



AGRIENT:
Enhancing Youth Entrepreneurship Skills,
Careers Guidance and Competences in
Agriculture Through a Game based Virtual
Reality Platform physics education
Agreement Number: 2018-3-HR01-KA205-060151



æ

**Agrient- Enhancing Youth Entrepreneurship Skills,
Careers Guidance and Competences in
Agriculture Through a Game based Virtual Reality**

ERASMUS + 2018-3-HR01-KA205-060151



AGRIENT:
Enhancing Youth Entrepreneurship Skills,
Careers Guidance and Competences in
Agriculture Thought a Game based Virtual
Reality Platform physics education
Agreement Number: 2018-3-HR01-KA205-060151

IO1 - Design of Agro-Entrepreneurship Curriculum, Formulation of Innovative Courses and Creation of Open Educational Resources

**Report and Need Analysis on Agribusiness Training in Europe
Curriculum and Outline of Contents
Templates for the Learning Material (Theory, Exercises)**



Executive summary

This document has been prepared in order to design of a curriculum of courses about Agro-Entrepreneurship, the preparation of the templates of learning material and the learning scenarios in Agrient project. Slovak University of Agriculture is coordinating the activity of developing the curricula in the context of the Intellectual Output 1 “*Design of Agro-Entrepreneurship Curriculum, Formulation of Innovative Courses and Creation of Open Educational Resources*”, but the contribution of the other partners is foreseen in terms of responsibilities for national content and development.

This output follows the findings of the studies and research about the current state on Agro-Entrepreneurship Training around Europe, with emphasis on participant countries, defines the content and pedagogical methods of the Courses.

The document is designed in order to assure the relevance of the developed learning materials, to adjust them accordingly to stakeholders’ feedback and requirements of the specific conditions of the 3D Virtual Learning Environment.

This deliverable summarizes the main information on the Agrient curricula, used pedagogical methodology, a combination of courses delivered on 3D Virtual World, with the aim of helping partners, institutional stakeholders and other relevant parties implementing an Agrient courses.

Chapter 1, Introduction, explains in more detail the subject of this document, how the training activities will be developed, and presents methodologies and didactical structures.

Chapter 2, Report and Need Analysis on Agribusiness Training in Europe presents the statistical analysis of the answers to questions addressed in questionnaires that were distributed to the participants to the survey conducted in the project. Within this survey Agrient project has described the current state on Agro-Entrepreneurship Training around Europe and identified the gaps and needs that help to design courses to cover agro-entrepreneurship training.

Chapter 3, Course design – syllabus and curriculum presents the typologies of materials and documentation to be utilized and produced during the training course.

The various criteria adopted to evaluate the course results through the training activities are described in **Chapter 4 Success indicators**.



1. Introduction

1.1. Training Objectives

The overall objective of the courses is to enhance the young people interest in agriculture, improve their entrepreneurship spirit and capability, increase their employability and assist them to successful entrepreneur and start initiatives in agriculture.

The Agrient's courses content development is structured in 3 main phases:

- development of the curriculum for Agrient courses;
- development of the learning content and 3D activities;
- development of the 3D Virtual Learning Environment and design of the 3D activities.

1.2. Agrient courses development

Two crucial targets need to be addressed for Agrient courses development: the definition of the training structure and methodology and the development of training modules. The training activities contribute to the professional training of the involved actors. The main characteristics of the Agrient training are:

- Simple in form;
- Fit to the specific conditions of the 3D virtual learning environment;
- Easy to start;
- Possible integration between modules;
- Focused materials, feedback and support;
- Customization of modules program and training design;
- Provide ongoing guidance and support;
- Provide step-by-step, research-proven materials;

It is essential to select the structure and methodology that will be the most effective for its training environment, considering the factors such as:

- **The overall learning objectives:** what is expected to be achieved through learning? In our case the learning materials will support transfer of know-how and innovations through acquisition of new skills and competencies in agro-entrepreneurship. The training will put particular focus to empower the business knowledge and improve



AGRIENT:
Enhancing Youth Entrepreneurship Skills,
Careers Guidance and Competences in
Agriculture Thought a Game based Virtual
Reality Platform physics education
Agreement Number: 2018-3-HR01-KA205-060151

advanced entrepreneurship skills. For this aim, also existing pedagogical materials such as photos, related videos, expert teachers, and books will be used.

- **Who needs the training:** and any categories of trainees that will increase training effectiveness and economy? In our case the training is needed by young individuals:
 - o unemployed or employed/involved in agriculture sector and want to extend their knowledge, entrepreneurship skills and qualifications;
 - o graduates of agriculture educational institutes of all levels;
 - o young 'NEETS' that are not in employment, education or training and would like to study and trained in entrepreneurship in agriculture sector;
 - o young people with fewer opportunities such as in isolated areas and small villages.
- **The expected learning outcomes:** what each person trained is expected to be able to do, and expect to know, at different stages and at the conclusion of training. Depending on the intensity level of the training and content of the modules, the trainees are expected to acquire specialized agriculture and entrepreneurship skills that help them to improve their entrepreneurship spirit and capability, increase their employability and assist them to successful entrepreneur and start initiatives in agriculture.
- **The scope of the training methods** is highly depending on the 3D Virtual World specific conditions. The 3D Virtual World will include for each course, a series of 3D interactive scenarios that will be designed and implemented as part of this output. Finally, the environment will feature training functionality like Auditoriums, classrooms and media rooms. The part of the 3D activities, the assessment test and user-satisfaction questionnaire will be part of the virtual learning environment.

2. Report and Need Analysis on Agribusiness Training in Europe

The questionnaire has been prepared with the aim to study the current state on Agro-Entrepreneurship Training around Europe and to identify the gaps and needs that Agrient partnership use to design courses to cover agro-entrepreneurship training.

2.1. Agrient Survey questionnaire

Question 1: How would you evaluate the relevance and importance of each of the following study fields / subjects for a future agro entrepreneur?

Question 1. Business management	
1.1.	Diagnostic analysis of the market and the business plan
1.2.	Identifying and validating feasible ideas for the future business
1.3.	Initiating a business
1.4.	Business modelling
1.5.	Timely planning of the business development
1.6.	Rapid prototyping
1.7.	Market surveying and product pricing
1.8.	Planning business costs
1.9.	Planning and managing the business team
1.10.	Business monitoring and control
Question 2. Team Management	
2.1.	Defining a team
2.2.	Teamwork skills
2.3.	Team management and execution team - key attributes
2.4.	Techniques to motivate human resources
2.5.	Conflict management
2.6.	Managing and allocating human resources
Question 3. Strategic Management	
3.1.	Management models: advantages and disadvantages
3.2.	General management principles
3.3.	Organizational culture
3.4.	Current trends in strategic management
3.5.	Leadership in the organization (company)
Question 4. Management of change	
4.1.	The process of organizational (company) change
4.2.	Change and adaptation strategies



4.3.	Relationship with the organization's (company's) external environment and the need for change / adaptation
4.4.	Organizational leadership
4.5.	Resistance to change
Question 5. Presentation and facilitation skills	
5.1.	Personal presentation skills
5.2.	Skills of persuasion
5.3.	Ability to mediate a discussion / debate
5.4.	Giving a speech (verbal and non-verbal aspects)
5.5.	Creating constructive feedback
Question 6. Organizational communication	
6.1.	Interpersonal communication. Assertiveness and persuasion
6.2.	Communicating with interest-holders outside the organization
6.3.	Written communication
6.4.	Audio-video communication
6.5.	Verbal communication
6.6.	Non-verbal communication
6.7.	Organization of sessions, discussions, debates
Question 7. Coaching	
7.1.	Personal development techniques
7.2.	Self-motivation
7.3.	Understanding and capitalizing on your own potential

Question 8: What knowledge fields do you consider important for a successful entrepreneur? Please grade each personal feature on how important you consider it to be for a future successful entrepreneur.

- Communication
- Conflict management
- Negotiation
- Motivation
- Managing change
- Analytical intelligence
- Emotional intelligence

Question 9: How would you evaluate the working methodology with the entrepreneurial students? Please grade each of the learning methods that you consider useful for the assimilation of knowledge.

- Theoretical presentations
- Team work (in projects)
- Case studies
- Simulations and exercises
- Elearning resources
- VR and 3D Worlds simulations



2.2. Answers and findings

Q1: *How would you evaluate the relevance and importance of each of the following study fields / subjects for a future agro-entrepreneur?*

Respondents have stated very high relevance and importance for:

- A startup guide for entrepreneurs,
- Planning/defining business costs.

Respondents expressed their high relevance and importance for:

- Market analysis,
- Market surveying and product pricing,
- Business monitoring and control.

Respondents found the answers less relevant and important:

- Business and marketing plan,
- Business model development,
- Rapid prototyping and innovation,
- Planning and managing the business team.

Q2: *How would you evaluate the relevance and importance of each of the following study fields / subjects for a future agro-entrepreneur?*

Respondents gave the most fours and fives for:

- Teamwork skills,
- Team management and execution team,
- Techniques for motivating human resources,
- Managing and allocating human resources, establishing your team and conflict management.

Q3: *How would you evaluate the relevance and importance of each of the following study fields / subjects for a future agro-entrepreneur?*

The least important is the Current trends in strategic management element, while others are rated almost equally important:

- Management models: advantages and disadvantages,
- General management principles,
- Organizational culture,



- Leadership in the organization (company).

Q4: *How would you evaluate the relevance and importance of each of the following study fields / subjects for a future agro-entrepreneur?*

As the most important „Relationship with the organization's (company's) external environment and the need for change / adaptation” has been rate.

Q5: *How would you evaluate the relevance and importance of each of the following study fields / subjects for a future agro-entrepreneur?*

The respondents think that the most important is „Personal presentation skills - verbal and non-verbal aspects”.

Q6: *How would you evaluate the relevance and importance of each of the following study fields / subjects for a future agro-entrepreneur?*

Verbal communication is the most important.

Q7: *How would you evaluate the relevance and importance of each of the following study fields / subjects for a future agro-entrepreneur?*

Understanding and capitalizing on your own potential is the most important.

Q8: *What knowledge fields do you consider important for a successful agro-entrepreneur? Please grade each personal feature on how important you consider it to be for a future successful agro-entrepreneur.*

In this group of questions everything is very important that proportions 4 and 5 are generally 10 out of 12.

- Communication skills
- Negotiation skills
- Motivational skills
- Managing change
- Analytical intelligence skills
- Emotional intelligence skills

Somewhat less important are conflict management skills and emotional intelligence skills.

Q9: *How would you evaluate the current working methodology with the agro-entrepreneurial students? Please grade each of the learning methods for the assimilation of knowledge.*

As the most important elements: case/field studies and team work (in projects).

3. Course design – syllabus and curriculum

3.1. Course design

The training materials will be in compliance with the EQF documents and will be take us reference the EQF definitions for the student's/trainee's achievements.

"Learning outcomes"	Statements of what a learner knows, understands and is able to do on completion of a learning process and which are defined in terms of knowledge, skills and competence
"Knowledge"	The outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual.
"Skills"	The ability to apply knowledge and use know-how to complete tasks and solve problems. In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments).
"Competence"	The proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework,

competence is described in terms of responsibility and autonomy.

The level 4 of the EQF will be appropriate for training. All partners are free to adapt national version of the training content to higher level of EQF.

3.2. Syllabus Template

The Syllabus Template follows the structure and methodology that will be the most effective for Agrient courses & 3D Virtual environment, considering the factors such as:

- **Planned types, learning activities and teaching methods** - the following teaching and learning activities can be adapted and used in a range of course target groups¹:
 - Concept mapping;
 - Participatory Learning in Action (PLA) Techniques;
 - Questioning;
 - Drill and Practice;
 - Formative quizzes;
 - Tutorials
 - Games
 - Story Telling
 - Simulations
 - Role-playing
 - Discussion
 - Small group activities;
 - Social media activities (Facebook, Twitter, Youtube);
- **Teaching hours** - the precise timing is very important part of the course design. During the syllabus development is very important to consider a time necessary for active learning and for learners to complete major assignments and prepare for exams.
- **Mode of delivery** – the course content can be delivered in a variety of ways. However the following innovative methods are required²:
 - *blended learning*, which encompasses a wide variety of designs, including:
 - technology enhanced learning (e.g. using pdf files or ppt presentations);
 - learning management systems as a support tool for face-to-face teaching and for storing learning materials and online discussion;
 - *online eLearning*, as a form of distance learning, with no face-to-face teaching, including:

¹ Additional reading:

http://www.fctl.ucf.edu/TeachingAndLearningResources/CourseDesign/Assessment/content/101_Tips.pdf
<https://www.uwc.ac.za/TandL/Pages/TandL-Activities.aspx>

² Additional reading:

<http://www.tonybates.ca/2015/02/03/deciding-on-modes-of-delivery/>



- courses for credits or non-credit courses, offered online and cover the relevant content, assessments, self-testing tools etc.;
 - fully open courses, such as MOOCs;
 - open educational resources, which can serve as supporting materials for teaching and learning.
- **Mode of completion and ECVET Credits allocated** - ECVET is European instrument to support lifelong learning, the mobility of European learners and flexibility of learning pathways to achieve qualifications. For more information follow the official document of European Commission "[The European Credit System for Vocational Education and Training](#)"
- **EQF level** - The European Qualifications Framework (EQF) acts as a translation device to make national qualifications more readable across Europe, promoting workers' and learners' mobility between countries and facilitating their lifelong learning. The EQF aims to relate different countries' national qualifications systems to a common European reference framework. Individuals and employers will be able to use the EQF to better understand and compare the qualifications levels of different countries and different education and training systems. Since 2012, all new qualifications issued in Europe carry a reference to an appropriate EQF level³.
- **Assessment methods**⁴ – the selection of appropriate assessment methods depends on factors like as planned learning outcomes, level of study, target groups of learners and their skills, knowledge and area of expertise, available resources, and delivery mode of the course and so on. Examples of assessment methods:
- Case studies;
 - Examination;
 - Multiple-choice tests;
 - Practical project;
 - Self-assessment.
- **Course objectives & Learning outcomes of the course unit** – course objectives clearly describe what you intend course participants to learn by the end of the course. Learning outcomes describe an intended or observed state, e.g. what your students will learn or what your students learned⁵. Depending on the intensity level of the training and content

³ Additional reading:

https://en.wikipedia.org/wiki/European_Qualifications_Framework

⁴ Additional reading:

<http://facultyinnovate.utexas.edu/teaching/assess-learning/methods-overview>

http://www.learningandteaching.info/teaching/assess_form.htm

⁵ Additional reading:

<http://resources.depaul.edu/teaching-commons/teaching-guides/course-design/Pages/course-objectives-learning-outcomes.aspx>



of the modules defined based on the Agrient survey findings, the trainees are expected to now about following:

1. Agriculture courses:

- Entrepreneurship (general course) SIBENIK
- Agrotourism SIBENIK
- Apiculture (SUA)
- Organic Farming (ARI)
- Smart Farming (SUA + ARI)
- **Traditional products:**
 - Learning objectives:
 - Students should understand - the term local product; how local producers (small and medium business enterprises and agricultural holdings) form the integral part of regional networks and local cultures and their incomes are realized predominantly on local and regional markets.
 - Learning outcomes:
 - Students should be able to - understand that sustainable and effective agriculture is closely connected production of quality and nutritious foodstuffs; identify the opportunities, options, and added value as well as to present constructive proposals for developing and/or supporting the local producers and local food production.

2. Entrepreneurship courses

- **Business concepts & skills** including: setting up local business networks, building and maintaining profitable business relationships, developing a business plan, sourcing and financing
 - Learning objectives:
 - Students should understand -
 - Learning outcomes:
 - Students should be able to -
- **Brokering and facilitation skills including:** negotiation and conflict handling, coaching skills, durable contracting, brokering in value chain partnerships



Erasmus+

AGRIENT:
Enhancing Youth Entrepreneurship Skills,
Careers Guidance and Competences in
Agriculture Thought a Game based Virtual
Reality Platform physics education
Agreement Number: 2018-3-HR01-KA205-060151

- Learning objectives:
 - Students should understand -
- Learning outcomes:
 - Students should be able to -
- **Marketing** including: Market Research, New Product Development, Pricing, Retailing and Merchandising, Selling, Group Marketing
 - Learning objectives:
 - Students should understand -
 - Learning outcomes:
 - Students should be able to -
- **Financial Management** including: Money Management, Managing Cash and Credit, Calculating Profit, Business Planning
 - Learning objectives:
 - Students should understand -
 - Learning outcomes:
 - Students should be able to -

3.3. Process of syllabus development



3.4. Curriculum Template

This template serves as the guideline for development of the chapters and content of Agrient learning materials.

In a theoretical sense, the curriculum refers to what is offered by the Agrient learning materials and courses. In a wider scope covers the knowledge, attitude, behaviour, manner, performance and skills that are imparted or inculcated in a student. It contains the teaching methods, lessons,



AGRIENT:
Enhancing Youth Entrepreneurship Skills,
Careers Guidance and Competences in
Agriculture Thought a Game based Virtual
Reality Platform physics education
Agreement Number: 2018-3-HR01-KA205-060151

assignments, physical and mental exercises, activities, projects, study material, tutorials, presentations, assessments, test series, learning objectives, and so on.

Course description - explain concisely what the course is about and how the overall course will support student learning in the entrepreneurship disciplines.

In this part of the curriculum you can describe details of the background of the course and its overall aims and the prior knowledge the students should have. You can also include information how the course relates to the other Agrient courses/lectures/training activities.

To filling this part, answer on following questions can help you:

- What is the course about?
- Why is it relevant, interesting, or significant?
- What questions will your course answer?
- What is the main argument of your course?

Learning outcomes - refer specifically to what students are expected to achieve or learn at the end of the course. You can use Bloom's taxonomy to identify verbs to describe student learning. Examples of learning outcomes verbs for library instruction include:

- Knowledge/Remembering: define, list, recognize
- Comprehension/Understanding: characterize, describe, explain, identify, locate, recognize, sort
- Application/Applying: choose, demonstrate, implement, perform
- Analysis/Analyzing: analyze, categorize, compare, differentiate
- Evaluation/Evaluating: assess, critique, evaluate, rank, rate
- Synthesis/Creating: construct, design, formulate, organize, synthesize

Course syllabus - highlight the main points in each topic/subject in order to help students better understand what is and what is not covered in the course.

The Syllabus Template below.

Learning activities - lists the components of the course (e.g. face to face meeting in auditorium, interactive/3D learning materials, library activities, field-trip via the pathway, etc.).

Educational activities consist not only from the study of theoretical learning sources. Student has to spend substantial part of the educational activities on the practical exercises. Please, plan activities of the topic/subject in the way to cover not only the theoretical but also interactive assessments.



Assessment type – is a part of the learning activities and must match to the planned learning outcomes. Please, describe how the assessment task(s) help to students achieve the planned learning outcomes.

Assessment type	Relations

Required and recommended readings - Please, provide list of references and additional readings.

The lists can include links to online resources and/or eBooks.

Required readings:

Recommended readings:

Feedback for evaluation - choose between following forms of evaluation – questionnaires or feedback from students through focus-group meetings.

3.5. Syllabus Template

Course title:

Planned types, learning activities and teaching methods:

Teaching hours:

Mode of delivery:

Mode of completion and ECVET Credits allocated:

EQF level:

Assessment methods:

Learning outcomes of the course unit:

Course content:

Recommended or required reading:

Basic:

Recommended:

Language of the course:

Names of the lectures:

Supervisor:

Notes:



AGRIENT:
 Enhancing Youth Entrepreneurship Skills,
 Careers Guidance and Competences in
 Agriculture Thought a Game based Virtual
 Reality Platform physics education
 Agreement Number: 2018-3-HR01-KA205-060151

Detailed content for the topic/subject

The units forming the course syllabus:

Topic/Subject	Contents/main points

3.6. Structure for the module syllabus development

MODULE x – Title of the module		
Partner responsible:		Partner cooperating:
Task range		
Learning outcomes	the learner has knowledge:	
	the learner has skills of being able to:	
	the learner has competence of:	
Module contents: -		
Module includes: <ul style="list-style-type: none"> - information about basic terms, measures and values; - online forums for discussions; - glossary; - links to useful websites. 		
Module motivation: -		
Glossary -		

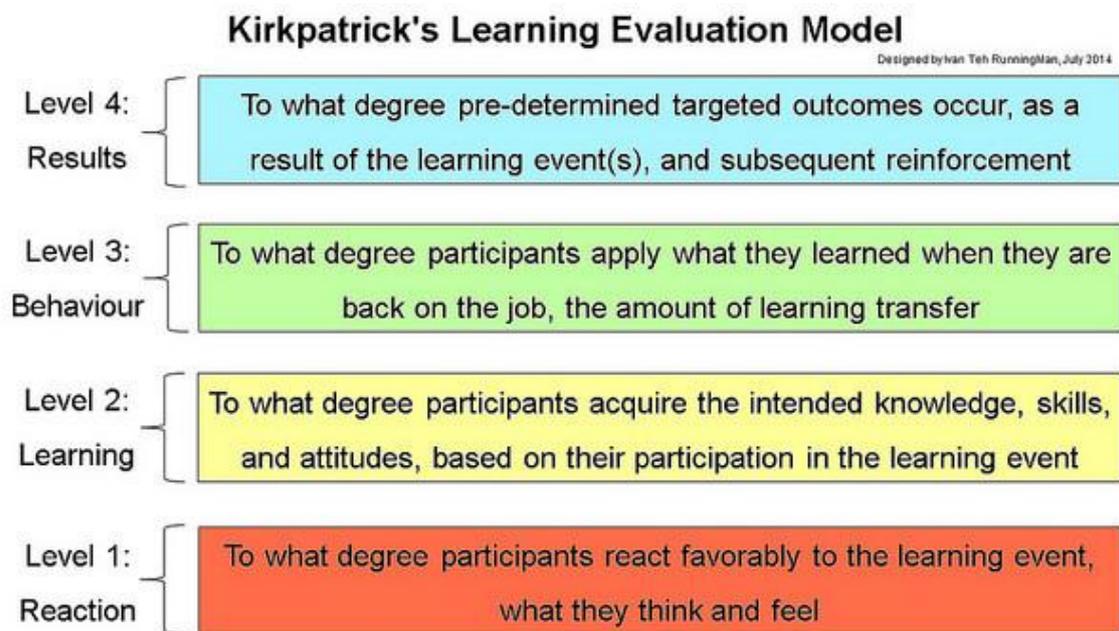


3.7. Structure for the module content

The name of the module	
Current information about the topic (Limit: 5000 characters)	
Causes and description of how it manifests (Limit: 5000 characters)	
Effects and management in the context of the topic/module (Limit: 5000 characters)	
Principles of the specific module (Limit 1000 characters)	
Basic terms/measures of the module/topic (Limit: 5000 characters)	
Training materials (tasks, case studies, exercises)	
Short description of the materials (Limit: 1000 characters)	
The format of the materials/resources (paper, film, photograph)	
Link of the online resources (film or video resources)	
Specific images (to support the purpose of the resources)	
Setting – Indoor/Outdoor	
Duration	
Materials	
No of Learners/Representatives	
Individual or group work	
Step by step guide (Limit 5000 characters)	

4. Success indicators

In the evaluation process we will follow Donald L Kirkpatrick's training evaluation model - the four levels of learning evaluation. This task involves the definition of the evaluation criteria and how the success of the training will be measured.



Source: Donald L. Kirkpatrick, "Evaluating Training Programs: The Four Levels (1st Edition)" by Berrett-Koehler Publishers, November 1994, ISBN-13: 978-1881052494

An assessment questionnaire based on multiple choice questions will be developed, in order to evaluate the knowledge that has been acquired through the course and the trainees' overall performance capacity. The assessment will take place on the on-line environment, at the last of each module.

A specific user's satisfaction questionnaire will also be employed in order to check the understanding acquired by participants. This will be especially useful during the piloting and first editions of training, in order to eventually the correct and redesign in preparation for further editions.

Evaluation level and type	Evaluation description and characteristics	Examples of evaluation tools and methods	Relevance and practicability
1. Reaction	Reaction evaluation is how the delegates felt, and	Typically 'happy sheets'.	Can be done immediately the training ends.

	<p>their personal reactions to the training or learning experience, for example: Did the trainees like and enjoy the training? Did they consider the training relevant? Was it a good use of their time? Level of effort required to make the most of the learning. Perceived practicability and potential for applying the learning.</p>	<p>Feedback forms based on subjective personal reaction to the training experience. Post-training surveys or questionnaires. Online evaluation or grading by delegates.</p>	<p>Very easy to obtain reaction feedback Important to know that people were not upset or disappointed. Important that people give a positive impression when relating their experience to others who might be deciding whether to experience same.</p>
2. Learning	<p>Learning evaluation is the measurement of the increase in knowledge or intellectual capability from before to after the learning experience: Did the trainees learn what intended to be taught? Did the trainee experience what was intended for them to experience? What is the extent of advancement or change in the trainees after the training, in the direction or area that was intended?</p>	<p>Typically assessments or tests before and after the training. Methods of assessment need to be closely related to the aims of the learning. Measurement and analysis is possible and easy on a group scale. Reliable, clear scoring and measurements need to be established, so as to limit the risk of inconsistent assessment.</p>	<p>Relatively simple to set up, but more investment and thought required than reaction evaluation. Highly relevant and clear-cut for certain training such as quantifiable or technical skills. Less easy for more complex learning such as attitudinal development, this is famously difficult to assess.</p>
3. Behavior	<p>Behavior evaluation is the extent to which the trainees applied the learning and changed their behavior, and this can be immediately and several months after the training, depending on the situation:</p>	<p>Observation and interview over time are required to assess change, relevance of change, and sustainability of change. Assessments need to be subtle and ongoing, and</p>	<p>Measurement of behavior change is less easy to quantify and interpret than reaction and learning evaluation. Simple quick response systems unlikely to be adequate.</p>

	<p>Did the trainees put their learning into effect when back on the job? Were the relevant skills and knowledge used Was there noticeable and measurable change in the activity and performance of the trainees when back in their roles? Was the change in behavior and new level of knowledge sustained? Would the trainee be able to transfer their learning to another person? Is the trainee aware of their change in behavior, knowledge, skill level?</p>	<p>then transferred to a suitable analysis tool. Assessments need to be designed to reduce subjective judgment of the observer or interviewer, which is a variable factor that can affect reliability and consistency of measurements. The opinion of the trainee, which is a relevant indicator, is also subjective and unreliable, and so needs to be measured in a consistent defined way. Assessments can be designed around relevant performance scenarios, and specific key performance indicators or criteria.</p>	<p>Management and analysis of ongoing subtle assessments are difficult, and virtually impossible without a well-designed system from the beginning. Evaluation of implementation and application is an extremely important assessment - there is little point in a good reaction and good increase in capability if nothing changes back in the job, therefore evaluation in this area is vital, albeit challenging. Behavior change evaluation is possible given good support and involvement from line managers or trainees, so it is helpful to involve them from the start, and to identify benefits for them, which links to the level 4 evaluations below.</p>
<p>4. Results</p>	<p>Results evaluation is the effect on the business or environment resulting from the improved performance of the trainee - it is the acid test. Measures would typically be business or organizational key performance indicators, such as: Volumes, values, percentages, timescales, return on investment, and other quantifiable aspects of organizational</p>	<p>It is possible that many of these measures are already in place via normal management systems and reporting. The challenge is to identify which and how relate to the trainee's input and influence. Therefore it is important to identify and agree accountability and relevance with the trainee at the start of the training, so they understand what is to be measured.</p>	<p>Individually, results evaluation is not particularly difficult; across an entire organization it becomes very much more challenging, not least because of the reliance on line-management, and the frequency and scale of changing structures, responsibilities and roles, which complicates the process of attributing clear accountability. Also, external factors greatly affect</p>



AGRIENT:
Enhancing Youth Entrepreneurship Skills,
Careers Guidance and Competences in
Agriculture Thought a Game based Virtual
Reality Platform physics education
Agreement Number: 2018-3-HR01-KA205-060151

	performance, for instance; numbers of complaints, staff turnover, attrition, failures, wastage, non-compliance, quality ratings, achievement of standards and accreditations, growth, retention, etc.	This process overlays normal good management practice - it simply needs linking to the training input.	organizational and business performance, which cloud the true cause of good or poor results.
--	---	--	--