

MANUAL 6

HOW TO EDUCATE SUCCESSFUL RURAL ENTREPRENEURS



TEACH
A MAN TO FISH
Education that pays for itself

ABOUT THIS SERIES

The SCHOOL IN A BOX Guide Series is designed as a 'one-stop shop' for anyone interested in establishing their own financially self-sufficient school.

The series is made up of nine individual manuals which between them cover all of the key areas which will need to be considered in detail in the creation of any Self-Sufficient School.

Each manual offers a step-by-step guide to building your understanding of key concepts and mastering a range of planning and management tools, as well as providing a wealth of case studies and real-life examples to illustrate both best practice and easily avoided pitfalls.

The full listing of manuals in the series is as follows:

1. Getting Started: An Introduction to Financially Self-Sufficient Schools, 2. How To Evaluate Your Organization, 3. How To Organize Your School, 4. How To Generate School Income, 5. How To Run A Self-Sufficient School, 6. How to Educate Successful Rural Entrepreneurs, 7. How to Organize Student Life, 8. How to Write A Business Plan for a Self-Sufficient School, 9. How to Finance Your Plan

CREDITS

The SCHOOL IN A BOX Guide Series represents the knowledge, experience and hard work of a dedicated team of authors and editors at Teach A Man To Fish and the Fundacion Paraguaya.



We would like to thank the following individuals specifically for their contributions to the series:

Celsa Acosta, Lorenzo Arrua, Martin Burt, Luis Cateura, David Charles, Jose de Domenico, Nik Kafka, Mary Liz Kehler, Nicola Radford, Jose Luis Salomon, Luis Fernando Sanabria, and Jim Stephenson.



Visit www.teachamantofish.org.uk and www.fundacionparaguaya.org.py for more information

THANKS

The SCHOOL IN A BOX Guide Series was made possible by the generous sponsorship of Educating Africa, an initiative of the Savxx Foundation.



Visit www.educatingafrica.com for more information.

© COPYLEFT

In spirit of the open source education movement, the SCHOOL IN A BOX Guide Series is offered under the terms of the following © Copyleft 2008 license.

Reproduction, adaptation and distribution of this work is permitted (and indeed encouraged!) under the condition that:

- Any resulting copies or adaptations are also bound by the same Copyleft licensing scheme outlined herein*

Any resulting copies or adaptation credit Teach A Man To Fish and Fundacion Paraguaya as original authors of the work and include the following URLs: www.teachamantofish.org.uk and www.fundacionparaguaya.org.py

Contents

1. Introduction	4
2. Base-line Assessment	4
3. The Entrepreneurial Teacher	16
4. Competency Based Education	24
5. Evaluation of Competency	30
6. Learning by Doing & Earning	33
Bibliography	38

1. INTRODUCTION

The constantly changing world we live in calls for us to update our knowledge and skills at every opportunity. Learning by doing is an innovative and dynamic teaching-learning method, and one that supports the idea that learning is developed through the constant practice of what is being learnt.

In educational practice, this method implies an intelligent management of subjects, flexibility and open mindedness from the educator.

There are many reasons for which a young person discontinues his or her studies: lack of financial means, parental unemployment; lack of communication at home; low self esteem; and lack of future perspective.

The best way to reverse this trend is to bring out the entrepreneurial side of students. Developing entrepreneurial skills helps young people to realize responsibility for their future and opportunities for a prosperous life ahead.

WHAT IS AN ENTREPRENEUR?

- An entrepreneur doesn't wait for someone to present them with an opportunity, they believe in themselves and their project, and work to get ahead
- An entrepreneur is a person who takes risks, has initiative and creativity, and makes things happen. They do not 'stand on the sidelines.'
- An entrepreneur applies their creative and innovative talent to start their own business or project or expand one that already exists.

2. BASE-LINE ASSESSMENT

“If you don’t know where you’re going you can be sure you’ll never get there – but if you don’t know where you’re starting from, you’re already lost!”

The objective of this chapter is to help you analyze how well prepared your school currently is for educating successful rural entrepreneurs – and identify the changes that will need to be made to improve it.

When you have finished reading this chapter you will be able to:

1. *Conduct a SWOT analysis of education at your school*
2. *Use problem & solution trees to create plans for change*
3. *Revisit your School Education Plan to ensure it emphasizes entrepreneurship*

Throughout Manual 6 of SCHOOL IN A BOX we will be looking at how to deliver an education that takes children from the poorest families where subsistence farming is the norm, and transforms them into successful rural entrepreneurs.

However to create the changes needed within your school to achieve this goal, you first need to take a cold hard look at the state of the education which you are currently offering, and at what the causes are of any current weaknesses

EVALUATING THE CURRENT STATUS OF YOUR SCHOOL

EVALUATION TOOLS

Two useful tools for evaluating the current status of education provided by your school are the ‘SWOT analysis’, and ‘Problem & Solution Trees’.

Each of the tools require you to be honest with yourself about how well your school is performing – however, if used properly they can be extremely useful for simplifying and solving quite complex issues faced by a school.

SWOT analysis

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. The analysis consists of making a list of the internal strengths and weaknesses of the group being studied; and of the opportunities and threats presented to this group by the external environment within which it operates.

As an example let’s look at the case of a girls’ boarding school, for which a training needs assessment was carried out.

The following table presents the results of a SWOT analysis conducted by the Santa Luisa Home for Girls on its training activities.

Assessment Findings	
Strengths	Weaknesses
<ul style="list-style-type: none"> - School values: including comradery, desire for self-improvement, and an openness to new ideas - Infrastructure: classroom, five computers with internet, kitchen - Girls with academic ability and motivation. 	<ul style="list-style-type: none"> - Lack of personal development education - Few teachers - Lack of financial resources - Lack of teaching & course materials - Lack of information resources - Lack of time resources
<ul style="list-style-type: none"> - Girls with additional knowledge including cooking, sports, music, dance and IT skills. - National and international financial and technical support available. - Support from the girls’ extended families 	<ul style="list-style-type: none"> - Lack of IT equipment - Lack of curriculum relevancy to local environment - Long term trend for reduced financial support from national government - Economic decline in the region may threaten girls’ attendance

Based on the information analyzed, ongoing financial constraints at the school appeared to be a major factor in restricting improvements in training. The suggested solution therefore was to take advantage of the short-term financial opportunities available to the school to put in place income generating activities – and the use these activities in the personal development of the girls in the school, including strengthening interpersonal and entrepreneurial skills.

Furthermore the analysis suggested that by teaching the girls skills which could contribute towards improved household income during vacations, the school might reduce the risk of dropout due to the deteriorating economic climate.

Suggested activities included; small business administration, IT services, catering, and hairdressing.

'Problem' and 'Solution' Trees

Another approach that can be very useful is to create a "problem tree" and a corresponding "solution tree" for each area or department, or where you see the process being necessary.

The "problem tree" is a diagram created to better understand a situation that you currently find unsatisfactory: for example the poor grades of some students or poor grades in general.

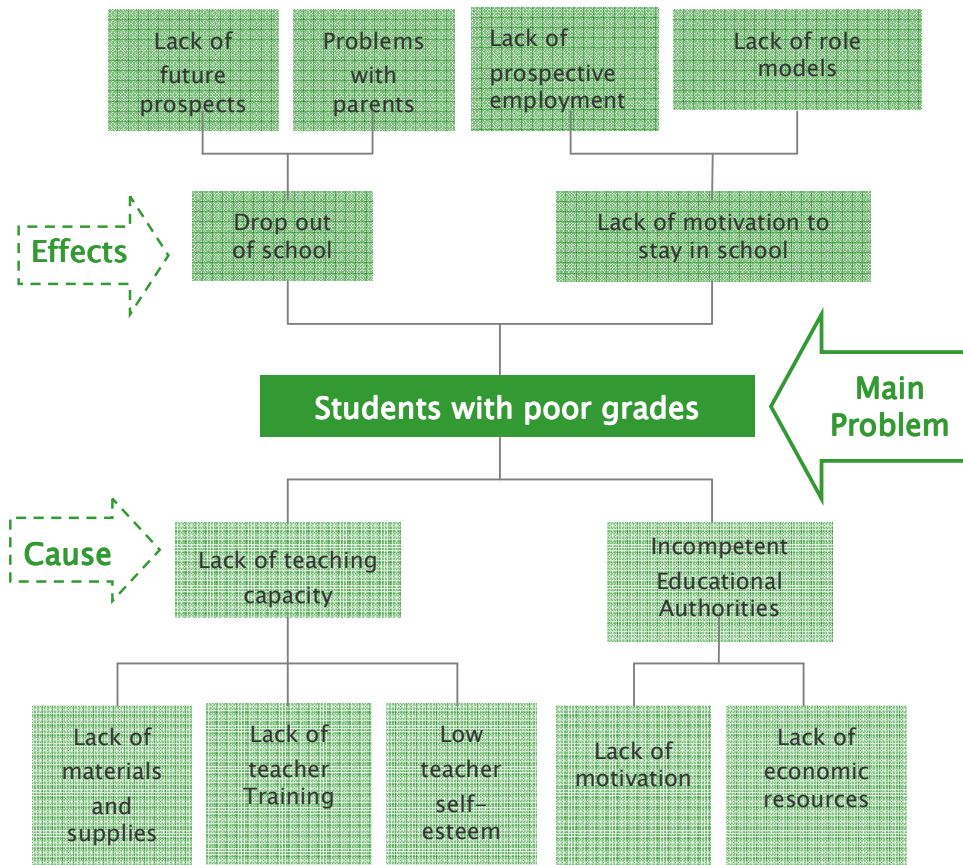
You write this problem in the middle of the tree, as in the example below, thus naming it as the main or central problem.

The branches of the tree which rise up represent the effects of this central problem – the most likely effect being to cause even more problems!

The roots, seen below the main problem, are its direct causes.

You can create as many levels of causes and effects of the problem as you see fit.

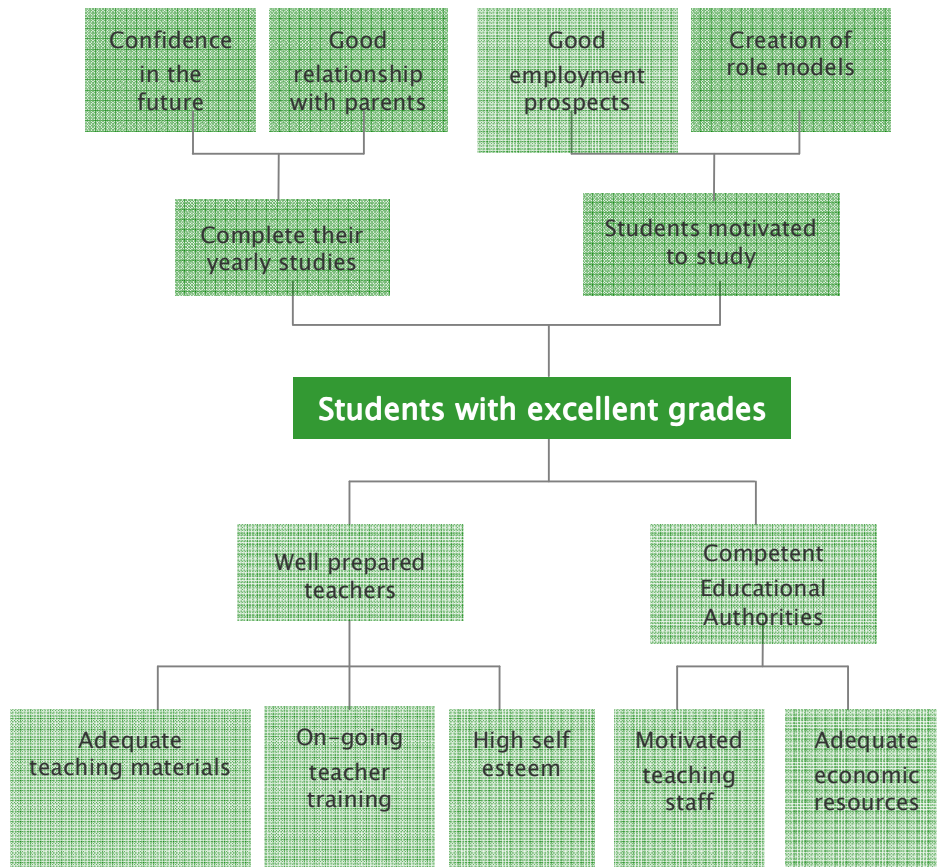
EXAMPLE OF A PROBLEM TREE



The next task is to convert this "problem tree" into an objectives or "solution tree".

The first step for this task is to select the most pressing problem and turn it into an objective or solution. Next, continue changing all the problems into objectives and solutions, as in the example below:

EXAMPLE OF A SOLUTION TREE



In this way the objectives are developed directly from the problems you have identified.

The next step is to convert this information into a simple objectives table.

OBJECTIVES TABLE

This table is used to describe first level goals, indicators of progress towards these goals, verifiers of those achieved goals and potential obstacles you might face while trying to achieve the goals:

Note: Make sure you consider what the appropriate ‘time frame’ will be when creating your table - i.e. per semester, year or month.

Overall Objective: Students with high grades every academic year

<i>Specific Objectives</i>	<i>Goals targetted</i>	<i>Indicators of progress</i>	<i>Means of verification</i>	<i>Potential obstacles</i>
Students will complete their studies	All the students will pass to the next grade	Grades	Report cards	Family problems
Students are motivated to continue their studies	All students demonstrate, verbally or in writing, that they are motivated in school and continue studying	Verbal demonstrations, periodic interviews with parents, group and individual exercises	Documents recording the activities in the previous column	That the documents are not created to do the follow-up

NEXT STEPS

Now that you have evaluated the current status of your school and you have your objectives, the next step is to create your plan for achieving those objectives.

However, before moving on to the planning stage, remember that the evaluation process is not a one off. It should be a continual process that includes all members of the school and allows for constant improvement in the way your school works.

It is important to see the evaluation process:

Not as:
 Success – failure
 Award – punishment
 Achieved – not achieved

But as:
 Looking at the current state of the educational process and, if needed, making the necessary corrective measures to accomplish the objectives.

THE SCHOOL EDUCATION PLAN

Identifying existing problems, and formulating viable solutions is only the first step along the road to creating a school for successful rural entrepreneurs.

To be effective your solutions will need to be incorporated into an action plan from which everyone involved can work. To avoid having multiple plans being used within the same school it makes sense to incorporate your planned changes within the School Education Plan (“SEP”).

The SEP is the educational equivalent of a business plan. It is a planning tool that serves to direct and articulate the management of the school as a whole, that is, the relationship between students, teachers and wider society.

It is likely that your school may already have a School Education Plan or an equivalent document. If not, now’s the time to make one!

Your school’s SEP should describe the range of objectives you wish to achieve and within in this provide an answer the following questions:

What type of school do I want to create?

Our answer would be: A school that is self-sufficient, generates opportunities and is innovative in its approach.

What type of students do I want to produce?

Our answer would be: Students who are successful, entrepreneurial, critical, confident and who value their communities.

What kind of teachers do I want in the classrooms?

Our answer would be: Teachers who are innovative, motivated, with a true vocation for teaching *and* learning.

What would *your* answers be?

Keep in mind that an SEP is:

- A document created with the participation of the whole educational community, all the way from the directors to the students.
- A technical document to be put into practice.
- A document that can be reviewed, adapted and changed as needed
- A document that demonstrates a commitment to educational development and the improvement of quality of life for the students.

- A set of objectives showing what values the institution will uphold.

PREPARING FOR THE DEVELOPMENT OR RE-DEVELOPMENT OF THE SEP:

First, form a development team for the new SEP. Once you have all your group members, make sure there is a balance of voices and a balance of power amongst members, who will be teachers, students, administrators, parents, and other members of the educational community.

Second, evaluate the current state of the project by asking the following questions:

What am I doing today that will contribute to achieving the proposed objectives of the SEP?

Which objectives have I achieved?

Who participated in achieving them and how did they participate?

Review with your team the *SWOT* analysis that was undertaken in the first stage of the diagnosis. This will help you move on to the following stage, in which you develop the organization's objectives.

Third, you have the task of "dreaming" and translating this dream into the objectives and goals of the SEP. How can you convert these 'dreams' into realizable objectives?

Fourth, now that you have established the objectives of your SEP you can go ahead with its development or redevelopment. It is beyond the purposes of 'School In A Box' to provide a template for the SEP, as many schools will already have their own established format. SEPs are also highly individual and vary greatly according to the situation of each school. If you would like further guidance on creating an SEP please get in touch with Teach A Man To Fish at info@teachamantofish.org.uk.

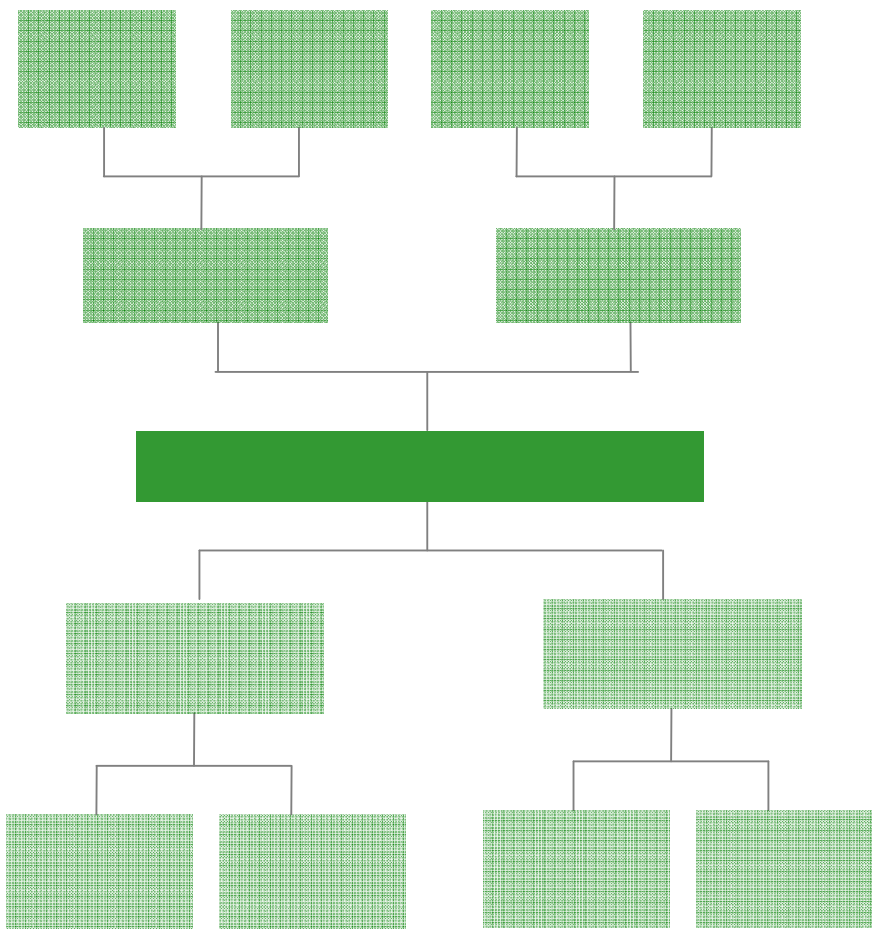
TO EDUCATE YOUNG ENTREPRENEURS IN A SUCCESSFUL MANNER IT WILL BE IMPORTANT TO CARRY OUT THE FOLLOWING ACTIVITIES:

- Carefully analyze the needs of the market to which you are directing the services of your institution, that is, the needs of young people in your area.

- Look into the possibility of forming teams, especially one that would lead the project and its auxiliary or operative teams, some that coordinate and supervise, others that implement. To do this, it is necessary to determine beforehand a clear purpose for each team and distribute functions and roles accordingly.
- Conduct a detailed survey at the community level to establish what qualities they would like their children to develop at school. Gaining an impression of what success means to the community may help improve the relevancy of your education programme.
- Gather the greatest possible amount of information about what an entrepreneur means to different community members.. Focus groups, extended interviews and questionnaires can be a useful way of finding this out.
- It is important that local educational authorities are very familiar with the student entrepreneur” project that is being carried out. Excellent communication with these authorities will help ensure that progress is not slowed down at a later date. It may be worthwhile presenting them with the action plan, and to give them an opportunity to offer input.
- Make a calendar of activities for tasks over the coming 12 months.

Self Evaluation

1. In what ways would this diagnosis process aid the development of your own institution?
2. Create your own problems tree, and a matching objectives tree for your institution.



3. Create an objectives table to be used in the development, or redevelopment of your School Educational Plan.

3. THE ENTREPRENEURIAL TEACHER

The objective of this chapter is to provide you with an overall view of the entrepreneurial skills needed for your school.

By the end of this chapter you will be able to:

- 1.) Identify and develop your entrepreneurial skills*
- 2.) How to incorporate entrepreneurship into the curriculum*

It may seem strange to associate a teacher with entrepreneurship, but there are thousands of teachers across the world successfully applying entrepreneurial principles to their teaching work. This story will help explain the concept a little further:...

The Creative Attitude Puts an End to Complaining and Excuses

Years ago, a supervisor visited a primary school. In his run-through he observed something that strongly called his attention: a teacher was cowering behind his desk, the students creating great disorder; the scene was chaotic.

He decided to introduce himself:

- "Excuse me, I'm the shift supervisor...is there a problem?"
- "I'm overwhelmed sir, I don't know what to do with these kids...I don't have any posters, the Ministry doesn't send me any teaching materials, I have nothing new to show them or tell them..."

The supervisor, who was an entrepreneurial teacher, saw a cork on the messy desk. He picked it up and with poise turned to the kids:

- "What is this?"
- "A cork, sir"...yelled the surprised students.
- "Good! Where do corks come from?"
- "From bottles, sir. A machine puts it there...", "from a cork tree..." "from the wood...", the children responded excitedly.
- "And what can be made from wood?" the teacher continued, enthusiastically.
- "Chairs...a table...a boat..."

- “Well, we need a boat. Who can draw one? Who can make a map on the chalkboard and locate the port closer to our little boat? And what is the closest port? What country is it in? What poet do you know of that was born there? What’s produced in this region? Anyone remember a song from this place?” And so he began a geography, history, music, economics and literature class.

The teacher was impressed. When the class was over, he told him emotionally:

- “Sir, I will never forget what you taught me today. Thank you so much.”

Time passed. The supervisor returned to the school and sought out the teacher. He was cowering behind his desk, the students again creating total disorder...

- “What happened? You don’t remember what you learnt?”

- “Yes sir – how could I forget? How lucky you should return. I can’t find the cork. Where did you leave it?”

*Excerpt from the book: **Stories For Intelligent People (Cuentos para regalar a personas inteligentes)** by the Argentine author Enrique Mariscal*

How many times have you found yourself in a situation like that of the story?

Possessing entrepreneurial qualities requires, more than anything, the desire for self-improvement and willpower. If a school is serious about introducing entrepreneurship into the education it provides, every teacher will need to be ‘on board’ with the vision and have the motivation to see it through.

The problems faced by the teacher in this story result from a combination of weakness of the education system. It is worth looking at what these weaknesses are, so that the entrepreneurial education system put in its place can be designed to address these weaknesses. We could summarize the **weaknesses** of the education system as the following:

<i>Actors</i>	<i>Weaknesses</i>
---------------	-------------------

Actors	Weaknesses
Teachers	Under-prepared Inexperienced Inflexible teaching approach Low self-esteem Does not share knowledge with colleagues
Students	Unmotivated Recipients of teaching rather than active learners Passive Generally under-achievers Low self-esteem
School Administrators	Autocratic leadership Reactive management Emphasis in administrative tasks Inflexible in adapting the teaching programme Unprofessional management, oriented neither at their internal nor external “markets”
Curriculum	Content-centered Evaluation as approval/control
Local Community and other institutions	Lack of communication between institutions Sporadic contact with students’ parents Lack of contact between the school and the surrounding community

It is entrepreneurial teachers, like the supervisor mentioned in the story, that are best placed to addressing some of the weaknesses identified above.

SO WHAT ARE THE CHARACTERISTICS OF AN ‘ENTREPRENEURIAL TEACHER’?

- Self-assured
- Tenacious
- Responsible
- Takes initiative
- Perseveres in face of adversity
- Acts with passion
- Achieves his/her goals

- Invites challenge
- Seeks new skills
- Approaches life and work with a positive attitude
- Recognizes the need to transmit the entrepreneurial culture in all areas of education.

YOU MUST DO TWO THINGS TO BECOME AN ENTREPRENEURIAL TEACHER:

- Overcome your own negative tendencies
- Engage in the outside world

Overcoming your own negative tendencies

- ***Fear of failure:*** is a normal feeling. It shouldn't become an obstacle to taking risks. Losing inspires winners but ruins losers.
- ***Insecurity:*** It takes great courage not to let pessimistic and alarmist comments generate doubts and fears.
- ***Laziness:*** Action always triumphs over inaction!
- ***Arrogance:*** Acts as a shield for covering up our ignorance. An entrepreneur needs to be flexible and know their limitations so they can work to improve themselves.

Engaging in the outside world:

- Looking for inspiration from real examples of entrepreneurship in your local area.
- Create contact with someone who is already a successful entrepreneur.
- Invest in your own training and self improvement.
- Learn from the stories of the other entrepreneurial teachers.
- Think big and don't be afraid to dream, the world of ideas and reality come together in the entrepreneur.
- Actively seek out opportunities, check their viability and draw up a workable road map.

INCORPORATING ENTREPRENEURSHIP INTO THE TEACHER'S ANNUAL PLAN

One of the critical elements of bringing an entrepreneurial approach into your school is to bring entrepreneurship into the teaching programme. This will involve bringing school staff together and developing a new program of studies that emphasizes entrepreneurship without neglecting the formal requirements of the curriculum.

It is important to emphasize that entrepreneurial education does not replace the core curriculum but is used to complement it and increase its educational impact.

You can incorporate entrepreneurship into any part of the formal curriculum, Let's use the 'Statistics' component of the Mathematics class as an example:

The following activities will be incorporated into the teaching of statistics;

- I. **Market survey statistics:** For homework students do market research tasks. For example students visit at least three different vegetable vendors and at each vendor find out how much they sell 3 different vegetable types for per kg. During the following class students bring their data together and create statistics showing how prices for these three vegetables differs between neighborhoods and villages and how the price compares per kg between vegetable types.
- II. **School enterprise statistics:** For example, students calculate percentage profitability between different school enterprises, by using income and expenditure ratios.
- III. **Educational achievement statistics:** Students analyze their own academic results between different years/semesters, seeing how their performance is improving or declining in percentage terms.

A Teacher's Annual Plan will be useful in incorporating entrepreneurial education into your current curriculum. Below you can find a template and first line example that may help in the design of your annual plan,

Nº	Date	Unit	Learning Objectives	Entrepreneurial Education
1	Feb 15th- March 15th	Statistics	<ol style="list-style-type: none"> 1. Understanding of Statistics in real life situations 2. Ability to apply statistical techniques across a range of data types 3. Ability to identify statistical errors 	Students analyse: <ol style="list-style-type: none"> 1. Market Research Statistics 2. School Enterprise Statistics 3. Personal Academic Progress Statistics
2				
3				

Self Evaluation

1. List 3 examples of how teachers at your school have taken an entrepreneurial approach to teaching

2. What entrepreneurial characteristics do you possess and which do you need to develop to achieve your objectives?

3. Create a 'Teachers Annual Plan' and how you could incorporate 'entrepreneurial education' into the subjects you teach, breaking it down into units. For example if you are a Mathematics teacher, units may be Statistics, Geometry, Formulas etc.

Unit Nº	Date	Unit	Learning Objectives	Entrepreneurial Education
1				
2				
3				

4. COMPETENCY BASED EDUCATION

The objective of this chapter is to learn about the benefits of competency based education and how it can be applied in a school setting.

When you finish this chapter you will be able to :

Create a teaching programme that emphasizes the development of both practical and academic skills to help inform successful, entrepreneurial and competent students.

WHAT ARE COMPETENCIES?

Capacities or abilities that relate directly to a given job or work function

HOW DO WE CREATE COMPETENCIES?

Before creating competencies we should first conduct a **functional analysis**. The methodology consists in a study that reconstructs the competencies that will allow workers to perform a determined job competently.

Once you have gathered all the information it will be useful for you to make a functional map, similar to the one that appears below:

EXAMPLE OF A FUNCTIONAL MAP FOR A VEGETABLE FARM ASSISTANT

Functions

<p><i>Key purpose:</i></p> <p>Assist the master bricklayer in the process of building houses.</p>	<p>Prepare and have ready the tools equipment, and primary materials, according to a production schedule.</p>
	<p>Assist in preparation, planting and harvesting activities</p>
	<p>Keep work areas and implements organized and supervised.</p>

Competencies can be described as being ‘Basic’, ‘Generic’ and ‘Specific’. For example, in the vocational educational field we can consider:

Basic Competencies	Generic Competencies	Specific Competencies
<ul style="list-style-type: none"> - Mathematics - Reading/writing 	<ul style="list-style-type: none"> - Teamwork - Planning skills - Organisational skills 	<ul style="list-style-type: none"> - Ability to use comercial standard farm tools - Ability to update farm record books.

Basic competencies: are those associated with fundamental knowledge. They are generally acquired through basic education and allow for job entry, for example abilities for reading and writing, oral communication and calculus.

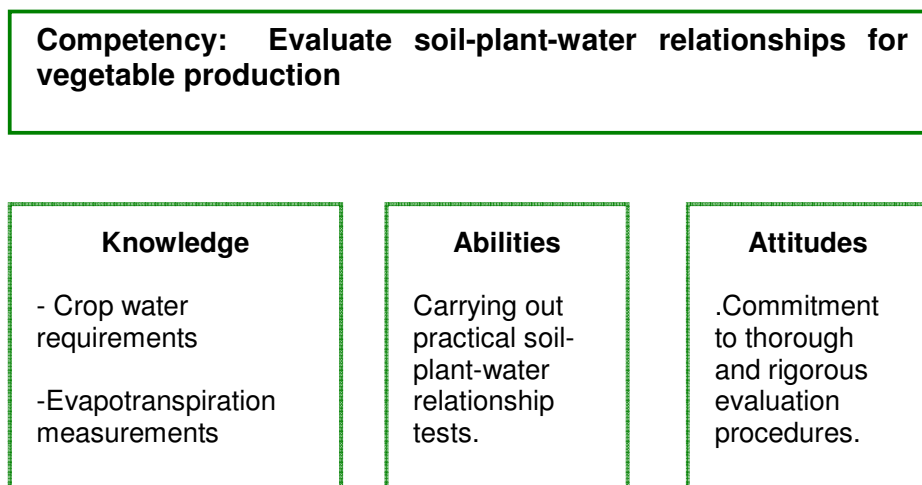
Generic competencies: relate to the behavior and attitudes or particular work environments, for example capacity for teamwork, ability to negotiate and plan.

Specific competencies: relate to the technical aspects directly linked with an occupation that are not easily transferred to other work contexts, for example operation of specialized machinery.

A competency is composed of three elements:

1. Knowledge
2. Ability
3. Attitude

In the example below knowledge, ability and attitude come together to form a competency, in this case the competency to evaluate soil-plant-water relationships for vegetable production.



Breaking down what a competency is made up of will help in planning how to teach the competency effectively. To apply this method to your whole teaching programme it may be worth taking some time to list the competencies that you are looking to develop in your students.

One of the best ways to do this is to create a competency based education programme for each discipline you are teaching. In the example below we look at the discipline of dairy farming.

Specific competencies of the dairy	Capacities	Activities	Frequency	Physical Requirements
Interpret laws and biological principles in the development of animal species.	Identify the current situation of milk production in the region and the factors that influence the milk production.	Maintain clean and hygienic conditions in the milking corral.	Daily, before each milking	Hygienic implements for the corral
Identify the interaction between natural physical factors and the animals in balance with the environment.	Associate climatic phenomena with milk production.	Clean and organize the milking machine and maintain it in hygienic conditions.	Daily, before each milking.	Cleaning Implements
Chose different production and management techniques for distinct categories of animals according to their breed, productive stage, and use.	Classify breeds of dairy cows according to their zoological characteristics.	Take care to maintain the habitual position of each cow in the milking stalls.	In each milking	Milking corral
Employ techniques of sanitary management.	Plan, construct and repair simple buildings and infrastructure used for dairy production.	Fill the feeders with the ration of prepared feed that corresponds to each animal according to its production.	Daily	Animal feed
Fulfill the production task of administering concentrated feed and leguminous materials according to the productive stage of the animal and its use.	Identify the anatomy and physiology of the mammary glands.	Control the quantity and quality of green forage placed in the spaces between the feeders.	Daily, before bringing the cows into the milking corral.	Feeders

Self Evaluation

1. Complete a Knowledge, Abilities and Attitudes set for an activity relevant to the lives of your students. This doesn't necessarily have to be agriculturally based.

COMPETENCY:

Knowledge
.....
.....
.....

Abilities
.....
.....
.....

Attitudes
.....
.....
.....

2. Complete a competency plan for a practical subject that is taught at your school.

Specific competencies of	Capacities	Activities	Frequency	Physical Requirements

EVALUATION OF COMPETENCY

Keep in mind that:

- Evaluation should not only consider what the student knows but also what he or she does with this knowledge in different contexts

Benefits of creating evaluation criteria:

- They allow you to develop more effective teaching material such as learning guides and exercises linked with the learning criteria.
- They allow you to create tests that are more “fair”: the student knows ahead of time the areas in which he or she will be evaluated.
- They clearly determine what is desired of students and provide a path to better studying and obtaining better results.

What are the indications that your students are learning, or are at least understanding explanations? Generally educators look for the following:

- Students are watching attentively ...
- Students are not yawning ...
- They are taking notes...
- They don't talk while you talking ...
- ... They definitely aren't sleeping!...

The creation of Evaluation Criteria involves specifying what to evaluate, and using indicators that are decided in conjunction with students, so that evaluation standards are in line with student aspirations and so that students are more responsive to the evaluation process..

FOR EXAMPLE

COMPETENCY: “Prepare animal feed according to the animal’s requirements.”

CRITERIA OF EVALUATION: Ability to store animal rations and distribute them in a secure and hygienic manner.

How will I know if the student has really learned?

- The student measures out the rations according to the feeding plan.
- The student distributes and controls the feed according to the type and requirements of the animal, ensuring health and safety standards are adhered to at all times.
- The student maintains the feeders in a hygienic condition and maintains a clean environment for the animals.

In an evaluation process, after defining the evaluation criteria, the evaluator should select ***indicators and proof***, that is that allow him or her to decide whether or not the established criteria were reached.

INDICATORS AND PROOF

Example: Maintaining the hygiene of the feeders and maintaining a clean environment for the animals.

Indicators	Proof
Utilizes cleaning equipment.	Cleaning equipment used correctly
Prepares the cleaning solution following the measurement called for by the manual.	Solution is correctly prepared
Cleans the animal stall according to hygiene specifications	The animal stall is clean and in a sanitary condition

Keep in mind that:

Indicators and proof are key in assessing whether students are progressing or not, with respect to the evaluation criteria.

Feeding back into the learning process

The evaluation process isn't over until feedback has been transmitted to the students. This allows students to detect their progress and difficulties, and allows teachers to plan new learning activities.

Self evaluation

Now you should create the evaluation criteria for the competency you have created, along with potential indicators and proof.

CRITERIA:

Indicators	Proof

6. LEARNING BY DOING & EARNING

LEARNING BY DOING

The following are principles of the Learning by Doing method:

- The curriculum should be relevant to the student's environment.
- Students learn best through the application of knowledge and skills in practical activities.
- These activities give students opportunities to practice their leadership and critical thinking skills.
- Teachers are most successful when they utilize a variety of teaching methods and are flexible in their teaching approach.
- The involvement of the community and mentors helps demonstrate the connection between what is being taught and real life.
- Graduates of 'Learning by doing' are more attractive to prospective employers as their skills can be more directly linked to the needs of the workplace.
- All school staff demonstrate their entrepreneurial skills by running 'Learning by Doing' programmes, helping them lead and educate by example.

LEARNING BY EARNING

What are the aims of 'Learning by earning'?

To encourage students to:

- be architects of their destiny
- exercise leadership
- develop self-esteem
- form clear objectives for themselves
- pursue specific and challenging goals
- act ethically to achieve their goals
- take calculated risks.
- develop perseverance
- think big
- trust in themselves

LEARNING BY DOING & EARNING

Learning by doing in itself is an excellent way to learn practical skills, but how can it be used to develop entrepreneurial skills? Learning by doing & *earning* means that students learn entrepreneurship by running both the practical and business side of school based businesses, with supervision, and generating real revenue.

Involving young people in business helps them to connect them with the society around them and increases their sense of social responsibility. Being able to see a tangible reward for their efforts in the form of income is highly motivating and helps develop a strong, self-sufficient attitude.

This self sufficient attitude will help young people expand and develop their family or non-family business in the future and make a positive contribution to their community.

So how can you organize students to manage on school enterprises? The experience of the Fundacion Paraguaya suggests that student co-operatives are an effective way of making

sure that school based businesses fulfill an educational and income generating function at the same time.

CREATING STUDENT CO-OPERATIVES

Since 2004, The San Francisco Agricultural School in Paraguay has used the model of student co-operatives to help students learn all the theoretical and practical aspects of running rural businesses. The co-operative is directed and organized totally by the students, empowering them and installing them with confidence for the future.

Student co-operatives maximize the potential of the 'learning by doing' method. Students at The San Francisco Agricultural School have used their co-operative to build a farm and organize a livestock production unit and have taken care of all the legal and administrative requirements that come with it.

One element that has been critical to the success of this co-operative is mentoring from the cooperative, business, and social sectors. Gaining community support will strengthen any student co-operative or enterprise and allow students to benefit from others' experience.

Purpose of Student Co-operatives

- To find shared solutions to shared problems, having cooperation and solidarity as work philosophies, and counting on individual effort and mutual help.
- To strengthen each member of the co-operative

THE COOPTA COOPERATIVE

This is a cooperative formed by third-year students at The San Francisco Agricultural School.

Becoming a member of this cooperative has allowed students to get real life experience of what working in a cooperative is like. They perform pre-assembly activities, put together reports, have meetings, elect officials, create support committees for the cooperative's different activities, choose the products and services that they will offer the market, organizational policies and perform other activities that are necessary for the smooth functioning of the cooperative.

This is a brief summary of how the Coopta cooperative is organized:

Organization: the cooperative business is self-organizing; students elect their own authorities.

Authorities

- General Assembly
- Board of Directors
- Monitoring committee
- Electoral committee
- Auxilliary committees
- Administration of the Cooperative

Students fulfill roles and functions based on Paraguayan Cooperative Law. For each of the productive activities they look to develop, they draw up a business plan.

Surplus: At the end of the year the surplus that has been generated through the activities of the cooperative is distributed and the organization is transferred to the next group of third-year students.

BIBLIOGRAPHY

Carter.C and Lyman Kravits.S (1997), *Vocational Orientation, How to Achieve your Goals* Primera Edición, Prentice – Hall Hispanoamericana, S.A. Capítulo 9.

Mariscal.E (2007). *Stories to Tell Intelligent People,* (online)
<http://www.enriquemariscal.com.ar/> (Accessed November 2007).