

The Flipped Classroom model

- Enabling new pedagogical models

Prof. Remigio Berruto
Prof. Patrizia Busato
Dr. Alessandro Sopegno
DISAFA, University of Turin

This document is about a pedagogical technique that blends online learning and face to face instruction in a way that is very effective in student learning, the flipped classroom.

In this respect, the first part of this document presents some work we have been doing at the University of Torino and the work carried out in the Food4Growth Erasmus project.

DISAFA – UNITO role in the project

- Train the people on the Flipped class methodology – 4-7 July 2016
- Make online training material on flipped classroom model – for teachers
- Make online platform for delivery of the Food4growth material- for students
- Uploading and testing of the material, learning objectives, test on line - for students
- The platform is available at:
<http://www.food4growth.eu/moodle>
- Following the delivery of the material

In the food4growth project,

the tasks of UNITO were the following:

Train the people on the Flipped class methodology, that occurs mainly 4-7 July 2016

For the training, UNITO make online training material on flipped classroom model – for teachers, that was used in that event

Make online platform for delivery of the Food4growth material- for students

Uploading and testing of the material, learning objectives, test on line - for students

The platform is available at: <http://www.food4growth.eu/moodle>

Food4growth on Moodle



■ <http://www.food4growth.eu/moodle>

The FOOD4G TRAINING MODEL is aimed at fostering 4 main relevant area of skills.

These skills are deemed key to be integrated in the professional profile of the food technician and students in order to improve their overall innovative interaction and communication capacity.

According to background and competences students can decide to study across all the modules or just to focus on some of them.

Online Learning: The evidence

National Center for Academic Transformation, USA

- 156 courses
- 195 institutions
- 250,000 Students

- Learning outcomes were improved in 72% of the courses
 - (ability to apply the material, retaining time, critical thinking...)
- Cost of instruction was reduced on average 34%
- Cost reduction for students as well...

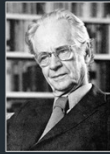
The advantages of online learning have been well documented when they relate to improving learning and reducing the cost of instruction. Detailed and extensive studies have been conducted related to this. One notable study is that conducted by the National Center for Academic Transformation in the USA.

In this study 250,000 students were followed in 156 courses spanning 195 higher education institutions.

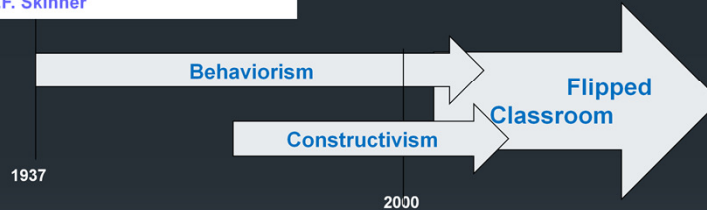
It was found that on the average, student learning outcomes were improved in a very high percentage of the courses delivered. By student outcomes meaning the ability of the student to understand, apply and use the knowledge in critical thinking activities.

Furthermore, although not part of this study, other research has indicated that students prefer this form of instructions.

Learning Theory



Teachers must learn how to teach... they need only to be taught more effective ways of teaching
B.F. Skinner



Reflective abstraction, however, is based not on individual actions but on coordinated actions.
Jean Piaget



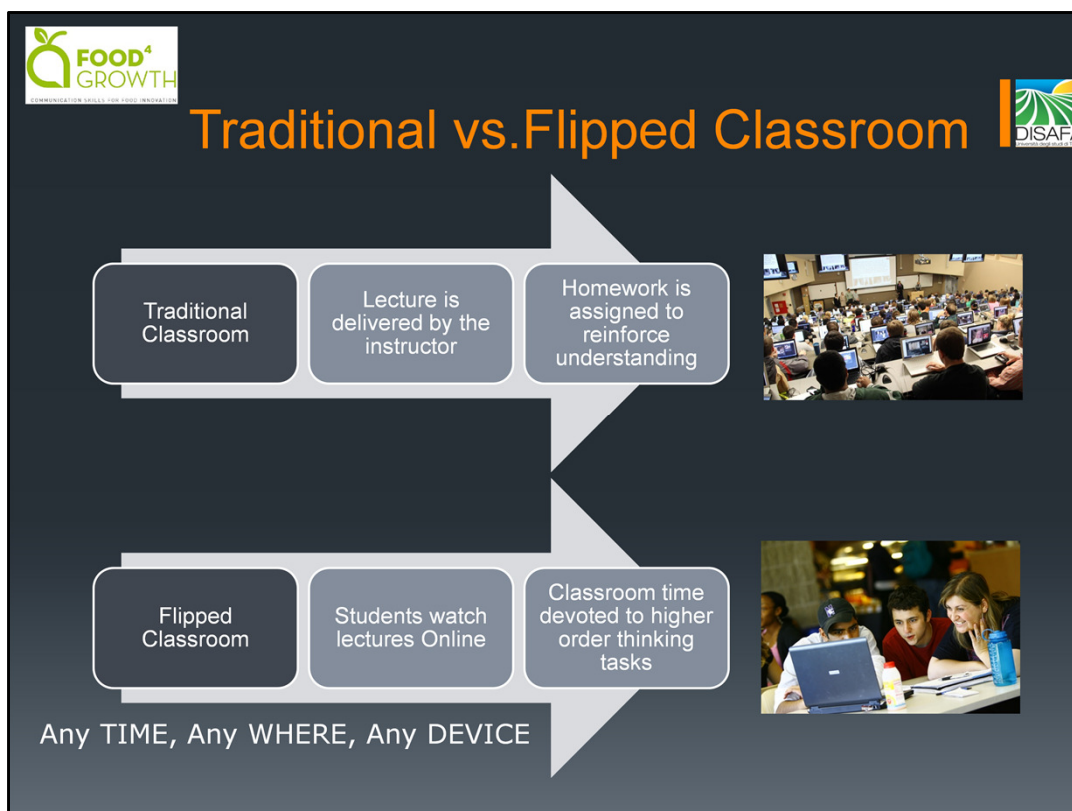
The basis of the flipped classroom comes from two dominant learning theories.

Behaviorism is a learning theory where the student is viewed as a “tabula rasa” that will acquire knowledge through exposure to the learning process. The role of the instructor is to “teach”. Under this theory, learning is demonstrated by the student in terms of behavior.

A second theory is Constructivism. In this learning theory, learning is considered to be a strongly social activity that involves self-reflection by the student on what the student has learned. Critical to constructivism is that in social interaction, students clarify, deepen and create new knowledge.

Note that behaviorism is teacher centered, while constructivism is student centered.

Principles of behaviorism and constructivism can be applied in the pedagogy referred to as the Flipped Classroom.



So how do we take advantage of both learning theories?

For one thing it is clear that students must exhibit clearly defined behaviors that demonstrate that they have learned the material. In addition, knowing that students learn better in social contexts, create the opportunities that allow for these interactions to take place. One approach that effectively creates this context is the flipped classroom.

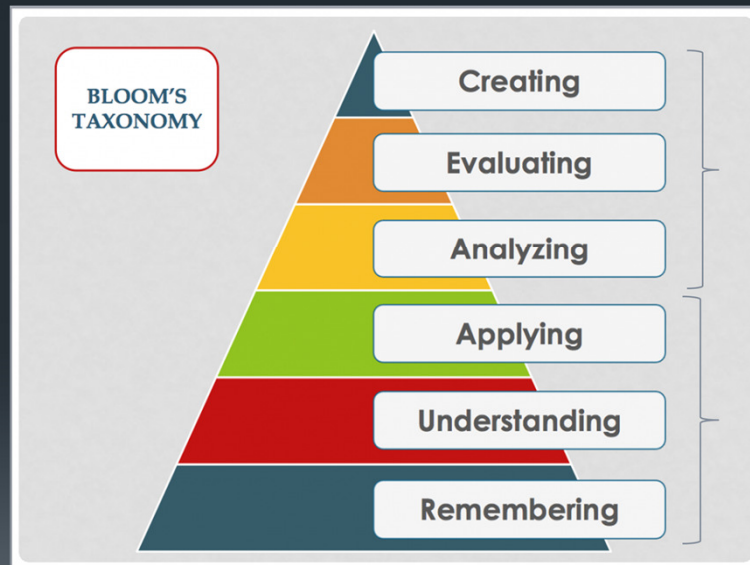
In a traditional classroom the primary mechanism by which knowledge is delivered to a student is a lecture. Following the lecture, students are given individual assignments in the form of homework. Regardless of some claims of “classroom interaction”, the lecture process is teacher centered and mostly one way (teacher to student).

The flipped classroom reverses this. Students, rather than attending a lecture, they view a carefully prepared video of the material and conduct some individual exercises. After this, in the time usually allocated for class, students meet for question and answers, discuss the materials learned, and work on open ended team projects.

Thus the term “flipped” refers to the time that is spent in class for a face to face lecture is now used for social learning activities. The time that was allocated to work at home is used to watch the lectures, generally online and at the student’s convenience.

Note that the activities conducted individually do not require human interaction.

Bloom taxonomy - levels of learning



- Not all material needs higher level of learning

Another important concept is Bloom's Taxonomy.

Bloom's Taxonomy is a useful tool to understand levels of learning when preparing educational materials.

Bloom's taxonomy describes various levels of learning, starting at a shallow level and progressively increases into deeper (or higher) levels of learning.

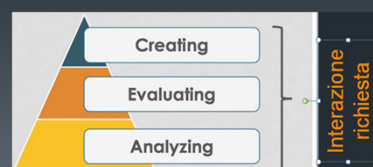
Thus, the simplest learning conduct is associated to remembering, while the highest level of learning is when the student is able to use the knowledge to create new knowledge.

What is useful and important about this taxonomy is that it helps clarify and articulate the level at which the students are expected to perform in the learning process. This is especially useful when articulating learning objectives.

Not all arguments need to pursue high level of learning objectives, this has to be kept in mind while designing the test and the material.

Flipped classroom – activities

- Activities that can be carried alone (quality of material very important)
- Obtained with:
 - Video
 - Quiz, test
 - Exercises
- Activities that require interaction and collaboration
 - on-line, in class (collaboration and interaction important)
- Obtained with:
 - Discussion forum
 - Question/answer
 - Collaboration to open-ended problems



The first three learning levels can be achieved by the student during the self-study periodo, using only videos, quizzes and exercises. Some exercises could require higher levels of learning

Pilot Study:

UNITO Student Preferences for Conventional and Flipped Classroom Learning Environments

Goals:

- Gain experience in online and flipped classroom learning methodologies
- Assess UNITO students preferences for conventional or flipped classroom
- Assess UNITO students performance

To study the effectiveness of the flipped classroom, a study was conducted in collaboration between UF and UNITO to assess the performance and preferences when comparing face to face conventional learning and the flipped classroom modes of instruction.

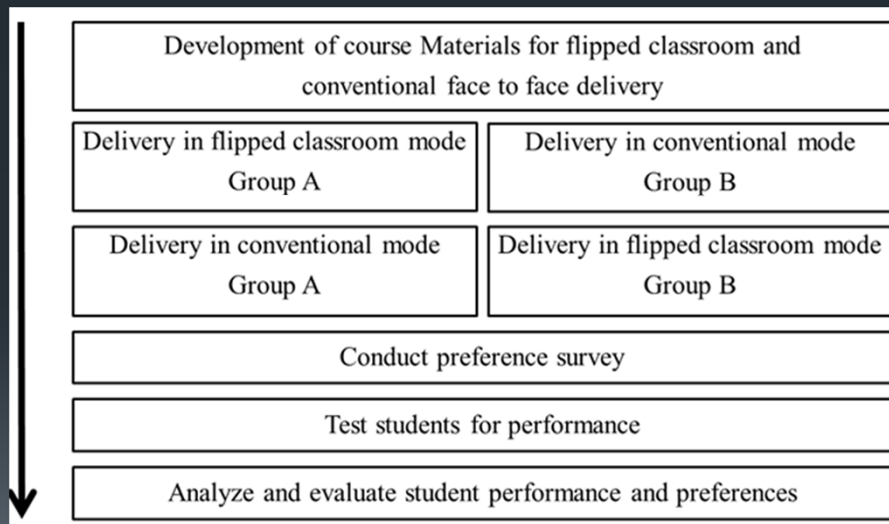
This also created the opportunity for the faculty to learn about online learning delivery and current pedagogical techniques.

Pilot Study (to convince our colleagues and gather some data):

- Logistic of agro-food chain course
- 2 groups of students
- Each of these groups covered both but opposite parts of the course materials using the traditional homework/lecture and flipped classrooms models
- Conducted in December 2014

For the purpose of this study a course on logistics of the agrofood chain was selected. Students that registered in the course covered materials in both modes of instruction, and were evaluated using the same assessment tools.

Trial design



The trial was conducted following the steps in this diagram.

As a first step, two contiguous modules in the course were selected for this study. Then, materials were developed for both modes of instruction. Materials for both modules were developed for conventional and flipped delivery.

Then, the group of students registered in the course was randomly divided into two groups A and B.

Delivery of the first module was then done for Group A in a flipped classroom mode, while students in group B were subjected to the conventional face to face delivery.

Then, for module two, the two groups A and B were inverted. Thus, group A took module two as face to face and group B took module two as conventional face to face.

After completing the modules students were asked to take a preference survey.

The survey was followed by a test. All students took the same test at the same time.

Finally, the results were analyzed

Overview

- Preparation
 - Two week Faculty Institute at the University of Florida (Pedagogy and instructional design principles)
 - 3 hour training on Course Management System (Canvas)
- Execution
 - Delivered the course modules at UNITO
 - Flipped (Online/active)
 - Traditional Face to Face
 - Conducted preference survey
 - Conducted student assessment
 - Assessment and evaluation of the pilot

The investment made in preparing and delivering these materials included less than three weeks on training on online pedagogy and instructional design principles.

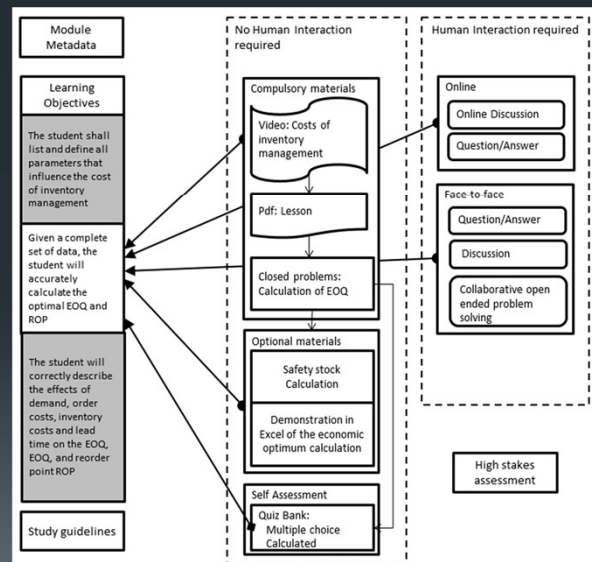
With the support of an instructional designer, videographer and graphics artist/programmer team, about one month of work was invested in creating the learning materials.

This was followed by the delivery of the course to the students. Each module was designed for a one week of student work.

As mentioned earlier all students took the assessment, the same high stakes test, at the same time.

Learning object ontology

- Define learning objects and how to measure them
- Define tests and assessments
- Prepare online activities
- Prepare in class activities



It is very important to underline that the design, assessment and academic alignment depends on a clear articulation of what the student is to learn in terms of the student behavior.

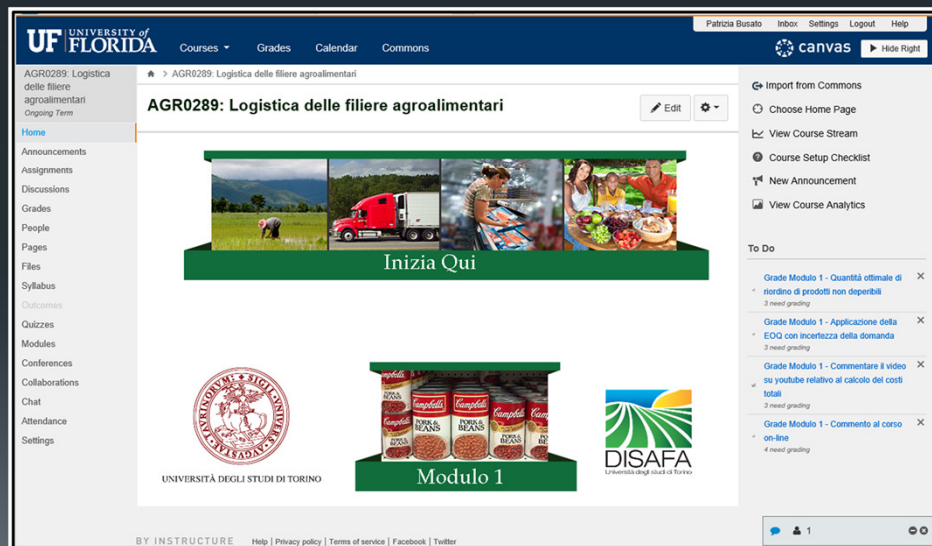
This is done through formal statement of learning objectives. A learning objective defines the behavior, what the level of performance is and the context in which this behavior occurs.

The assessment and learning materials are developed only after a clear articulation of the learning objectives is complete.

This slide shows the ontology of a learning objective, including those activities that will be carried out individually by the student and those that will require interaction with other students.

It is important to note that the design process includes in strict order: 1) define learning objectives, 2) define assessment items, 3) define learning content.

Development and deployment



The developed course materials were implemented using the Canvas course management system. This slide shows the appearance of the first module.

Demo



DEMO:

What a student will experience demonstrated here. It is very important to note that a typical 50 minute lecture can most often be reduced to 15 to 20 minutes of video. Also it is recommended that videos are about 6 minutes in length. The students attention will drop drastically for videos longer than 12 -15 minutes.

Collaborative (active) Learning (the Flipped classroom)



After having completed the online modules, the group can meet virtually or physically.

It is at this point where carefully architected open ended problems or questions are essential for the student to become engaged into meaningful and thorough discussion.

Face to Face, in-class activity in the flipped classroom

- Problems selected
 - Open ended problem
 - Closely aligned with the learning objective
 - Engaging
- Students
 - Students worked in teams to devise a solution or design
 - Instructor provided structure and general guidance

In this pilot special attention was paid to align the learning objectives with the problems that students worked on. This proved to be a specially difficult task, Students worked in teams to solve these problems.

During the time that the students are solving the problems the instructor plays a guiding role. Avoiding the temptation to lecture the students at this time is important. Rather than providing a solution for the students, the instructor should ask a question or make a suggestion that forces the students to reformulate their thinking.

Because its unlikely that when faced with open ended problems different groups of students will come up with the same solution, it was found that its of value to have the students present their work and receive criticism from other students.

Student Preferences

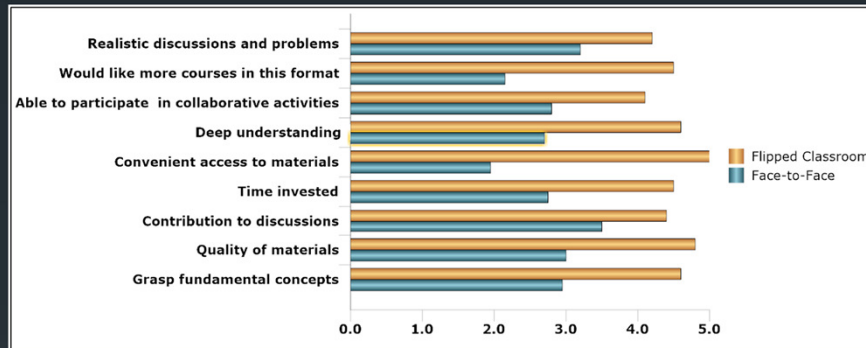


	Flipped Classroom				Face to Face			
	Strongly disagree	Disagree	Neutral	Agree	Strongly disagree	Disagree	Neutral	Agree
It was easier for me to grasp the fundamental concepts related to food chain logistics								
The quality of the materials used for delivery was high and more engaging (videos, problems, discussion, etc.)								
I was able to better participate and contribute to the discussions								
The time I invested in studying was more efficiently used								
Access to materials anytime and from any location was more convenient for me								
I learned more and achieved a deeper understanding of the course materials								
I was able to better participate in the collaborative solution of open-ended problems								
I would like to take other courses in this format								
The discussions and problems solved were of a higher and more realistic level								

After completing the course materials and the assessment student were asked to fill a comparative survey using a Likert scale.

The survey was designed in an effort to assess student perceptions in terms of how much they learned, how effective was the use of their time, and their overall preference to take courses in the flipped format versus the conventional mode of instruction.

Student Preference Means



- Preference for Flipped Classroom
- Deeper understanding and less time invested
- Convenience
- Would like more

Plotting the mean Likert responses shows the dramatic difference.

Student Performance

Summary Statistics for Student Evaluation*				
(Highlighted scores are associated to the Flipped Classroom)				
	Module 1		Module 2	
	Mean	Standard deviation	Mean	Standard Deviation
Group A	100	0	78.47	23.6
Group B	62.38	18.66	97.62	2.06

* One student from each group not completing the modules was removed from the analysis.

- Flipped classroom scores significantly higher
- Flipped classroom dispersion of scores lower

Also, the results of the assessment (high stakes test) show that students performed consistently better in the flipped classroom format.

In the table note that the means for the flipped classroom are highlighted in blue. It can readily be seen that the performance is consistently higher for the flipped classroom. 100 vs. 78 for group A and 97 vs 62 for Group B.

Interestingly, these numbers show also that the dispersion of the grades is considerably less in the flipped classroom format. The SD for the flipped classroom in each module is 0 and 2, while for the conventional face to face is 23 and 18.

Thus this pilot appears to show that students not only prefer the flipped classroom format, but also perform better and more uniformly under that mode of instruction

Required instructor competency

- Skills to develop online materials
 - Instructional design logistics
 - Learning objectives
 - Assessment items
 - Learning assets
- Skills to develop and conduct collaborative learning
 - Selection of material (design problem, use case, policy, etc.)
 - Group management strategies (facilitate face to face and online activities)
- Technical Skills
 - Course management system
 - Collaboration tools
 - Technical tools used by the students (simulation, GIS, web pages, etc.)

In developing a flipped classroom course it is important to note that the pedagogical approach is different. Thus it requires that the instructor learn a different way of approaching teaching.

The instructor must learn to develop online materials. This requires the instructor to work with an expert on educational technology and instructional design. It requires the instructor to learn how to develop quality learning objective, assessments and learning materials. This require formal training as the experience is different from traditional face to face. Furthermore, it requires a team of people in which the instructor is a subject matter expert.

Also, the instructor must be well versed in developing and conducting collaborative learning. Careful selection of the materials with soft but effective management strategies are essential.

Finally, the instructor must acquire some minimal level of technical skills.



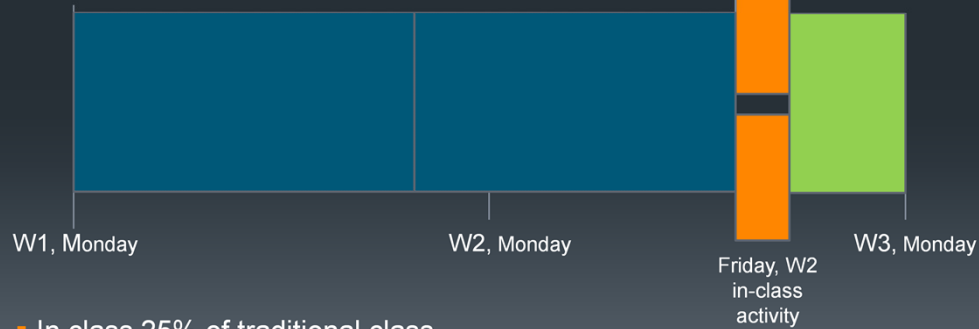
- In class activity 100% of lessons
- Little interaction with students → they don't know the material

22

Agrifood Logistic Flipped class A.A. 2016-2017

- 6 modules (2 Weeks each)
- 21 in-class activity hours

Module 1 material
available online



- In class 25% of traditional class
- High interaction during in-class activity and through the forum

In the flipped class, the in-class activity is the 25% of traditional class. With this method, there is high interaction during in-class activity and through the use of the forum.

Test results comparison

Traditional class 2015-2016 (n=33)

- Lesson attendance (>75%) 19 (57%)
- Working students 2 (6.6%)
- Average 26.6/30, CV 9.6%
- Average workers (2) 24/30
- First exam 16 (49%)
- Second exam 10 (30%)
- Third exam 3 (9%)
- Following exams 4 (12%)
- Exam with 6 open questions

Flipped class 2016-2017 (n=56)

- Lesson attendance (>75%) 52 (93%)
- Working students 4 (7%)
- Average 28.2/30, CV 5.7%
- Average workers (3) 27.6/30
- Pre-exam 54 (96%)
- First exam → all the remaining students
- Exam with 57 questions, 7 open

Result consideration

- Flipped Exam test more deep knowledge (57 questions vs. 6)
- High average score → 28.2 vs. 26.6 (+1.6/30) → better preparation
- High score working students → 27.6 vs. 24 (+3.6/30) → less difference with normal students → quality of online materials
- CV low → 5.7 vs. 9.6 → more opportunities for students with difficulties to learn
- High results on first attempt → 96% vs. 57% → gradual preparation of students (6 tests during course teaching) that do not require to study for final exam

Flipped Exam test more deep knowledge (57 questions vs. 6)

High average score was 28.2 versus 26.6 (+1.6/30), the flipped classroom student had better preparation

High score working students was 27.6 versus 24 (+3.6/30), less difference with normal students because of better quality of online materials

CV low → 5.7 vs. 9.6 → more opportunities for students with difficulties to learn

High results on first attempt → 96% vs. 57% → gradual preparation of students (6 tests during course teaching) that do not require to study for final exam

Benefits



- Student convenience
- Higher levels of achievement
- Availability of learning materials anytime, anywhere, on any device
- High levels of student-student and student-instructor interaction
- Create a skilled workforce
- Reduce costs (e.g. Travel expenses)
- High ROI
- Better use of classroom space
- Flexibility for instructors

We have now three EU projects for the introduction of Flipped Classroom Methodology

However, this effort is well spent as there are several benefits to this mode of instruction that result in better learning and reduced costs of instruction.

Reasons to adopt the flipped class

- Language and technology familiar with students today
- Students could look again at the lesson
- Increase interaction student-teacher
- Allows teachers to know better their students
- Increase interaction with students
- Change management of in class time
- Add flexibility in time management for students
- Add flexibility in time management for teachers
- High ranking education institutions use it
- Simplify the offer of classes in english

Language and technology are familiar with today's students. Students could look again at the lesson, there is an increase in the interaction student-teacher that allows teachers to know better their students and also increase interaction within students.

Change management of in class time, add flexibility in time management for students and for teachers.

High ranking education institutions use it and it simplify the offer of classes in english.

FOOD 4 GROWTH course

- Basic Skills
- Strategic influencing and negotiation
- Communication
- Negotiation: the Art of dealing



The FOOD4G TRAINING MODEL is aimed at fostering **4 main relevant area of skills** .

These skills are deemed key to be integrated in the professional profile of the **food technician and students** in order to improve their overall innovative interaction and communication capacity.

According to your background and competences you can decide **to study across all the modules or just to focus on some of them**. Through this training pathway you will be able to develop the following **learning objectives**:

Basic Skills

Strategic influencing and negotiation

Communication

Negotiation: the Art of dealing

Basic skills

- Objective 1: Knowledge of organizational features
- Objective 2: Knowledge of team building tools
- Objective 3: Knowledge of main communication concepts
- Objective 4: Knowledge of effective communication strategies
- Objective 5: Knowledge of write clear reports
- Objective 6: Knowledge of innovation
- Objective 7: Knowledge of identify dis/advantages of innovation

Basic skills module: Be able to know the organizational features of the company and the actors involved in the decision process making, and own basic corporate team building, communication techniques and styles

Objective 1: Knowledge of organizational features

- Activities:
- Watch the video of Company organization part 1 (03:16) (PDF)
- Do the learning assessment: Company organization part 1
- Do the classroom exercise 1: Company organization part 1
- Watch the video of Company organization part 2 (04:06) (PDF)
- Do the learning assessment: Company organization part 2
- Do the classroom exercise: Company organization part 2
- Watch the video of Company organization part 3 (03:36) (PDF)
- Do the learning assessment: Company organization part 3
- Do the classroom exercise: Company organization part 3

Objective 1: Knowledge of organizational features Activities:
Watch the video of Company organization part 1 (03:16) (PDF)
Do the learning assessment: Company organization part 1
Do the classroom exercise 1: Company organization part 1
Watch the video of Company organization part 2 (04:06) (PDF)
Do the learning assessment: Company organization part 2
Do the classroom exercise: Company organization part 2
Watch the video of Company organization part 3 (03:36) (PDF)
Do the learning assessment: Company organization part 3
Do the classroom exercise: Company organization part 3

Objective 2: Knowledge of team building tools

- Activities:
- Watch the video of Work team and team work part 1 (02:26) (PDF)
- Do the learning assessment: Work team and team work part 1
- Do the classroom exercise: Work team and team work part 1
- Watch the video of Work team and team work part 2 (03:40) (PDF)
- Do the learning assessment: Work team and team work part 2
- Do the classroom exercise: Work team and team work part 2
- Watch the video of Work team and team work part 3 (02:05) (PDF)
- Do the learning assessment: Work team and team work part 3
- Do the classroom exercise: Work team and team work part 3
- Do the self assessment form

Objective 2: Knowledge of team building tools activities:

Watch the video of Work team and team work part 1 (02:26) (PDF)

Do the learning assessment: Work team and team work part 1

Do the classroom exercise: Work team and team work part 1

Watch the video of Work team and team work part 2 (03:40) (PDF)

Do the learning assessment: Work team and team work part 2

Do the classroom exercise: Work team and team work part 2

Watch the video of Work team and team work part 3 (02:05) (PDF)

Do the learning assessment: Work team and team work part 3

Do the classroom exercise: Work team and team work part 3

Do the self assessment form

Objective 3: Knowledge of main communication concepts

- Activities:
- Watch the video of Communication part 3 (04:00) (PDF)
- Watch the youtube video about Bad listeners (02:51)
- Do the learning assessment: Communication part 3
- Do the classroom exercise: Communication part 3
- Do the classroom listening skill assessment

Objective 3: Knowledge of main communication concepts Activities:
Watch the video of Communication part 3 (04:00) (PDF)
Watch the youtube video about Bad listeners (02:51)
Do the learning assessment: Communication part 3
Do the classroom exercise: Communication part 3
Do the classroom listening skill assessment

Objective 4: Knowledge of effective communication strategies

- Activities:
- Watch the video of Communication part 3 (04:00) (PDF)
- Watch the youtube video about Bad listeners (02:51)

Objective 3: Knowledge of effective communication strategies:

Watch the video of Communication part 3 (04:00) (PDF)

Watch the youtube video about Bad listeners (02:51)

Objective 5: Knowledge of write clear reports

- Activities:
 - Watch the video of Writing clear reports (03:17) (PDF)
 - Do the learning assessment: Writing clear reports
 - Do the classroom exercise: Writing clear reports

Objective 5: Knowledge of write clear reports Activities:

Watch the video of Writing clear reports (03:17) (PDF)

Do the learning assessment: Writing clear reports

Do the classroom exercise: Writing clear reports

Objective 6: Knowledge of innovation

- Activities:
 - Watch the video of Innovation (3:46) (PDF)
 - Do the learning assessment: Innovation
 - Watch the video of Innovation part 2 (4:47) (PDF)
 - Do the learning assessment: Innovation part 2
 - Do the classroom exercise: Innovation part 1 and 2
 - Watch the video of Innovation part 3 (4:07) (PDF)
 - Do the learning assessment: Innovation part 3
 - Watch the video of Innovation part 4 (3:08) (PDF)
 - Do the learning assessment: Innovation part 4
 - Do the classroom exercise: Innovation part 3 and 4

Objective 6: Knowledge of innovation Activities:

Watch the video of Innovation (3:46) (PDF)
Do the learning assessment: Innovation
Watch the video of Innovation part 2 (4:47) (PDF)
Do the learning assessment: Innovation part 2
Do the classroom exercise: Innovation part 1 and 2
Watch the video of Innovation part 3 (4:07) (PDF)
Do the learning assessment: Innovation part 3
Watch the video of Innovation part 4 (3:08) (PDF)
Do the learning assessment: Innovation part 4
Do the classroom exercise: Innovation part 3 and 4

Objective 7: Knowledge of identify dis/advantages of innovation

- Activities:
 - Watch the video of identify dis/advantages of innovation (3:12) (PDF)
 - Do the learning assessment: identify dis/advantages of innovation
 - Watch the video of identify dis/advantages of innovation part 2 (4:42) (PDF)
 - Do the learning assessment: identify dis/advantages of innovation part 2
 - Do the classroom exercise: identify dis/advantages of innovation part 1 and 2

Objective 7: Knowledge of identify dis/advantages of innovation Activities:

Watch the video of identify dis/advantages of innovation (3:12) (PDF)

Do the learning assessment: identify dis/advantages of innovation

Watch the video of identify dis/advantages of innovation part 2 (4:42) (PDF)

Do the learning assessment: identify dis/advantages of innovation part 2

Do the classroom exercise: identify dis/advantages of innovation part 1 and 2

Strategic influencing and negotiation

- **Objective 1: Formulating a strategic approach**
- **Objective 2: Managing techniques to evaluate stakeholder's actions**
- **Objective 3: Building up simulated influence session**

Strategic influencing and negotiation: Given an innovative product, the ability to understand market and identify and mapping relevant stakeholders in term of their position, level of influencing, relevance, interest and position

Objective 1: Formulating a strategic approach

- Activities:
 - Part 1: Markets and market Advantages
 - Watch the video of 1.1 Advantages (01:59) (PDF)
 - Do the 1.1 Assignment
 - Part 2: Analysis of the competitors
 - Watch the video of 1.2 Competitor analysis (02:26) (PDF)
 - Do the 1.2 Assignment
 - Part 3: Geography and markets: countries as targets
 - Watch the video of 1.3 Countries and targets (02:59) (PDF)
 - Do the 1.3 Assignment

Objective 1: Formulating a strategic approach Activities:

Part 1: Markets and market Advantages

Watch the video of 1.1 Advantages (01:59) (PDF)

Do the 1.1 Assignment

Part 2: Analysis of the competitors

Watch the video of 1.2 Competitor analysis (02:26) (PDF)

Do the 1.2 Assignment

Part 3: Geography and markets: countries as targets

Watch the video of 1.3 Countries and targets (02:59) (PDF)

Do the 1.3 Assignment

Objective 2: Managing techniques to evaluate stakeholder's actions

- Activities:
 - Part 1: Writing a stakeholders' list
 - Watch the video of 2.1 Stakeholder list (02:55) (PDF)
 - Watch the video of 2.1.1 Stakeholder chart (01:57) (PDF)
 - Do the 2.1 Assignment
 - Part 2: The meaning of writing a Stakeholders' chart
 - Watch the video of 2.2 Learning the meaning of a stakeholder chart (04:22)
 - Do the 2.2 Assignment
 - Part 3: Positioning the Stakeholders in a dynamic evaluation chart
 - Watch the video of 2.3 Stakeholders positioning (02:17)
 - Do the 2.3 Assignment
 - Part 4: Individuating the stakeholders reciprocal relations
 - Watch the video of 2.4 Reciprocal relation (03:09)
 - Do the 2.4 Assignment

Objective 2: Managing techniques to evaluate stakeholder's actions Activities:

Part 1: Writing a stakeholders' list

Watch the video of 2.1 Stakeholder list (02:55) (PDF)

Watch the video of 2.1.1 Stakeholder chart (01:57) (PDF)

Do the 2.1 Assignment

Part 2: The meaning of writing a Stakeholders' chart

Watch the video of 2.2 Learning the meaning of a stakeholder chart (04:22)

Do the 2.2 Assignment

Part 3: Positioning the Stakeholders in a dynamic evaluation chart

Watch the video of 2.3 Stakeholders positioning (02:17)

Do the 2.3 Assignment

Part 4: Individuating the stakeholders reciprocal relations

Watch the video of 2.4 Reciprocal relation (03:09)

Do the 2.4 Assignment

Objective 3: Building up simulated influence session

- Activities:
 - Part 1: Defining a strategic influence plan
 - Watch the video of 3.1 Strategic influence plan (07:09) (PDF)
 - Do the 3.1 Assignment
 - Part 2: Putting strategic influencing to the service of real stakes
 - Watch the video of 3.2 Strategy evolution track (08:03)
 - Do the 3.2 Assignment
 - Part 3: Negotiation: introductory basic concepts
 - Watch the video of 3.3.1 Introduction (06:25)
 - Watch the video of 3.3.2 Reading an article (08:36)
 - Watch the video of 3.3.3 Strategic path of action (02:56)
 - Watch the video of 3.3.4 Building a vademecum (04:06)
 - Watch the video of 3.3.5 Vademecum case red meat (05:54)
 - Watch the video of 3.3.6 Vademecum case Alcohol (05:09)
 - Do the 3.3 Assignment

Objective 3: Building up simulated influence session Activities:

Part 1: Defining a strategic influence plan

Watch the video of 3.1 Strategic influence plan (07:09) (PDF)

Do the 3.1 Assignment

Part 2: Putting strategic influencing to the service of real stakes

Watch the video of 3.2 Strategy evolution track (08:03)

Do the 3.2 Assignment

Part 3: Negotiation: introductory basic concepts

Watch the video of 3.3.1 Introduction (06:25)

Watch the video of 3.3.2 Reading an article (08:36)

Watch the video of 3.3.3 Strategic path of action (02:56)

Watch the video of 3.3.4 Building a vademecum (04:06)

Watch the video of 3.3.5 Vademecum case red meat (05:54)

Watch the video of 3.3.6 Vademecum case Alcohol (05:09)

Do the 3.3 Assignment

Communication plan

- Objective 1: Create a communication strategy
- Objective 2: Create a communication plan

Communication plan: Once identified relevant stakeholders, the ability to rightly communicate innovation through the development of a consistent communication strategy in order to build up consensus about the innovation proposed

Objective 1: Create a communication strategy

- Activities:
 - Watch the video of Communication strategy: an introduction to the module (01:36) (PDF)
 - Watch the video of Objectives (01:07) (PDF)
 - Watch the video of Development of contents (01:07) (PDF)
 - Watch the video of Target Audience and key messages (01:31) (PDF)
 - Watch the video of Channels and Tools (01:17) (PDF)
 - Watch the video of Planning (01:17) (PDF)
 - Do the Objective 1: Create a communication strategy Assessment

Objective 1: Create a communication strategy Activities:

Watch the video of Communication strategy: an introduction to the module (01:36) (PDF)

Watch the video of Objectives (01:07) (PDF)

Watch the video of Development of contents (01:07) (PDF)

Watch the video of Target Audience and key messages (01:31) (PDF)

Watch the video of Channels and Tools (01:17) (PDF)

Watch the video of Planning (01:17) (PDF)

Do the Objective 1: Create a communication strategy Assessment

Objective 2: Create a communication plan

- Activities:
 - Watch the video of Introduction to communication plan (02:48) (PDF)
 - Watch the video of Objectives (01:13) (PDF)
 - Watch the video of Target Audience (01:43) (PDF)
 - Watch the video of Materials and Activities (01:37) (PDF)
 - Watch the video of Budget (06:12) (PDF)
 - Watch the video of Assessment of outcomes (03:29) (PDF)
 - Do the Objective 2: Create a communication plan Assessment

Objective 2: Create a communication plan Activities:

Watch the video of Introduction to communication plan (02:48) (PDF)

Watch the video of Objectives (01:13) (PDF)

Watch the video of Target Audience (01:43) (PDF)

Watch the video of Materials and Activities (01:37) (PDF)

Watch the video of Budget (06:12) (PDF)

Watch the video of Assessment of outcomes (03:29) (PDF)

Do the Objective 2: Create a communication plan Assessment

Negotiation: the Art of dealing

- Objective 1: Distributive and integrative negotiation
- Objective 2: Principles and elements of integrative negotiation
- Objective 3: Cognitive biases
- Objective 4: The preparation and the errors to avoid
- Objective 5: Negotiation with yourself. Negotiation as a social skill

Negotiation: the Art of dealing

Ability to influence relevant stakeholders when appropriate through negotiation skills. Maintain an awareness of goals and objectives and navigates solutions towards desired ends, while maintaining relationships and supporting consensus.

Objective 1: Distributive and integrative negotiation

- Activities:
 - Watch the video of Distributive and integrative negotiation-part 1 (03:01) (PDF)
 - Watch the video of Distributive and integrative negotiation-part 2 (03:03) (PDF)
 - Watch the video of Distributive and integrative negotiation-part 3 (00:55) (PDF)
 - Do the Test: Distributive and integrative negotiation

Objective 1: Distributive and integrative negotiation Activities:

Watch the video of Distributive and integrative negotiation-part 1 (03:01) (PDF)

Watch the video of Distributive and integrative negotiation-part 2 (03:03) (PDF)

Watch the video of Distributive and integrative negotiation-part 3 (00:55) (PDF)

Do the Test: Distributive and integrative negotiation

Objective 2: Principles and elements of integrative negotiation

- Activities:
 - Watch the video of Principles and elements of integrative negotiation-part 1 (03:43) (PDF)
 - Watch the video of Principles and elements of integrative negotiation-part 2 (04:56) (PDF)
 - Watch the video of Principles and elements of integrative negotiation-part 3 (03:41) (PDF)
 - Watch the video of Principles and elements of integrative negotiation-part 4 (03:16) (PDF)
 - Do the Test: Integrative negotiation

Objective 2: Principles and elements of integrative negotiation Activities:

Watch the video of Principles and elements of integrative negotiation-part 1 (03:43) (PDF)

Watch the video of Principles and elements of integrative negotiation-part 2 (04:56) (PDF)

Watch the video of Principles and elements of integrative negotiation-part 3 (03:41) (PDF)

Watch the video of Principles and elements of integrative negotiation-part 4 (03:16) (PDF)

Do the Test: Integrative negotiation

Objective 3: Cognitive biases

- Activities:
 - Watch the video of Cognitive biases- part 1 (03:20) (PDF)
 - Watch the video of Cognitive biases- part 2 (03:42) (PDF)
 - Watch the video of Cognitive biases- part 3 (01:03) (PDF)
 - Do the Exercise: Cognitive biases
 - Do the Test: Cognitive biases

Objective 3: Cognitive biases Activities:

Watch the video of Cognitive biases- part 1 (03:20) (PDF)

Watch the video of Cognitive biases- part 2 (03:42) (PDF)

Watch the video of Cognitive biases- part 3 (01:03) (PDF)

Do the Exercise: Cognitive biases

Do the Test: Cognitive biases

Objective 4: The preparation and the errors to avoid

- Activities:
 - Watch the video of The preparation and the errors to avoid-part 1 (03:25) (PDF)
 - Watch the video of The preparation and the errors to avoid-part 2 (04:01) (PDF)
 - Watch the video of The preparation and the errors to avoid-part 3 (01:20) (PDF)
 - Do the Test: Preparation and the errors to avoid

Objective 4: The preparation and the errors to avoid Activities:

Watch the video of The preparation and the errors to avoid-part 1 (03:25) (PDF)
Watch the video of The preparation and the errors to avoid-part 2 (04:01) (PDF)
Watch the video of The preparation and the errors to avoid-part 3 (01:20) (PDF)
Do the Test: Preparation and the errors to avoid

Objective 5: Negotiation with yourself. Negotiation as a social skill

- Activities:
- Watch the video of Negotiation with yourself-part 1 (03:20) (PDF)
- Watch the video of Negotiation with yourself-part 2 (03:16) (PDF)
- Do the Test: Negotiation with yourself

Objective 5: Negotiation with yourself. Negotiation as a social skill Activities:

Watch the video of Negotiation with yourself-part 1 (03:20) (PDF)

Watch the video of Negotiation with yourself-part 2 (03:16) (PDF)

Do the Test: Negotiation with yourself

Grazie!

Thank you