entangle

Entrepreneurship Trainers for VET
A Novel Generation Learning

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ENTANGLE – R.8 Conceptual layout of materials and tools.

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01	12th July 2013	First issue
02	25th September 2013	Second issue
03		
04		

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1   INTRODUCTION

1.1   Scope of the present document

The present document *ENTANGLE-WP4-R8-Conceptual layout of materials and tools* is included in the work package 4 Conceptual layout of materials and tools.

Workpackage Description

The main objective of this Work Package is turning the findings and the conclusions of WP3 into a conceptual layout of the contents of the materials and the possible tools needed for organising optimal VET teachers and small enterprise/entrepreneur relationships.

The definition of materials needed is based on the results of the Situation Status Quo and Recommendations phase, work packages 2 and 3 and the presented recommendations at the second project meeting.

The work package is divided in two tasks:

- Task 4.1 *Setting the scene*. This task defines the different aspects with respect to purpose of the training, goals, topics and modules to be included. Execution of the analysis of the results from the reports of WP2. Lead by FEM SUA. It also addresses the integration of the existing ViPiA and BDF materials.

- Task 4.2 *Defining the delivery, the process*. This task focuses on the part of the conceptual layout that defines the way in which the Entangle training is delivered.

Scope of Result 8

The aim of this report is describing the *Conceptual Layout* with the contents, materials and tools of the training for VET teachers and, consequently, VET students.

2   CETEI PEDAGOGICAL MODEL

The CETEI PEDAGOGICAL MODEL is an adaptation between the theories of Judi Harris, author of the TPack Model and the Idit Harel's model. Here we describe both of them.

2.1   The Three Circles of Judi Harris

Judi Harris's model describes the different types of knowledge needed for teachers. This model is based on understanding that learning processes are complex activities that need three type of knowledge by teachers:

- Knowing the content, where they will have to know the subject or discipline they teach.

- Pedagogical knowledge about learning processes, objectives and values on education, that is to say, how to teach efficiently.

- Technological knowledge, which implies understanding how ICT's work and apply them in the classroom correctly.

To follow the TPACK methodology it is necessary to carry out a teaching plan adapted to context and based on activities. According to the planning model, it can be described by the final result of these five decisions:

- Deciding the learning objectives;

- Making practical pedagogical decisions about the nature of the learning experience;

- Choosing the strategies on learning assessment that reveal if students are really learning;

- Choosing the activities to train the learning experience, and

- Choosing tools and resources

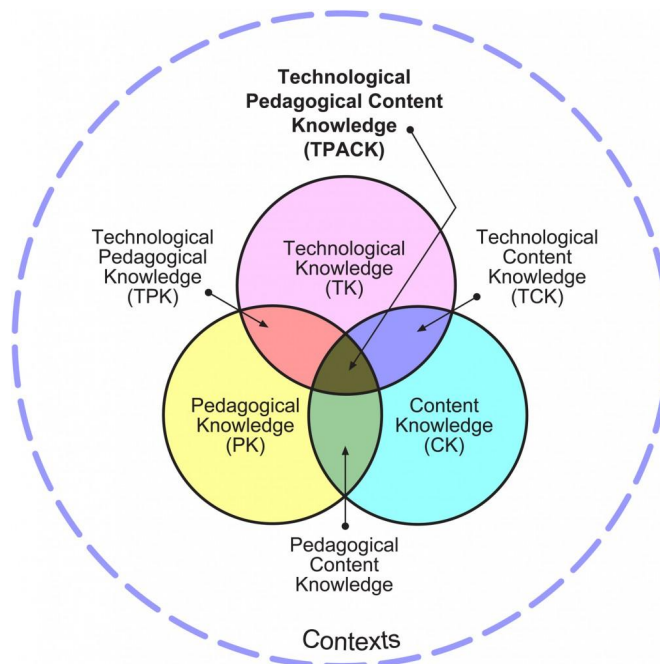This picture shows an approximation to the model:

Image 1: Tpack Model. Source: http://www.tpack.org/

It is explained in ENTREPRENEURSHIP REPORT VET[1] and TEACHER EDUCATION FOR ENTREPRENEURSHIP FINAL REPORT[2] that VET teachers need a number of skills in order to teach entrepreneurship to VET students. This idea agrees with Judi Harris' model.

According to the former reports, these skills are classified in three types:

- Content management skills: teachers require the skills to support students throughout the process of starting a business. This includes planning and preparing the project. In our case, this knowledge is referenced to the CANVAS METHODOLOGY and to a set of knowledge management. In the lower picture in this same page, we refer *content management skills* as *project management skills.*

- Pedagogical skills: to be successful it is necessary to put the stress in the pedagogies that encourage the process of learning: by doing, by exchange, by creative problems solving, etc. In our proposal, we use pedagogies based on exploring and researching the offered resources by Internet. This pedagogy is called PEDAGOGY OF DISCOVER.

- Personal skills: much of the success of the process depends on the teachers' communication skills. These skills are: active listening, the ability to negotiate, the ability to work in teams with others work mates and, the most important, the ability of creating a suitable learning environment in which the student can feel confident and secure. Only when teachers are aware of the importance of these skills they can teach entrepreneurship properly.

We put the training program in the intersection of the three types of skills. We call this cross ENTANGLE UP.
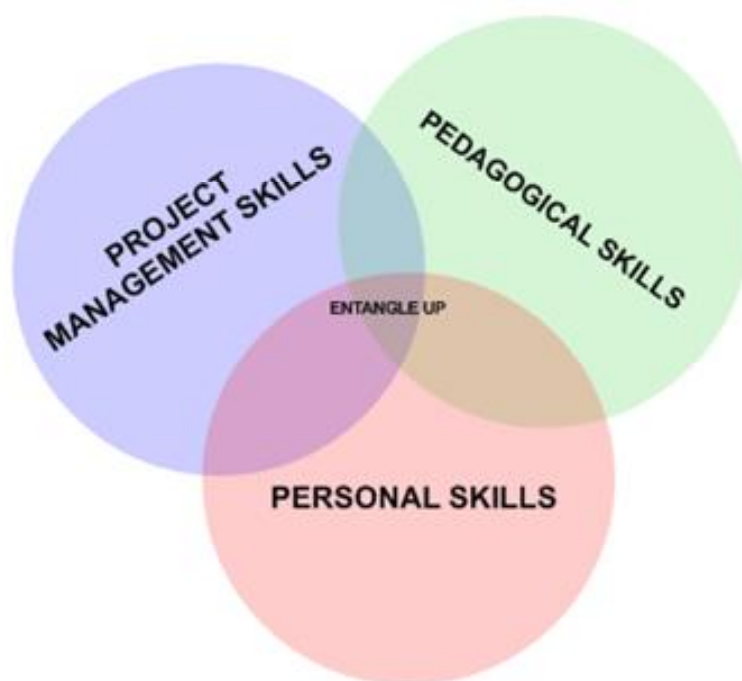

Image 2: Entangle Up. Source: own elaboration.

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[1] Available in Entangle Google Drive

[2] Idem

2.2   The Idit Harel's Model: the 3 X's

Dr. Idit Harel Caperton, degree in Learning Research by the Massachusetts Institute of Technology, developed her theory in the last decade of the 20Th century. She pointed that the 21st century citizen needs a set of new abilities and skills. These skills are required in the current period of change and development of new technologies.

These skills are:

- EXPLORING: It means the ability to discover and to find the information required by the person.

- EXCHANGING: It means the skill to interchange knowledge with other people, it also means the ability to work in team.

- EXPRESSION: It means the ability to express and convince the new ideas, the new projects, etc.

The teacher who wishes to teach entrepreneurship needs these abilities and the VET student, future entrepreneur, too.

The ENTANGLE UP program takes into account these skills by its activities. Activities like forums in order to exchange ideas and methodologies for working with VET students.

2.3   The five aspects of the training design

Five different aspects have been considered in the design of the ENTANGLE UP programme:

- The goals of the ENTANGLE PROJECT: training teachers in order to increase the number of VET entrepreneurs.

- The entrepreneurship content: The Business Model Canvas and ViPiA materials.

- The methodology to be used: mainly Internet research and exchange of knowledge between participants. This methodology boosts the team work between applicants.

- The activities to be developed by the participants (teachers): activities designed to achieve pedagogical and personal skills.

- The required ICT tools: above all things the use of a Learning Management System as Moodle.

The five aspects are summarized in this picture:

Image 3: The five aspects of the Entangle Up's methodology. Source: own elaboration

2.4   Mixing the three circles and the training design: the life long learning.

The blend of the previous aspects constitutes the general framework for the design of the course for training teachers and improving their skills in order to teach entrepreneurship better.

The underlying idea is the necessity of life long learning for teachers.
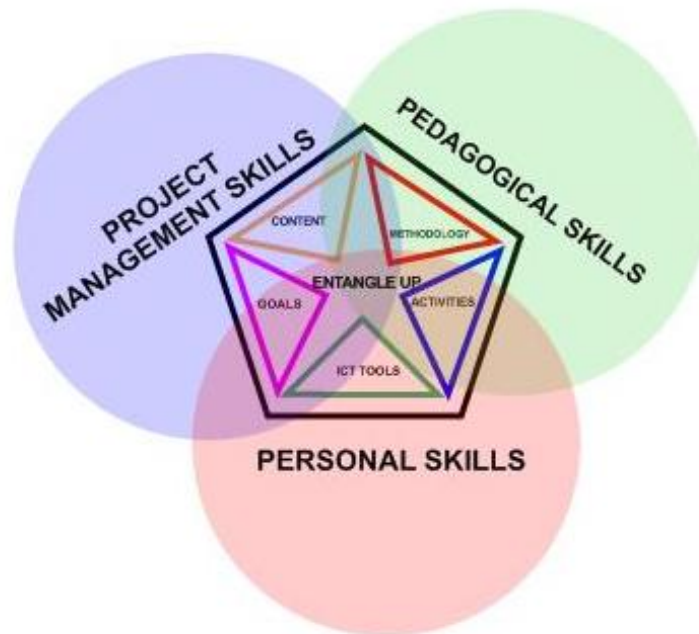
This picture shows the approach to the notion:

Image 4: The Entangle Up's methodology. Source: own elaboration

3   THE COURSE STRUCTURE

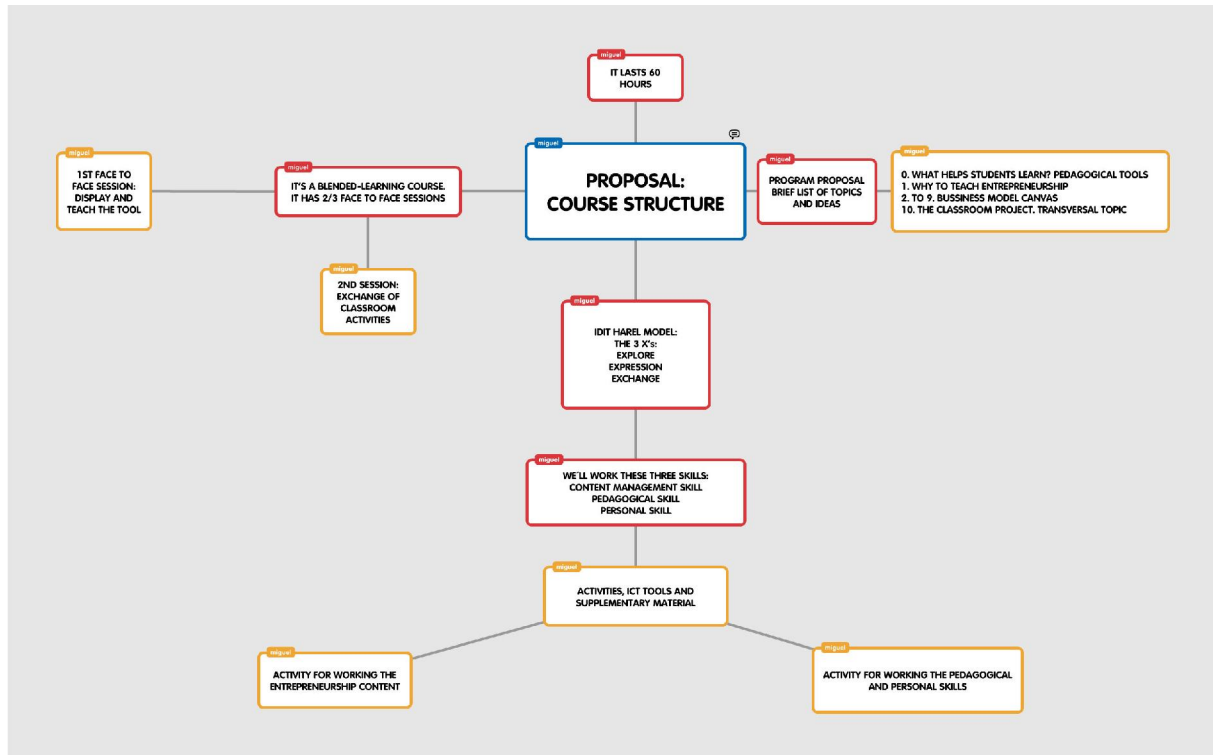The next picture summarizes the general structure of the training:

Image 5: The Course Structure. Source: own elaboration

In the next points we develop the different aspects of the course:

3.1   Goals and expected results of the training

The main objectives to be achieved by the ENTANGLE UP project are:

- Training VET teachers in order to get well-founded knowledge and criteria to promote entrepreneurship among their VET student.

- Creating digital materials and resources to encourage entrepreneurship among VET students.

- Sharing the overview, experiences and good practices between VET teachers.

- Comparing proper classroom strategies in order to encourage entrepreneurship among the VET students.

- Promoting ICT tools, especially web 2.0 tools in the education field in order to animate the entrepreneurship.

- VET teachers are able to build an exciting classroom project to encouraging entrepreneurship.

Regarding the expected results, we expect the following outputs and outcomes:

- Acquisition of knowledge and skills related to entrepreneurship teaching.
- Providing new materials and tools for the promotion of teaching entrepreneurship among VET students.
- Progress in developing ICT skills among VET teachers.
- Creation of a teacher's network for the exchange of knowledge, experiences, good practices and materials.
- Encouraging VET teachers and students towards entrepreneurship.

3.2   Target Group[3]

The target group is comprised of VET teachers. The profile of this target group is:

- 45 years old.
- Married with two kids, one is 15 years old and the other is 11 years old
- He/she has several subjects to teaching
- He/she has different types of students, some of them with personal troubles.
- His/her students are not always aware about the subject and, sometimes they are not in the classroom.
- He/she is overworked: paperwork, talk with or about students, contact with families, meetings, preparing lessons, counselling students and teachers, exchange of experiences with workmates, etc.
- He/she always has homeworking.
- He/she is stressed, with more management than teaching; at the end of the day, he/she is tired but happy with his/her work and in the end of the day he/she is satisfied with his/her day work.
- His/her "wants" are life long learning, personal growth, smaller groups, motivated students, students acquiring competences, less administrative work, focus on teaching, suitable ICT, engaging materials, time to find new materials, etc.
- His/her "pains" are uncertainty, changes, no management support, more administrative work, etc.
- His/her "gains" are becoming an expert, innovation, motivation, students' engagement, new competences, popular teacher.
- The subject that they teach is mainly entrepreneurship.

The general context is:

- Negative economic news
- Growth of unemployment
- Cutbacks in education

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[3] The target group perception is based on empathy map made up in the first progress meeting held in Amsterdam in 21st and 22nd of May 2.013. This empathy map represents typical entrepreneurship teacher as perceived by the consortium. Source: ENTANGLE WP3 Result 7.

- Bigger groups in classroom

These inputs have been taken into account to adapt the training materials.

3.3 Length

Bearing in mind the brainstorming of Amsterdam meeting and the recommendations from Work package 3, Result 7 RECOMMENDATIONS FOR TRANSFER, the course length is 60 hours.

3.4 Type of training

It is a blended learning course with 3 face to face sessions:

- 1st face to face session: presentation of goals, displaying and showing the tools and platform Moodle.

- 2nd face to face session: Presentation of the first block of activities to be done by teachers. These activities are thought to be applied in the classroom with his/her VET students. These activities fall within the right block of the Business Model Canvas: The value proposition, the customer segments, the customer relationships and the channels.

- 3rd face to face session: Presentation of the second block of activities to be done by teachers. These activities are thought to be applied in the classroom with his/her VET students. These activities fall within the left block of the Business Model Canvas: The key resources, the key activities, the key partners and cost and revue streams.

Each session lasts 4 hours. The following table summarizes the distribution of hours by type of education:

TYPE	HOURS
Face to face sessions	12
On line sessions	48
TOTAL	60

Table 1: Distribution of hours by type of education.

3.5 Support tools

The chosen Learning Management System is Moodle.

The complementary suggested ICT tools are:

- Google apps.

- www.prezi.com

- www.mural.ly

- www.wix.com

- www.about.me

- www.creatupropiaweb.com

- www.facebook.com

- www.twitter.com

3.6   Methodologies and types of activities

Each topic of the programme includes two types of activities:

- Activities for working on entrepreneurship contents.
- Activities for working on personal and pedagogical skills.

The idea is working the different types of the basic skills needed for teaching entrepreneurship.

3.7   Brief list of topics

The brief list of topics is showed in the following table; it includes the distribution of hours by topic:

TOPIC	ESTIMATED HOURS
Pedagogical and personal skills	14
Business Canvas model	14
Online activities to do by teachers	20
Exchange of activities, ideas, experiences, etc. Between participants: face to face sessions.	12
TOTAL	60

Table 2: Distribution of hours by topic.

Here is the first topic: Pedagogical and personal skills

- The new role of teachers.
- Competence methodologies: Internet research by Webquests and Treasure Hunters, and Problem Based Learning.
- Why to teach entrepreneurship.

The development of the Business Canvas Model is:

- Doing value propositions: the value proposition
- Who is the customer?: The customer segments
- Customer relationships
- Channels
- What is necessary for success: The key activities
- What is necessary for success: The key resources
- What is necessary for success: The key partners
- Structure cost and revenue streams

The following table summarizes the training content:

	MODULE NUMBER	ESTIMATED HOURS
FACE TO FACE SESSION	**PRESENTATION OF GOALS AND TOOLS**	4
FIRST BLOCK OF ON LINE SESSIONS	0. Pedagogical tools	8
	1. Challenges and prospects in teaching entrepreneurship: why to teach entrepreneurship.	2
	2. BMC[4]: doing value propositions	4
	3. BMC: who is the customer?	4
	4. BMC: improving value propositions	4
	5. BMC: customer relationships and channels	6
FACE TO FACE SESSION	**PRESENTATION OF THE FIRST BLOCK OF ACTIVITIES TO BE DONE BY TEACHERS**	4
SECOND BLOCK OF ON LINE SESSIONS	6. BMC: what is necessary for success: the key activities	4
	7. BMC: what is necessary for success: the key resources	3
	8. BMC: what is necessary for success: the key partners	3
	9. BMC: Structure cost and revenue streams	6
FACE TO FACE SESSION	**PRESENTATION OF THE SECOND BLOCK OF ACTIVITIES TO BE DONE BY TEACHERS**	4
	10. The final project	4
	TOTAL OF HOURS	60

Table 3: Distribution of hours by topic.

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[4] Business Model Canvas

4   SUMMARY OF TOPICS AND ACTIVITIES TO BE DEVELOPED

The next table shows the summary of topics and activities. Most of these activities must be developed:

MODULE	SUBJECT / MATTER / SKILLS		PEDAGOGICAL MATERIAL ACTIVITY AND METHODOLOGY		ICT TOOL
	CONTENT SKILL	PEDAGOGICAL AND PERSONAL SKILLS	PEDAGOGICAL MATERIAL	ACTIVITY AND METHODOLGY	
M.0		PEDAGOGICAL TOOLS: • The new role of teachers • Problem based learning • Webquest & treasure hunters	• Readings about the new teachers role • Video about the changes of the teachers role • What is a webquest and a PBL?	• Internet research: webquest: the new role of the coach for teaching entrepreneurship	WQ: GOOGLE.SITE MOODLE
M.1	CHALLENGES AND PROSPECTS IN TEACHING ENTREPRENEURSHIP: WHY TO TEACH ENTREPRENEURSHIP? • Why countries are interested in entrepreneurship? Economic and other reasons • Skills needed and developed	• PERSONAL SKILLS FOR TEACHING ENTREPRENEURSHIP	• Readings about entrepreneurship and new teacher's skills • Video about the Business Canvas Model	• Internet research: Europe and entrepreneurship. • Forum: why is it worth to teach entrepreneurship? • Film about BCM	GOOGLE.APPS MOODLE

		• How to teach entrepreneurship? Business Model Canvas.				
BUSINESS CANVAS MODEL	M. 2	DOING VALUE PROPOSITIONS: • Creativity • Innovation & differentiation • Customer's needs & motivations: the core of our proposition		• Readings and videos for encouraging creativity, innovation. • Maslow pyramid and motivations models • Youtube movie "what motivates us" • Technique: elevator pitch	• Internet research: ideas for launching a business. • Designing dynamics for encouraging creativity and post it in the forum: worth spreading ideas: how to work the creativity, innovations with vet students.	WQ: GOOGLE SITE MOODLE
	M. 3	WHO IS THE CUSTOMER: • The importance of customers • Customer segments. • Empathy map	• PEER EVALUATION/ COEVALUATION	• Readings/video about the importance of customers • Readings/video about customer segments • Video about How to build the Empathy Map • Video about www.mural.ly	• Create one empathy map[5] • Forum: WORTH SPREADING IDEAS: How to work the importance of customers with vet students. • On line questionnaire (M2 & M3)	MOODLE www.mural.ly , www.prezi.com GOOGLE APPS
	M. 4	IMPROVING VALUE PROPOSITIONS: • Benchmarking • Internet research and SWOT ANALYSIS • Our target customer proposition	• THE HEADINGS (RUBRICS) FOR EVALUATION • PEER EVALUATION/ COEVALUATION • INTERNET RESEARCH USING WEBQUEST	• Readings/video about benchmarking • Readings/ video about SWOT ANALYSIS. • Readings/ video about peer evaluation	• Internet research: WQ about benchmarking and SWOT analysis. • Designing our own activity for doing benchmarking and SWOT ANALYSIS with vet students[6]	WQ: GOOGLE.SITE
	M. 5	CUSTOMER RELATIONSHIPS AND CHANNELS: • CUSTOMER RELATIONSHIP TYPES • SOCIAL SKILLS: empathy, assertiveness, etc. • DIGITAL MARKETING and	• SOCIAL SKILLS: empathy, assertiveness, etc. • COMPUTER SKILLS: Free resources for building a web, users of social media. • HEADINGS (rubrics) for evaluation • PEER EVALUATION.	• Readings/video about customer relationship types in special sales forces. • Readings/ video about the importance of social skills in business. • Readings/ video about digital	• On line questionnaire M4 & M5 • Building a rubric for assessing the content of the web page, social media page of the students • Forum: WORTH SPREADING IDEAS: How to work the social skills with VET students.	www.wix.com www.about.me www.creatupropiaweb.com www.facebook.com

[5] It will be peer evaluated

[6] It will be peer evaluated

		ECOMMERCE: e-mail marketing, use of social media, web design, etc.		marketing in special social media.		www.twitter.com
	M. 6	WHAT IS NECESSARY FOR SUCCES? THE KEY ACTIVITIES. • Production • Distribution channels • Customer relationship • Revenue streams…		Readings/video about types of key activities.	• On line questionnaire. • Forum: WORTH SPREADING IDEAS: How to work the key activities with VET students.	Moodle
	M. 7	WHAT IS NECESSARY FOR SUCCES? KEY RESOURCES: • Human resources • Financial resources • Material resources • Intellectual property…		Readings/video about types of key resources. Youtube video	• On line questionnaire. • Building a rubric for assessing the key resources of a business project.[7] • Forum: WORTH SPREADING IDEAS: How to work the key activities with VET students.	Moodle
	M.8	WHO IS MORE NECESSARY FOR SUCCES? THE KEY PARTNERS. • The suppliers • capital partners • joint ventures		Readings/video about types of key partners.	• On line questionnaire. • Creating a PBL or Webquest for working this content with VET students[8] • Forum WORTH SPREADING IDEAS: How to work the key partners with VET students.	Moodle Google.sites for the PBL or Webquest
	M. 9	STRUCTURE COST AND REVENUE STREAMS: • Types of costs: fixed costs and variable costs • Key costs of channels, customer relationships, key activities and key		Readings/video about types of business models in order to get revenue streams. Readings/video about types of costs.	• On line questionnaire. • Building a rubric for assessing the cost structure and revenue streams.[9] • Forum: WORTH SPREADING IDEAS: How to work this topic	Moodle

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[7] It will be peer evaluated

[8] It will be peer evaluated

[9] It will be peer evaluated

			Example of Financial Plan	with VET students.	
		resources, etc. • Types of revenue streams • Types of price fixing • The financial plan			
M. 10		**THE FINAL PROJECT**: Your own Business Model Canvas: fill the canvas with your own business idea			Moodle www.mural.ly

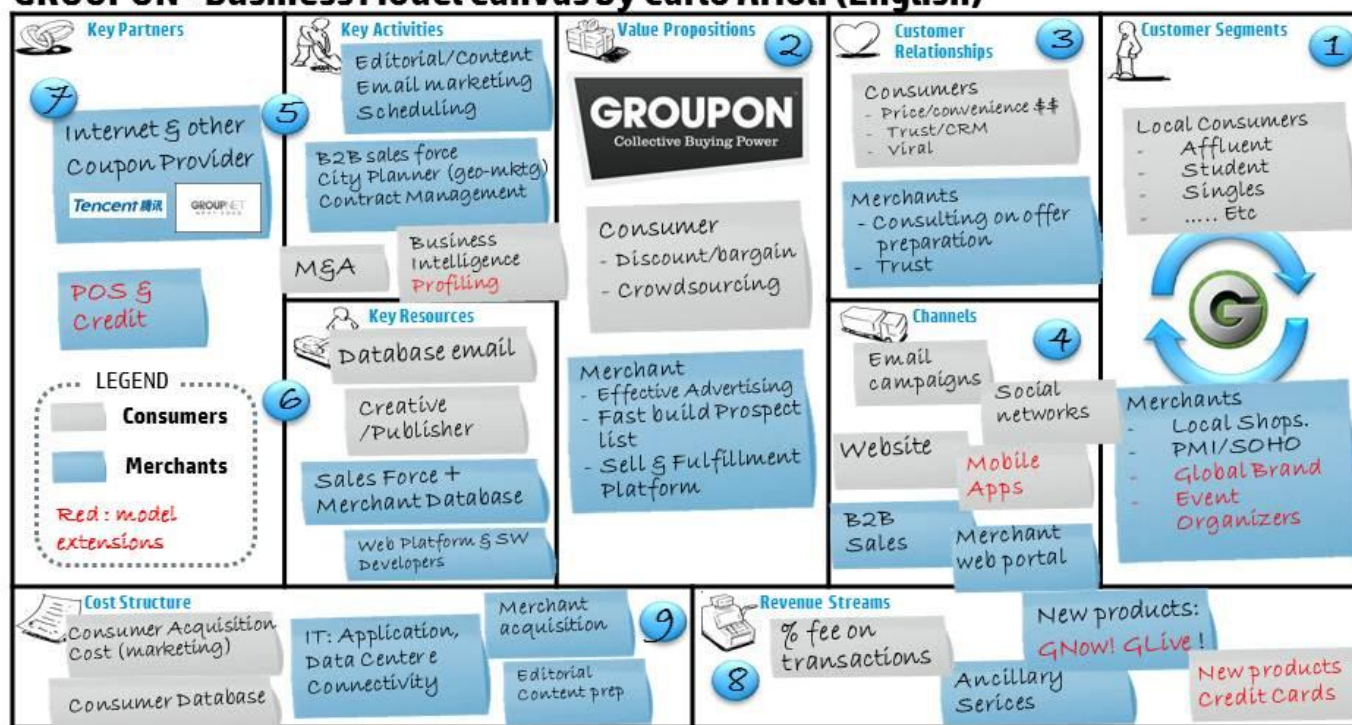In order to be able to develop **THE FINAL PROJECT**, we attach some pictures about the order:

Image 5: Example of Business Model Canvas Source: http://www.marketingespresso.net/images/Strategia/Groupon-Business-Model-Canvas-Carlo-Arioli-English.jpg
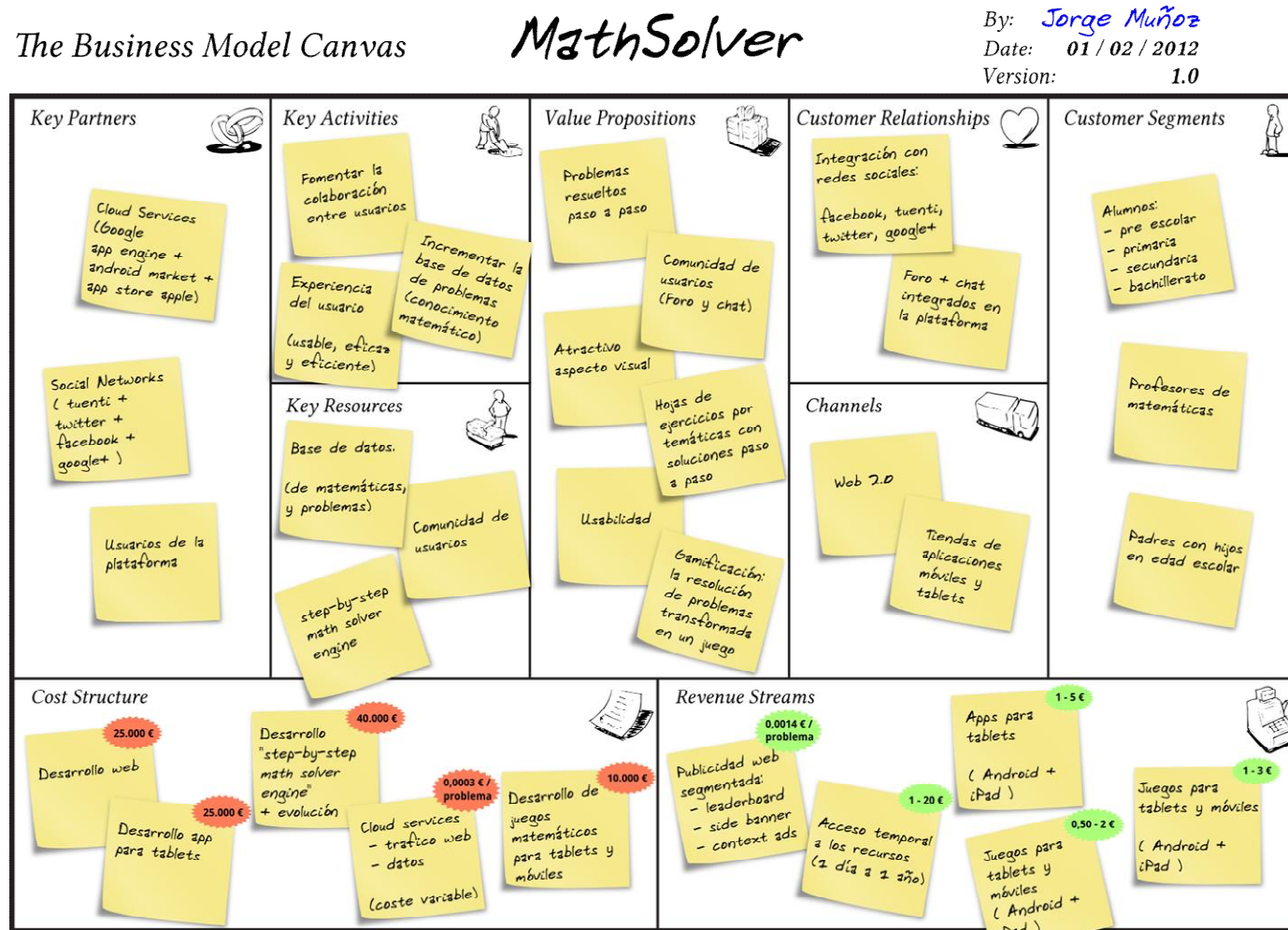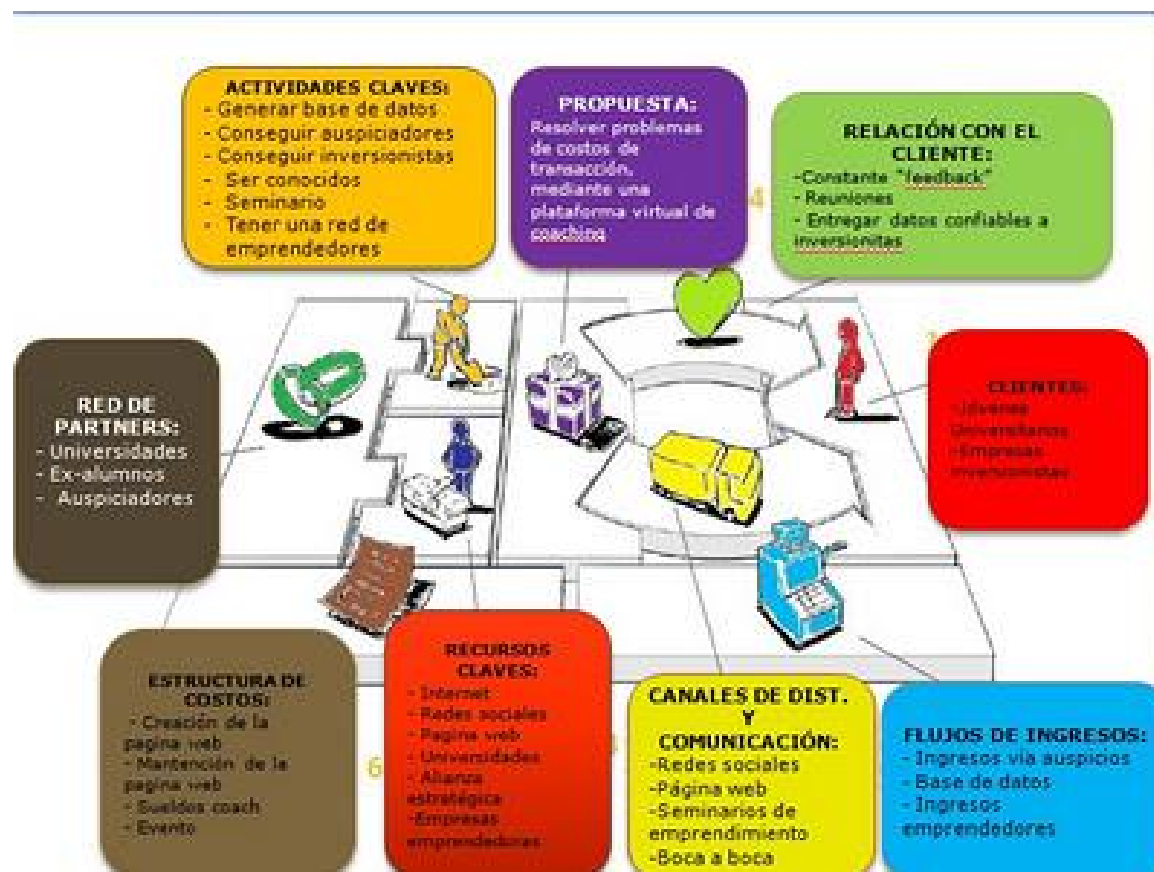
Image 6: Example of Business Model Canvas Source: http://www.eoi.es/blogs/jorgemunoz/2012/02/10/mathsolver-business-model-canvas/

Image 7: Example of Business Model Canvas Source: http://1.bp.blogspot.com/-INY0auuAIIc/UbECego8kxI/AAAAAAAAAwY/TCu5okNJYBQ/s400/Osterwalder-2.jpg

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[10] Available in Entangle Google Drive

[11] Available in Entangle Google Drive