are unfamiliar with.

The Chilled Food Product sheet also includes the key points about chilled products that will need to be considered when selecting the products and deciding on the manufacturing process.

The Chilled Food Product sheet also lists the categories of the food groups along with a list of what you can get out of the food items, the students will need to begin to consider all of these things when selecting their food products.

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Activity (30 minutes)

Now the students should be ready to go back to their groups to begin to prepare their menus, they will need to keep the client brief and consumer groups in the forefront of their decision making.

The students will need to write up their menus on a piece of a paper once they have finished.

Plenary (10 minutes)

Bring the students back together, discuss how they have found the activity, how they have reached decisions, if they are happy with their choices, if they enjoyed coming up with a new menu.

Whose role is this within your organisation.

Taste test (20 minutes)**Discussion (5 minutes)**

Although we do not have actual produce to test it is important for the students to get some feedback at this stage.

Explain to the students that they are going to be a taste panel for each other, describe how important this is in the product development process and how most food companies employ a taste panel when designing new produce or improving existing products.

Activity (15 minutes)

Two representatives from each team will go around to the other teams and present their menu plan. The taste panel will complete an evaluation card for each menu. Remind the class that they should be giving honest and fair feedback.

Review (5 minutes)

Allow the teams some time to get back together to discuss the feedback that they have had and to make any changes to their menus that they feel are needed.

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Production – Field to fork (30 minutes)

Now that the students have a good idea of the menu they will be producing they will need to plan its production.

Discussion (10 minutes)

Explaining that everything we eat comes from plants or animals, this means that our food has had to go through a process; this is called field to fork. Food has to be farmed, caught or grown at home. Food for public consumption has to go through a number of measures to ensure it is safe, it also has to meet quality standards and the standards of the consumer, we wouldn't want to eat green carrots.

Go through the field to fork presentation

Activity (10 minutes)

Hand out the Traceability worksheets and ask the groups to look at the food products on their menu and complete the worksheet.

Plenary (10 minutes)

Bring the group back together; what did they discover completing this activity, could they find any produce that did not come from plants or animals. Do they think it would be an interesting job to work in the planning/procurement section of a food company?

Whose role is this within your organisation.

Cost (10 minutes)

Discussion (10 minutes)

Putting a price on a food item is difficult as there are so many factors to consider. Discuss with the class the items that they think need to be factored in you will be looking to include;

Farming, Transport, Competition, Consumer, Factory, Production, Packaging, Staffing, HACCP

Discuss with the students the factors your company has to consider when pricing up a product. You could give some examples here of your own produce pricing.

Whose role is this within your organisation.

This would be a good time to take a break for lunch now, when the students come back they will be working on their packaging and branding, thank them so far for their hard work.

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Welcome back (5 minutes)

After the break it would be a good time to recap on the mornings activities. What have they achieved so far, what have they learnt? How is their company shaping up under the pressure?

Packaging and Logo (50 minutes)

Now the students have their menu, they know where and when it is being put together they need to consider how the finished product will look. **Remember that this is very important to A-List Airlines.**

Discussion (10 minutes)

It would be great if you could show some of your own packaged products here to give the students an example of the finished article. If not you can use the work sheet; **fit for a king**

What do the students think they need to consider when designing their packaging, here are some ideas;

- Cost
- Size
- Materials
- Durability
- Ease of production
- Storage
- Transport
- Look
- Branding
- Reusable
- Hygiene
- Cutlery
- Serving

Activity (30 minutes)

In their groups the students now need to design their logo and packaging for their menu plan. They must at least have the design on paper if they have time and the resources are available they could mock up their design.

Plenary (10 minutes)

Bringing the class back together, how did they find this activity, was it easy, how many of the considerations did they cater for, which ones did they decided were most important?

How does this happen in your company, who's role is this?

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Label

Discussion (5 minutes)

Can the students explain product labels to you, why are they important, what do they mean?

Every food product has to have a label and the students menu plan will be no different, take some time to discuss different labels with the students, what they include and why.

Activity (15 minutes)

Give each group a label sheet and work with them through each key area, as you work through ask them to think about their product and the sort of labeling it would have.

How does this happen in your company, whose role is this?

Pitch (60 minutes)

Now it is time for the students to prepare their pitch, remind them that they are presenting to you as A-List Airlines and you will be choosing a winning menu and team. Their pitch must be five minutes long and they can prepare their pitch in anyway. The pitch must include;

- The menu
- The reason for choosing this menu
- The planned production of this menu
- The packaging and design of the finished product

Give the students 30 minutes to create their pitch

Bring the students back together and get them to take it in turns to pitch to you. When they have finished you may like to get them to do a small activity whilst you are looking through your notes and making a decision on the winner.

Mini activity (10 minutes)

Get the students to consider the amount and variety of jobs that they have learned about during this process. Ask them to complete a “my job is...” Sheet whilst you are deciding on the winning team.

And the winner is...

Time to bring the class back together, talk through the experience you have had today, your highlights and then you can announce and present to the winner.

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