Bringing back the school farm

Jillian Carter
Middle School teacher of technology: agriculture, Mountain View Adventist College, Sydney, NSW

Introduction

Would you like to see an improvement in your students' motivation to learn, level of responsibility and knowledge of where food comes from, regardless of academic ability? Do your students have the opportunity to learn hands-on business and marketing skills during their schooling years? Do they have the opportunity to do all of this in one subject?

> *The program has encouraged lifelong learning, assisted in developing responsibility and boosted enjoyment of learning*

Our program

Mountain View Adventist College (MVAC) established a school farm in conjunction with the addition of a new Stage 4 Technology Mandatory subject in 2006, which focuses on agricultural industries. The areas of study we look at include Products (Agricultural Product Design) and Built Environments (Structural Design). These areas cover a range of design projects which the students are actively involved in, such as: the production of in season snow peas, Lebanese cucumbers, and green beans, the production of free-range eggs, and the breeding of chickens, quails, and mini lop rabbits (for pets). Students also design chicken enclosures and business logos for produce packaging.

On a daily basis the students complete a range of activities in order to keep the farm functioning and their farm friends in good health. They are responsible for providing food and water to the chickens, quails and rabbits. They also collect, market and sell their products (10 dozen chicken eggs per week), and their young pets. When growing vegetables, the students must maintain a regular fertilising program, pick and pack their vegetables and then deliver their product to their purchaser. The students also collect money and write cash receipts. The students learn about farm economics, farm hardships (in 2007 hail destroyed the cucumber crop est. 100kg) and monitoring disease in the crop and in the livestock. All students enjoy this subject as it covers a wide variety of areas.

1 MVAC students participating in the farm project

[Photography: Jillian Carter]

1



Benefits identified by staff

The educational opportunities provided by this subject have encouraged students' lifelong learning, assisted in developing responsibility and boosted enjoyment of learning. The framework of the subject encourages students to develop and communicate ideas, work effectively in teams, analyse and evaluate their designs, solve problems, deal with death, develop skills in business and marketing, and discuss God's amazing creations. Many of these developmental areas are identified by The National Goals of the Adelaide Declaration (1999) as essential areas of learning for all students in Australia. This subject provides both high and low academic achievers with hands-on experiences that motivate learning. These results are consistent with the researched benefits of agricultural learning experiences (Cormack, 2005).

Perceived benefits identified by students

Students who participated in this program during Semester One, 2008, completed a questionnaire where they identified the following benefits to the program, "*You learn how to plant and take care of animals, and it makes you feel like there is a reason to go to school*", "*It taught me that animals are not just there for decoration but to love and we need to have responsibility!!*" Others stated, "*I enjoyed learning because we were learning and doing chores at the same time*", "*I learnt that it is fun to take care of plants and animals and there has got to be one subject that is fun*". The students were also asked if they would recommend other schools to establish a similar program and they answered, "*Yes, I would recommend other schools start a school farm because you can have fun and at the same time you can be learning about great and educational things*", "*YES YES YES! A farm is the way to go, it's great fun and such a great experience*" another stated, "*Schools don't know what they are missing out on*".

A statement made by one of the students identified how students can transfer their experiences and knowledge from the subject to their lives: "*I learnt from the rabbits that you shouldn't have babies when you are young*" (we had an unplanned pregnancy of a young rabbit). This is a significant statement considering the demographic of the school and the increasing rate of teenage pregnancies in today's society.

Benefits identified by the principal

"*We are very blessed to have an excellent technology: agriculture program running at the College*," comments Mrs Gibbons, the College

principal. "*Not only does this program enhance our curriculum, it also supports all of our students in understanding the value of creation. Many Sydney children don't get the opportunity to see how their food is grown and how to take care of animals. This program encourages them to experience the first hand delights of seeing a newborn rabbit and picking the fruits of their labour from the vegetable garden. Even though this program is running for the Middle School students, all the students at the College have the opportunity to share in the joy of feeding the animals or cuddling a young rabbit or chicken.*"

Although a school farm project does take money and effort to set up, the benefits outweigh the difficulties. MVAC has demonstrated that curriculum demands may be met in an innovative and practical way. In addition, by connecting students with the environment, the school is promoting positive values and providing 'hands on' experience that students will remember for years to come.

> ***It provides hands-on experience that children will remember for years***

For more information on establishing a school farm program contact Jillian Carter *jcarter@mvac.nsw.edu.au* or visit *www.freewebs.com/mvacfarm* for more pictures. TEACH

References

J. Cormack (2005). *An investigation of the perceived benefits of agricultural learning experiences through a case study of Lindsay Rural School.* Avondale College.

Department of Environment and Heritage. (2005) *Educating for a sustainable future.* Melbourne: Curriculum Corporation.

Cost of establishing a farm program

Establishing a school farm will vary in cost according to the size and agricultural industries chosen. A farm similar to MVAC is suitable for a school with very limited space—28m x 13m.

Our farm has:

- raised vegetable beds due to poor soil quality (suitable for 1 class of 25 students),
- an area suitable for 25 chickens (including a nesting area),
- an aviary housing 4 rabbit hutches and quails on the floor,
- a greenhouse, and
- an exercise area for rabbits and their babies.

Ongoing expenses such as feed and fertiliser are paid for out of the farm earnings, as it is a fully functioning self-sustained student operated business.

Further farming options include aquaponics and hydroponics which are both great for promoting sustainability and water saving.

Seems like a lot of money? Well, no, not when you consider the current cost of your Stage 4 Technology Mandatory: woodwork / metalwork, computing, cooking or sewing departments. This may be a cost effective alternative for your school.

The Australian Department of Environment and Heritage in conjunction with the United Nations, declared 2005–2014 the Decade of Education on Sustainable Development. There are, therefore, many grants currently available from local councils which can help schools to establish Sustainable Development projects or school farms. In July 2007, MVAC received a $6050 government grant towards establishing the program.

Our set-up costs

Secure fencing—3 barbs at the top (28 m x 13 m)	$7000
Second hand aviary (3m x 2.5m)	$400
Second hand chicken shed for nesting and food storage (3 m x 3 m)	$500
Rabbit hutches (x4)	$450
Livestock (day-old chickens—$5 each, Mini Lop rabbits—$50 each, day-old quails—$3 each)	$400
Raised vegetable beds (made from old pallets) & quality soil	$1200
Greenhouse & installation (8.4m x 3.2m)—depending on location / climate this may not be essential	$3000









2 Jillian Carter, teacher and the author

3-5 MVAC students participating in the farm project

[Photography: Jillian Carter]

2 3 4 5