

E-learning: best practices



Gerhard Schleining

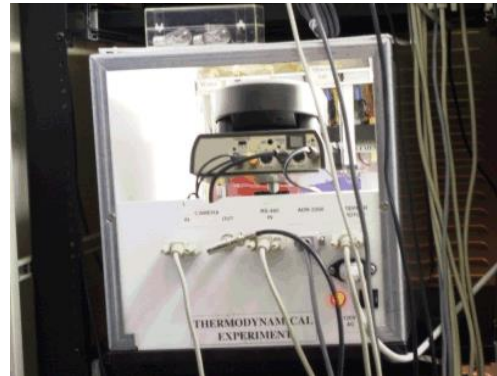
University of Natural Resources and Life Sciences, Vienna

Department of Food Science and Technology

E-learning

E-Learning: „use all kinds of electronic/digital media“

- **Electronic white boards**
- **Youtube channels**
- **Virtual labs**
- **Serious games**
- **.....**







**Limits for experiments:
equipment, costs, space, safety**

- **Online courses**

Online courses

- using **Learning and Content Management Systems (LCMS)**, like **moodle**
- **Selfstudy /Moderated /Blended learning**



Courses

▼ Collapse all

▶ **European FooD-Study & Training Alliance**

▶ **SEA-ABT (South East Asian Academy for Beverage Technology)**

▶ **POSTHARVEST**

▼ **Connect4Action**

▼ **Courses for Industry Professionals**

Internal communication "Challenges during the innovation process" ⓘ

NAVIGATION

Home

▶ ISEKI-Food E-learning

▶ Courses

CALENDAR

◀ April 2019 ▶

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Online courses

+	-
<ul style="list-style-type: none">• Learning independent from location and time	<ul style="list-style-type: none">• Engagement is difficult• missing body language• missing social contacts

What must be done to fail

- Do not specify **user requirements**
- No **strategy** but trial and error
- No communication with **users**
- Wrong **technology**
- No **commitment** of top management
- Do not care about **ROI** (Return on Investment)
- Cheating when planning of
-

CARPE DIEM

6 steps towards
future-orientated,
student-centered
LEARNING.

1 BLUEPRINT

Work with your team to lay out the mission statement for your course and work out what you want to achieve.



2 STORYBOARD

Make a visual representation of your learning, teaching and assessments. Use it to work out your schedule and how things fit together. Use the five stage model as a scaffold.

3 BUILD YOUR PROTOTYPE

Build your design in the online environment. Develop your e-fivities and test them in a real and practical way.



4 REALITY CHECK

Have your colleagues test your design and collect the feedback. Test out other participants designs.



Use the feedback to refine the design. Indicate where more work needs to be done and who might do the work.

5 REVIEW ADJUST

6 PLAN YOUR NEXT STEPS

Assess the risks involved with being able to complete the course. Ask yourself what resources you are going to need and set clear deadlines!



Layout: clear structure and description



e-learning

Home > Courses > European FooD-Study & Training Alliance > Entrepreneurship in the Food Industry (50 h)

NAVIGATION

Home

- My home
- ISEKI-Food E-learning
- My profile
- Current course
 - Entrepreneurship in the Food Industry (50 h)
 - Participants
 - Badges
 - INTRODUCTION
 - 1. Entrepreneurial Goals & Context
 - 2. Recognising Opportunities
 - 3. Developing Ventures
 - 4. Finding Resources
 - REFERENCES
 - ASSESSMENT
 - FEEDBACK
- My courses
- Courses

ADMINISTRATION

- Course administration
 - Turn editing on
 - Edit settings
- Users
- Filters
- Reports
- Grades
- Badges



Entrepreneurship in the Food Industry

This module will enable you to develop entrepreneurial skills and attitudes by focusing on the practices and process of entrepreneurship, including opportunity recognition, people and markets, finance, intellectual property and innovation.



Announcements



General discussion forum

if you have any question to trainers or other participants, please post it here

Turn editing on

SEARCH FORUMS

Go

[Advanced search](#)

Learning Outcomes

After successful completion of the activity, the participants are able to:

- Appreciate the commercial drivers for innovation and product development within the food industry
- Understand how to identify, contextualise and communicate opportunities
- Analyse their own entrepreneurial skills and appreciate how to further develop these as part of their ongoing personal development

INTRODUCTION



The interactive nature of the online resources in this module will help you to develop **key entrepreneurial skills** such as collaboration, creative thinking, and problem solving. Asynchronous learning will be supported by online discussions and assessment guidance to check progress.

This module will be primarily structured around the '**Opportunity Business Model**' unpacking

ONLINE USERS

(last 10 minutes)
None

Motivating Layout

Best Storage and Transportation Practices



Short presentation on: [Best Storage and Transportation Practices](#) 3.5MB PDF document



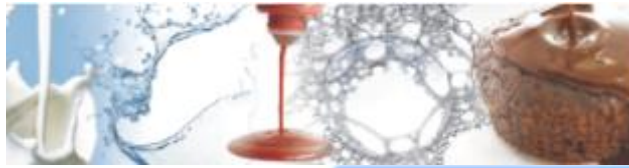
Essay on: [Best Storage and Transportation Practices](#) 2MB PDF document



Qself evaluation: [Best Storage and Transportation Practices](#)

Layout: attractive elements

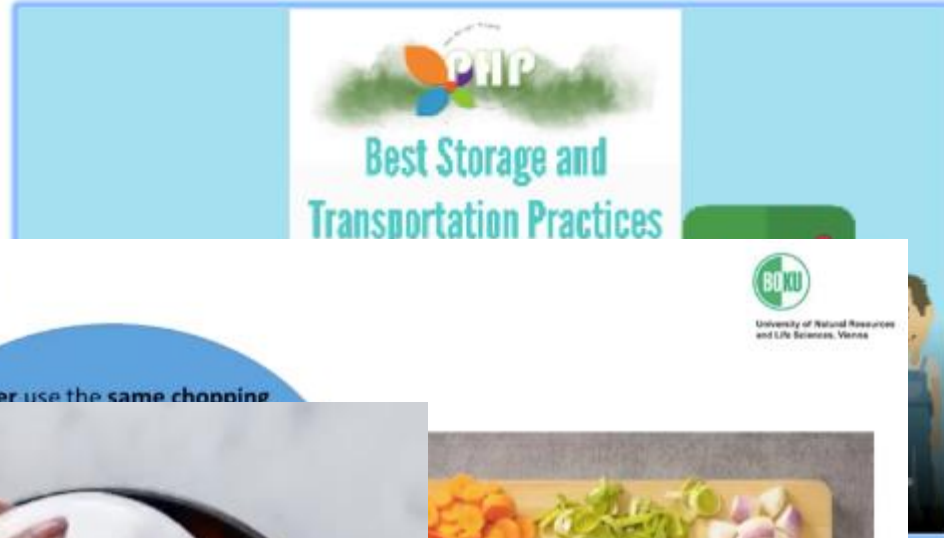
Static
pictures



animated gifs



Videos: cartoons



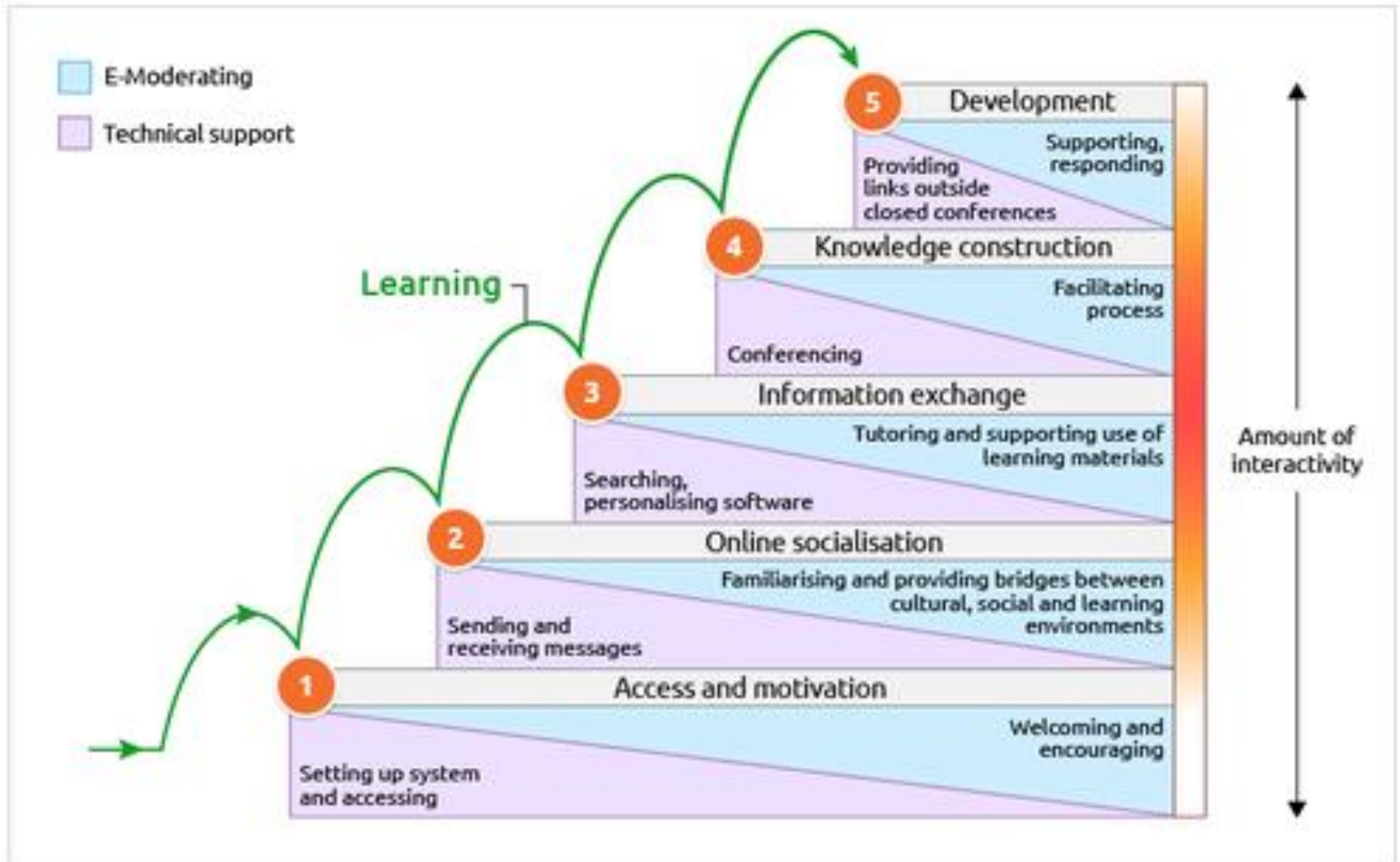
pps



Youtube

E-moderating

The essential role is promoting **human interaction and communication**





Professor Gilly Salmon is Academic Director at **Online Education Services (OES, <http://www.oes.com>)** in the UK and has been a learning innovator for more than 30 years and is one of the world's leading thinkers in digital and blended learning.

- The key for Active Online Learning
- at least for 2 people working and learning together, online, not at the same place
- Needs to be designed in advance

Socializing

General

754.323 Validation of Cleaning Processes and Hygienic Design (3 ECTS)



announcements



FREQUENTLY ASKED QUESTIONS

do not hesitate to ask questions, there are no silly questions

INTRODUCTION



Organisation

1.7MB



Introduction of participants



Group building

Please add your name to a group

Introduction of participants

Hédi Mitter

 Subscribed

◀ Christina Wendelin

Display replies flat, with oldest first ▾

Move this discussion to ... ▾

Move

Pin



Hédi Mitter

by Mitter Hedvig - Monday, 23 April 2018, 10:59 AM

Hi everybody!

My name is Hédi (my real name is Hedvig, but i don't like it) and I'm from Hungary, Budapest. I grew up in Esztergom near to Budapest.

After grammar school I decided to go to Budapest for studying "Food engineering" at Corvinus University.

During my studies, I worked in Nestlé as a Technology Trainee and after that in Metro Cash & Carry as a Food quality Trainee. I decided to focus on Food Safety and Quality. So after my Bachelor, I enrolled in the Master Food Safety and Quality Engineer at SZIE.

I decided to come in Vienna for this semester as an Erasmus student to study languages and new usefull things about my studies.

Average of ratings: - Rate... ▾



[Permalink](#) | [Edit](#) | [Delete](#) | [Reply](#)

Socializing: Group building

General

754.323 Validation of Cleaning Proces



announcements



FREQUENTLY ASKED QUESTIONS

do not hesitate to ask questions, there are no silly questions

INTRODUCTION



Organisation

1.7MB



Introduction of participants



Group building

Please add your name to a group

Group building

Please add your name to a group

S)

View

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First Page

Group1 - Building evaluation (Picture 6)

1. Lise BRAY
2. Aurore AHLSELL DE TOULZA
3. Julie JANSON
4. Hilde KEMME

Group 2

1. Isa BERGDAHL
2. Jan LANDZETTEL
3. Sylvain Merheb
4. Marianne Dahle
5. John Osamwonyi

Group 3

1. Ingeborg Ertesvag
2. Riccarda Chiappani
3. Rebecca Knechtl
4. Margot Tillon

Interactive individual task: ask and answer questions

HYGIENIC DESIGN



Food Safety and Hygienic Design



machinery directive



EHEDG Doc.8: Hygienic Equipment Design Criteria (2018)







INDIVIDUAL TASK: FS & Hygienic Design: Question/Answer

INDIVIDUAL TASK: FS & Hygienic Design: Question/Answer

1. Ask a question about Food Safety and Hygienic Design
2. Answer a question from somebody else

Add a new discussion topic

Discussion	Started by		Replies
HACCP		Merheb Sylvain	1
Legal requirements		Tillon Margot Nirina Marie	1
Indirect product contact surface		Bergdahl Isa Katariina	1
GMP & GAP		Chiappani Riccarda	1

INDIVIDUAL TASK: FS & Hygienic Design: Question/Answer

Dead Ends

 [Subscribe](#)

[◀ Self draining](#)

[Zoning ▶](#)

Display replies flat, with oldest first ▾

Move this discussion to ... ▾

[Move](#)

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Dead Ends

by [Knechtl Rebecca](#) - Monday, 1 April 2019, 10:11 PM

Why are dead ends a big issue for food safety?

Average of ratings: [✓ Rate...](#)

[Permalink](#) | [Edit](#) | [Delete](#) | [Reply](#)



Re: Dead Ends

by [Ertesvag Ingeborg](#) - Monday, 2 April 2019, 6:09 PM

Dead ends are areas where raw materials/products/cleaning products can get stuck and create an accumulation of unwanted matter. Dead ends can create big microbial problems in the food industry. They are great places for microorganisms to settle, live and grow. The microorganisms can create biofilms and create a continuous contamination to the raw material/product.

Dead ends are hard to clean, due to the design of the equipment. When it is hard to clean, it often takes a lot of resources, time and money. The industry can not sell products with contaminants of unwanted microorganisms, and therefore need good cleaning systems to avoid unwanted matter in the dead ends. The best way to solve the problem is by cleaning more often, create a smart clean in place system or change the design/layout of the equipment.

Average of ratings: - [Rate...](#) ▾

[Permalink](#) | [Show parent](#) | [Edit](#) | [Split](#) | [Delete](#) | [Reply](#)

Interactive individual task

HYGIENIC DESIGN



Food Safety and Hygienic Design



machinery directive



EHEDG Doc.8: Hygienic Equipment Design Criteria (2018)



INDIVIDUAL TASK: FS & Hygienic Design: Question/Answer



INDIVIDUAL TASK Hygienic Design: I know something

INDIVIDUAL TASK Hygienic Design: I know something

Article: Hygienic Design: How Our Thinking Has Evolved

 [Subscribe](#)

[◀ Training of staff](#)

[HACCP ▶](#)

Display replies flat, with oldest first ⇅

Move this discussion to ...



Move

Pin



Article: Hygienic Design: How Our Thinking Has Evolved

by [Rykkelid Dahle Marianne](#) - Thursday, 4 April 2019, 1:47 PM

<https://www.foodsafetymagazine.com/magazine-archive1/december-2016january-2017/hygienic-design-how-our-thinking-has-evolved/>

This is an interesting and short article discussing principles of hygienic design, I want to draw forward this quote in particular, because it enlightens the costs and extra work that can be caused by poor design:

"In this case, to compensate for a poor design, we need to do more aggressive cleaning, which could include partial or complete disassembly of a piece of equipment or even components of the facility to allow for a thorough cleaning at a set frequency."

Average of ratings: - [Rate...](#) ⇅

[Permalink](#) | [Edit](#) | [Delete](#) | [Reply](#)

Interactive individual task

INDIVIDUAL TASK: Equipment evaluation

1. Select an equipment from (1)
2. fill in the **number of the picture** and **your name** in the list of already selected equipment (2)
3. evaluate equipment:
 - What is good, why is it good
 - What is wrong, how can it be improved
4. upload a powerpoint presentation showing weaknesses and strenghts and suggestions for improvements

Add a new discussion topic

Discussion	Started by		Replies	Last post
Image 5		Merheb Sylvain	0	Merheb Sylvain Sun, 7 Apr 2019, 7:23 PM 
00010		Kemme Hilde Annebeth	0	Kemme Hilde Annebeth Sun, 7 Apr 2019, 5:21 PM 
00013		Tillon Margot Nirina Marie	0	Tillon Margot Nirina Marie Sat, 6 Apr 2019, 5:21 PM 
Picture 00004		Ahlsell de Toulza Aurore	0	Ahlsell de Toulza Aurore Sat, 6 Apr 2019, 12:22 PM 

Interactive offline group task



Building Design



GROUP TASK: Building Evaluation



Upload results building evaluation

make a brainstorming on your picture answering the following questions:

1. what is good, why is it good
2. what is bad, how can it be improved

Task Building design

make a brainstorming on your picture answering the following questions:

1. what is good, why is it good
2. what is bad, how can it be improved

1

1



2

2



3

3



Interactive offline group task

BAD & IMPROVEMENT



- Open process can cause contamination : Lid cover cleanable
- Cables mounting are not easy to clean, accumulation of dust/product : Covered by lid or take away of the production line in a vertical grid in one-layer
- Pipes installation above process, horizontal and long can cause contamination from dust : Avoid piping installation above the production line, vertical and short, and can be separated in another room



Offline group activity

FACTORY VISIT

GROUP TASK: make pictures of

- a) good solutions, explain why
- b) hygienic risks, explain why, suggest improvements
- c) upload results as powerpoint



Factory visit



safety instructions pilot plant



upload reports here



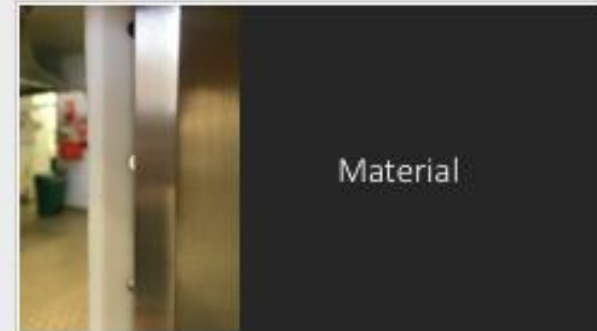
Offline group activity



1



2



3



4



5



6



7



8



9

FEEDBACK and QUALITY ASSURANCE



write a letter to the students of the next year

"What you should know for a successful participation"



letters to students from previous years

write a letter to the students



write a letter to the teacher

"What you should know for a successful participation"

"What you should consider when giving the course next year"

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letters to teachers from previous years

session

First Page

Dear students,
here you will find some infos and tips in case you are planning to take this course.

During this classes you will get a good overview about hygienic design related to food safety in all its aspects: you will learn about the equipment but also the building design and the cleaning and validation. At the end you will be able to recognize easily both good and bad solutions and make suggestions for implementations.

You have to be careful in your semester planning because, even though this course is classified as normal lecture, the attendance is mandatory and you will have to take some time to work on some individual and some group tasks!! The tasks are not difficult and especially the group tasks are interesting, because they let you discuss about the lecture topics and gather ideas in small groups, so that you can make new acquaintances and exchange some knowledge.

Rating of engagement of team members



Beurteilung der Mitarbeit der Gruppenmitglieder

Beurteilung der Mitarbeit der Gruppenmitglieder

Beurteilen Sie die Mitarbeit ihrer Gruppenmitglieder:

Schreiben Sie die Familiennamen und daneben eine Zahl von 1-5

1..sehr engagiert

5..mangelnde Mitarbeit

(jede(r) hat sein eigenes WIKI und kann die WIKIS der anderen nicht sehen)

[View](#)[Edit](#)[Comments](#)[History](#)[Map](#)[Files](#)[Administration](#)

First Page

Knechtl: 1

Kogler: 1

Leitner: 2

- Aly Mohamed Adel Ahmed
- Baumgartner Sarah
- Berger Philip
- Ceccarelli Flavio
- Daurer Andrea
- Gruber Christina
- Gruber Magdalena
- Gruber Philipp
- Haider Elisabeth
- Huemer Jakob
- Kienzl Bettina
- Knechtl Rebecca
- Knöbl Christoph Franz
- Kogler Maximilian
- Kohl Teresa

User **✓ Kremser Vanessa**

- Krottenthaler Anna
- Lanner Bernhard Franz
- Leitner Michael
- Nemec Alexandra
- Prieling Lukas
- Regner Markus
- Roitinger Eva
- Schelling Joane
- Schindler Roman
- Schleining Gerhard
- Stocker Thomas
- Stöbich Lena Katharina

Clear Assessment Criteria

1.3 OBM Assessment contribution

As part of your assessment for this module, you are required to submit an **Opportunity Business Model** report (max 1,800 words).

This assessment is designed to increase your experience of new venture creation. You will have the opportunity to research a novel food product that would appeal to investors who specialise in the food industry. The purpose of this assignment is to create a number of potential new business ideas for this product and to express the best idea as an opportunity business model (OBM). Please note you should demonstrate depth of research by including references in your submission document.

More specifically prepare a report, which includes:

- Title and contents
- Executive summary
- Description of
 - (a) the business idea (food product or service selected)
 - (b) the external driver(s) that are creating the opportunity
 - (c) and how these support your new business idea
- Opportunity business model of your new business idea
 - Proposition, People, Place, Process, Profit
- Launch marketing strategy for your new business idea in the context of its industry and market;
- References.

Assessment criteria

The OBM report will be assessed on the basis of:

- Evidence of structure & planning, including introduction and conclusion (10%)
- Depth and breadth of analysis of the idea under investigation (40%)
- Appropriateness and relevance of conclusions and recommendations (30)
- Written presentation and appropriateness of language/relevance to audience (20%)

TASK

By the end of lesson 1, you should be developing your research into drivers of change in the food industry in preparation for spotting your opportunity for a new food product. You might want to access market reports, industry publication and news stories, as well as journal papers, for this task.



Self evaluation: Quiz

Best Harvesting Techniques



Short presentation on: [Best Harvesting Techniques](#) 2.2MB PDF document



Essay on: [Best Harvesting Techniques](#) 4.1MB PDF document



Self evaluation on: [Best Harvesting Techniques](#)

Started on Tuesday, 22 January 2019, 9:02 AM

State Finished

Completed on Tuesday, 22 January 2019, 9:03 AM

Time taken 1 min 15 secs

Grade 4.00 out of 10.00 (40%)

Question 1

Incorrect

Mark 0.00 out of
1.00

🚩 Flag question

⚙️ Edit question

Which is not included in harvesting operation?

Select one:

- ☐ a. Selection of mature fruits
- ☒ b. Identification of the maturity of fruits ❌
- ☐ c. Proper storage of fruits
- ☐ d. Detaching of the fruits from tree

Your answer is incorrect.

The correct answer is: Proper storage of fruits

Question 2

Incorrect

Mark 0.00 out of
1.00

🚩 Flag question

⚙️ Edit question

Which of the following cannot be considered as one of the main principles of harvesting?

Select one:

- ☐ a. Crops destined for storage should be as free as possible from skin breaks, bruises, spots, rots, decay and other deterioration
- ☐ b. Manual harvesting should be applied instead of mechanical harvesting
- ☒ c. Harvest should be completed during the coolest time of the day ❌
- ☐ d. The produce has to be harvested and handled gently

Your answer is incorrect.

The correct answer is: Manual harvesting should be applied instead of mechanical harvesting

Thank you for your Attention

