

# AgriCom conference,

# Viterbo Italy,

**September 19, 2013** 



# The education of agriculture competencies

# **IFSAT Foundation**

## **Bas Timmers**

presentation

# **Charlie Wannop**

**Philip Broomhead** 

# In 20 minutes:

4 slides about IFSAT foundation

6 slides about competences

#### 10 about agriculture competences

#### 5 on conclusion



# **IFSAT Foundation**

International Foundation for Sustainable Agriculture Training

#### In bullet points:

Initiated Budapest 1990, established in 1995 in NL

Goal: "Education and training support for a sustainable rural environment"

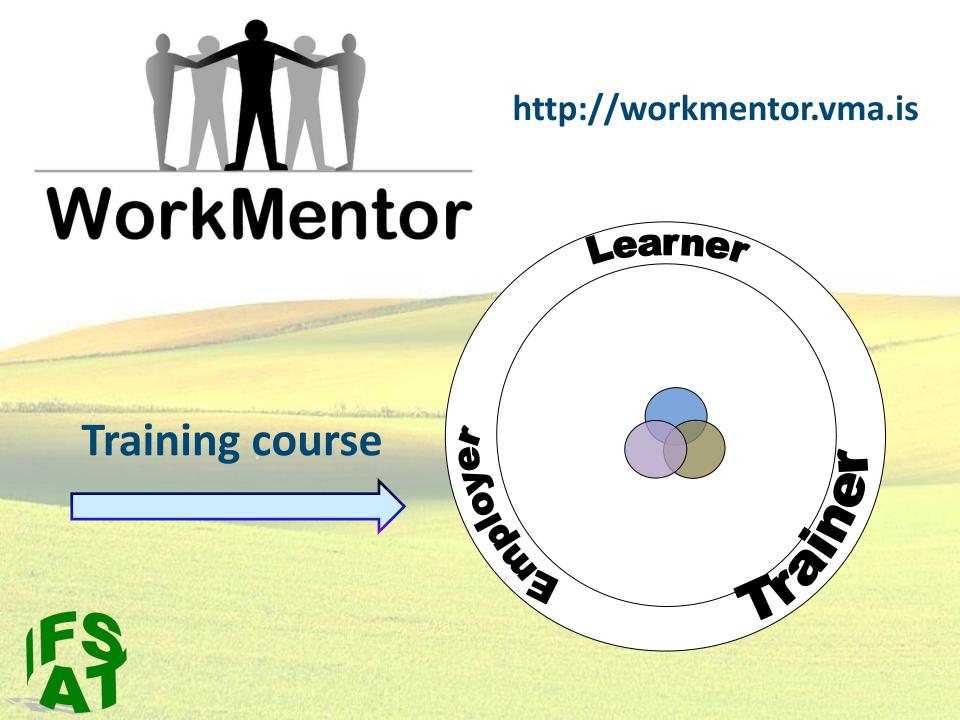
Organic Agriculture education levels 2 - 5
 Involvement in > 20 European projects
 Involved in some 24 EU countries

Real international network

# **IFSAT last projects**

- **EcoJob-AP**, BG project for OA education
- FINESSA, organic agriculture blended learning
- Organic MedNet, Set up of a Mediterranean Organic
   Education Network
  - BEES, training sustainable beekeeping in Turkey
  - **WorkMentor,** development of training package for mentoring learners in the workplace
    - AgriCom, AGRIculture COMpetences model.
    - **GreenBlend** blended learning OA in Greece and Bulgaria, [never started]

ACT, Agricultural Alliance for Competence and Skills based Training [Jan.2014]







### demonstrates the importance of describing competences for agriculture professional and eduation purposes.

## Question: how to educate agricultural competences?



# How to design a curriculum

20<sup>th</sup> century: break down a job in **knowledge and skills** and build an education program on this.

21<sup>th</sup> century: break down a job in **knowledge, skills and 'behaviour'** and build an education program on this.



# Competence

Workshop of the POÈTE project in Nantes 2009 defined competence as:

"The ability to demonstrate theoretic and practical skills in performing routine and complex tasks under a range of circumstances that meet industry standards."

But there are many definitions.

#### POETE meeting: Charlie, Brigita, Jens-Ole, Philip, Jūratė, Bas, Luminata



# **Elements of competence**

### Knowledge

### Skills

#### **Behaviour** (occupational or professional)



# **EcoJob-AP project**







#### HANDBOOK

TO ACQUIRE KEY COMPETENCES FOR THE PROFESSIONAL QUALIFICATION 'EcoJob-AP' ON EUROPEAN STANDARDS



HANDBOOK

available still at:





Training on European standards for ecological agricultural production - EcoJob-AP

Pilot project No BG/06/B/F/PP-166012



#### **IFSAT re-wrote the level 3 competences:**

#### **EcoJob-AP**

#### **FINESSA**

### **Organic-Mednet**



# The Organic-Mednet project classified professional competences of the Organic Farmer in 3 groups:

Managerial competences

**Production competences** 

#### ICT Competences



# Managerial competences

Successful work planning;

- Knowing and understanding legislations;
- Persistency in the maintenance of all documentation both physical and financial;
  Is familiar with market trends and market prices;
  Flexibility in use of financial resources, planning;
  Strictly respecting the income expenditure financial plan;
  - Flexible management of human resources.



# **Production competences**

- Cultural practices in agricultural production: soil cultivation, fertilizing, sowing, irrigation, pruning, pest management, tractor driving and mechanization of agricultural production, etc.;
- Animal care with hygiene & health observation, feeding, cleaning, milking, etc.;
  - Adherence to the sanitary-hygiene requirements in the work activities;
  - Natural resources preservation: land, water, air, beneficial fauna and flora, etc.;

Human health protection.

# **ICT Competences**

To feel confidence in use of ICTs (Internet, different software programmes, etc.);
To understand and use different information resources about organic agriculture;
To follow the news related to agriculture in media, newspapers, on TV, etc.



**Breakdown** [3 selected aspects]:

# Knowledge

To know, understand and use different information resources about OA

# Cultural practices in agricultural production: tractor driving, soil cultivation, .... etc.

**Behaviour** 

**Skills** 

Successful work planning



# **Knowledge elements**

#### Knowledge

Competency	Main elements	
To understand and use	Collect production	
different information resources about organic	information	
agriculture	Be informed about	
	regulation and certification	
	Access to market	
	information	
	Information from research	



# **Knowledge acquisition**

#### Knowledge

Competency	<b>Main elements</b>	Acquired by
To understand and use different information resources about organic	Collect production information	Internet research, fairs and shows, study clubs and advisory services
agriculture	Be informed about regulation and certification	Internet data, news, information by professional organizations and advisory services
	Access to market information	Internet, farmers co- operatives and advisory services
	Information from research	Internet and advisory services



# **Skills elements**

Competency	Main elements	
Cultural practices in agricultural	Knowledge of soil management	
production: sowing, soil cultivation,	Practical soil management	
fertilizing, irrigation, pruning, pest	Driving tractors	
management, mechanization of agricultural production, etc.	Selection of machinery needed [for tillage, seeding, weeding, harvesting, storaging]	
	Calibrating machinery	and stated and
	Operating machinery	
	Calculate seed needs	
	Calculate fertilizer needs	
	Pest, Weeds and Disease [PWD] management:	
	PWD occurrence	
	PWD identification	VIE PROVER
	PWD damage estimates	
	PWD control	
	Pruning	
	Fruit trees	and the second sec
	Hedges and wind shields	and the second second





# **Skills acquisition**

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Competency	Main elements	Acquired by	
Cultural practices in agricultural	Knowledge of soil management	Internet and field trips	
production: sowing, soil cultivation,	Practical soil management	Internet, training and experience	
fertilizing, irrigation, pruning, pest	Driving tractors	Practical training, building experience	
management, mechanization of agricultural production, etc.	Selection of machinery needed [for tillage, seeding, weeding, harvesting, storaging]	Internet surveys, study clubs, product information, demonstrations, shows and fairs	
	Calibrating machinery	Manuals and instruction	
	Operating machinery	Practical training	
	Calculate seed needs	Internet, product data, production planning, experience	
	Calculate fertilizer needs	Internet, product data, production planning, experience	
	Pest, Weeds and Disease [PWD] management: PWD occurrence PWD identification PWD damage estimates PWD control	<ul> <li>Internet and field trips for occurrence and identification</li> <li>Internet data on damage assessment and control options</li> <li>Training in control measures</li> </ul>	
	Pruning Fruit trees Hedges and wind shields	<ul> <li>Internet data search</li> <li>Knowledge of trees and plants</li> <li>Training in use of pruning equipment</li> </ul>	

# **Behaviour elements**

#### Behaviour.

Competency	Main elements
Successful work planning	Time management
	Productivity of men and machinery.
	Cost awareness
	Self discipline
	Work Overview and being able to structure work [Understanding logical work progression and cohesion]
	HRM and assigning [dividing] tasks.





# **Behaviour acquisition**

#### Behaviour.

Competency	Main elements	Acquired by
Successful work planning	Time management	Training and experience
	Productivity of men and machinery.	Observation, data collection, product information, demonstrations,
	Cost awareness	Knowledge of cost factors
	Self discipline	Professional attitude
	Work Overview and being able to structure work [Understanding logical work progression and cohesion]	Experience [over a number of years]
	HRM and assigning [dividing] tasks.	Study, building good working relations, observation, knowing staff competencies.



### **Conclusion:**

Education in professional competences to become an Organic Farmer should include:

Lectures on Theory [class room or internet or mix of these]

Skills training [on a dedicated training facility]
 Experience [monitored and supported during practise placement]



#### In short:

# **Blended learning**





## The results of the AgriCom project,

## the competence inventory and list can

# be used effectively to help designing

# an education curriculum.

# Warmonderhof Training Centre, NL

# Learning Working

# Living

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# Thank you

# www.ifsat.eu bastimmers@online.nl





#### Son of an arable farmer in Wieringermeer, NL







# **Before you go:**

# Please take 3

# minutes for evaluation



The few questions below will help us to evaluate today's conference and provide feedbac on the effectiveness of the AgriCom project. So please take 3 minutes to complete th questionnaire.

Has the conference succeeded in explaining the AgriCom Competence Model?

1	z	3	4	5
0	0	0	0	0

Has the conference succeeded in explaining the useful applications of the AgriCon Competence Model?

1	z	3	4	
0	0	0	0	0

How important is it to have well defined competences for the job, profession, specializatio or training opportunity in your line of work?

1	2	3	4	5
1 0	20	• •	ô	ů

In your opinion, are the AGRICOM Competence Levels sufficient for the Agriculture sector?

1	2		4	5
0	0	0	0	0
			ompetence Mod	

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For further suggestions or remarks, please use the backside of this paper!

#### THANK YOU !!

Please hand the form at the door.

Please check your views on a grade 1 to 5 with 1 being very poor and 5 being excellent.

	-		-	-
1	2		4	5
0	0	0	0	0



# Thank you again

