

AgriCom conference,

Viterbo Italy,

September 19, 2013



The education of agriculture competencies

IFSAT Foundation

Bas Timmers

presentation

Charlie Wannop

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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"

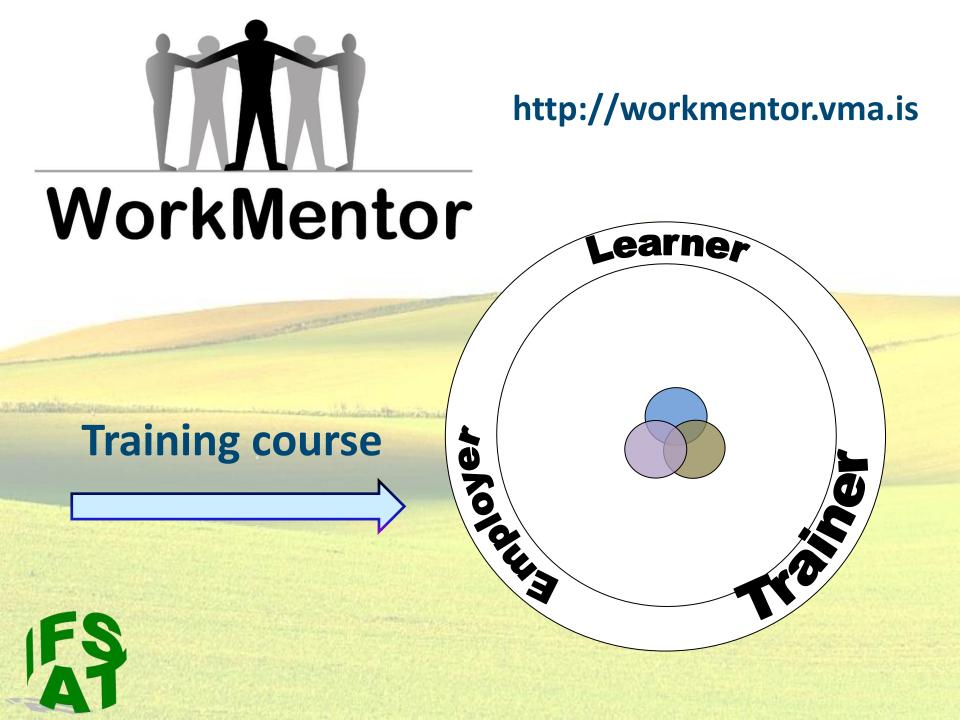
Organic Agriculture education levels 2 - 5
 Involvement in > 20 European projects
 Involved in some 24 EU countries

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

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

21th 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 | Main elements | 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 | Internet and field trips for occurrence and identification Internet data on damage assessment and control options Training in control measures | |
| | Pruning Fruit trees Hedges and wind shields | Internet data search Knowledge of trees and plants Training in use of pruning equipment | |

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

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

| 1 | 2 | | 4 | 5 |
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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

