

# Farm Safety Programmes in the U.S. and how they can influence Blue Light's Farm Safety Programme.

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## **Introduction**

### **Rationale for the Fellowship**

Blue Light in conjunction with Worksafe N.Z. produces a farm safety programme through schools for N.Z. Primary school aged children in rural and semi-rural settings throughout the country.

Whilst there are a small number of farm safety education programmes currently being carried out in N.Z., the Blue Light programme is unique in that it looks to change attitudes within the wider community in the long term through work parents carry out in conjunction with the school and their children rather than simply providing a curriculum for teachers to deliver in isolation from the families as is the case in other programmes.

However, because of the unique delivery aspects of this programme there are no long term studies to examine the efficacy of this type of programme, or how successful it is in achieving its longer term aims particularly in promoting attitudinal change. Whilst we have a plethora of qualitative data, to justify the continuation of the programme we are looking to be able to provide examples or data on programmes that have worked in a similar fashion in other contexts. To learn from these and bring those aspects and resources that have worked well into our own programme suite.

My aim therefore in taking on the Fellowship was to examine and discuss the programmes currently being carried out in the rural Mid-West U.S.A. and examine what programmes if any are effective in terms of long term community attitudinal changes and therefore changes in accident rates.

I primarily studied the 4-H programmes run through the Universities in three states: Ohio, Vermont and Iowa.

I was also looking at a number of research questions aimed at further developing the resources that we produce and to gain ideas on how programmes can continue to be engaging, for young people in the longer term. (see appendix 1 – A brief summary of the programme, appendix 2 – Questions underpinning the research)

## **Executive Summary**

### **A Summary of what we found out that is relevant to the N.Z. Setting**

Much of the extra-curricular work done with young people in the U.S. is carried out under the auspices of the 4-H programme often run through the U.S. University system.

4-H is committed to helping young people develop skills that will help them succeed in life and empowering all youth to reach their full potential. Not unlike the goals of Blue Light Ventures Inc. There being many synergies with the two organisations which have made this study particularly relevant to us. (see appendix 3 – Background to the 4 – H Programme).

### **Key areas of relevance:**

- ‘High’ incidences of preventable injuries, and accidents among young people living and working in rural / semi-rural settings in the U.S.A.
- A desire to provide programmes that are targeted to young people and their communities to decrease the accident / injury rates and in the wider context to empower young people to be the best that they can be.
- A similarity in attitudes within rural communities to safety, health and regulatory bodies.

- Similarity of vectors linked to injuries and accidents e.g. ATVs, Livestock, chemicals, slips, falls, firearms. With the exception of grain silo accidents.
- The wide variety of programmes offered to young people to help them develop skills and attitudes that will keep them safe on farms.

### **Key areas for investigation and development in N.Z.**

- Programme development opportunities for Blue Light:
  - Farm Safety Days in communities involving schools, parents and community groups
  - Farm Safety Camps as a further vehicle for bringing young people and communities together, offering a more comprehensive programme.
  - Continued resource development particularly with ideas from other contexts.

### **How we will promote this to make a difference to our organisation and Blue Light**

Blue Light has had a long term commitment to its rural safety programme. It has been offered to schools throughout N.Z. for the past 3 years, reaching currently some 500 primary schools and over 20,000 students.

As an organisation we have a strong desire for the programme to continue to be sought after and successful.

In order to do this we need to:

- Continue to develop the programme resources to ensure they stay current and engaging
- Develop further opportunities with the programme for young people to engage with rural safety
- Monitor the improvements in attitudes and knowledge as young people move through their education.

This study has provided Blue Light with the opportunity to review its rural safety programme through the lens of 3 different states programmes giving us a new perspective and the opportunity to review our programme through the lens of the work carried out overseas.

The learnings gained will be promulgated widely amongst the organisation and our partners.

### **Key Learnings From The Fellowship**

In all three states visited, farm safety for communities in general and youth in particular is a high priority for National, Federal and local governments.

In the U.S. mid-west as is the case in N.Z. agriculture is the major economic and social activity being carried out involving millions of people both in terms of workers and their families. Greater numbers of people again like N.Z. visit these regions and stay on farms and rural properties.

Agriculture is the major source of revenue for the region earning billions of dollars U.S. for the national economy.

In parallels to N.Z. also, agriculture is the major source of injuries; low level, serious and including fatalities. In the mid-west agricultural activities are by far the largest contributor to work place accident injuries and deaths. Also like N.Z. despite a falling agriculturally based population and the roll out of wide ranging intensive farm safety programmes both for adults and youth over the past decade, injury and fatality rates have only been slowly declining.

U.S. farmers like their N.Z. counterparts are seen by many who work and study in the agricultural safety field, feel that despite the high injury rates on farms, farm owners, and workers continue to have a cavalier attitude towards farm safety that has been difficult to change in the long term.

These parallels have made this study highly interesting and relevant to our work.

Interestingly, from my observations, most youth farm safety programmes observed in the three states are directly aimed at the young people themselves, through;

- Training programmes both for youth workers and those youth living on and visiting farms.
- Online programmes
- Youth Farm Safety Camps and Youth Safety days
- Training booklets, guides and resources
- Varied organisations including the universities producing a wide ranging variety of youth educational programmes.

Whilst a wide range of adults in the local communities are involved in the delivery of many of the programmes, the programmes themselves tend to take place to a degree in isolation from the families and caregivers on the farm.

These programmes are high quality, highly engaging, well resourced, comprehensive and ubiquitous throughout the mid-west, and often run via Universities through the 4-H organisation and also I-CASH.

An absolute highlight was the access given to the resources being produced so that I could take them away to use in N.Z.

There was also a great deal of research both locally and nationally supporting the effectiveness of these programmes, particularly as seen by participants and their families. The research has been ongoing over the past decade and is giving rich data to inform the practice of these programmes into the future.

The idea of 'Youth Farm Safety Camp' is a particularly intriguing one to me, and it seems that it engages many youth in a positive, interesting and useful way, particularly those who live and are employed on farms.

Also of interest to us in N.Z. is the role the Universities play in providing many of the resources and programmes including teaching and research staff for these programmes for youth under the age of 20 and much of the research is carried out by the Universities involved in the programmes.

Interestingly there seems to be a gap in the programmes acknowledged by some in terms of engaging and working with the parents and youth together. This is an area of interest to all of the parties, particularly the intrinsic difficulties in obtaining long term data and results for the efficacy of the programme and linking this to decreasing accident and injury rates.

This is an area of agreed collaboration and future investigation.

Blue Light in order to continue obtaining funding through the traditional channels has the challenge of providing such data linking the programme working with the parents and community to a fall in youth accidents and accidents in general in the rural community in N.Z.

Also of concern amongst the participants of this fellowship is the accepted and researched time limit for any programme to continue to be relevant and successful. Even those highly successful programmes, particularly in the field of education seldom have continued efficacy in the medium to long term. Few programmes and educational resources maintain the effectiveness past 3 – 4 years. Refreshing them, keeping them current and engaging in an information rich world is a universal problem.

### **The relevance of the 4 Programme**

The 4-H programme is directly relevant to the aims and objectives of the Blue Light farm safety programme primarily in the outcomes we are seeking to provide, encompassing:

- Improvements to community attitudes towards safe practice
- Improved education as to how these practices can be developed
- Community involvement

Like 4-H and the young people we are both working with, we are looking to promote change in the long term using a range of highly engaging strategies that remain relevant over the long term.

In particular the outcomes that Blue Light can take from 4H in terms of adapting its programmes:

- The continued development and updating of print media educational resources
- High quality instruction opportunities that involve both short and longer term experiences i.e from 1 – 2 hour lesson formats to longer day events and even overnight camps.
- The integration of printed resources with quality online media, although work must be done to ensure that parents and caregivers are always part of the learning experience.

#### **4-H in the N.Z. setting.**

Having the Universities involved in running a greater range social and educational programmes for young people in N.Z., particularly primary and lower secondary students is an interesting concept and one with considerable merit.

Universities having greater opportunities to work with their communities is one that has benefits both to the community and the University. Universities currently offer a number of programmes to students, particularly in the secondary school scene and developing these further would greatly enhance the development opportunities for our young people, while at the same time building strong links between them and the higher learning organisations.

Developing clear pathways of academic progress for them. This is currently being provided, although not to the extent of those opportunities offered overseas.

I see the major issues that would need to be overcome, would be around funding – staffing, time, resourcing and professional development.

However Universities being encouraged and supported to develop further their links with other organisations – e.g. Worksafe, ACC, Federated Farmers, the Dairy Board, Fonterra as well as the local education schools cluster groups, would provide an excellent avenue for funding and resourcing and the building of an exciting extended programme for young people.

### **Key areas for continued research and development.**

Following a highly informative, useful and thought-provoking experience, rich in resources, ideas and contributions from the institutions visited there remains in my mind two key areas for continued research and development:

1. How can we effectively measure our programme's long term effectiveness in changing attitudes to farm safety particularly amongst youth?
2. Can we link changes in attitudes in the community in the long term to decreasing injury and fatality rates in rural N.Z.?

The challenge remains for us as an organisation to ensure that our programme continues to be sought after in rural communities and schools, and that it keeps on evolving to ensure that it stays relevant to young people and their families in the face of increasing competition from I.T. and in particular social media for our young people's attention and time.

This fellowship was particularly illuminating and helpful in this area, as well as thought provoking and useful in challenging my ideas, pre-conceptions and assumptions. An opportunity I would not have had otherwise.

I have built links with experts in this field in the U.S. and have ready access to their resources and research to build into our own efforts, and hopefully improving the quality of delivery and services to both partners.

All programmes, particularly those in education have a relatively short period of time (often around 3 years) whereby they remain effective, even those that have demonstrated a high degree of efficacy. In order to maintain and build on gains programmes need to stay; relevant, fresh, provide new material and ideas and provide new learning experiences.

Key outcomes of this study therefore have been:

- Links built with organisations providing similar programmes in the U.S.
- Additional high quality resources from a variety of sources focussing on Farm Safety relevant to N.Z.
- A close examination of the 'Farm safety Days' and the 'Farm safety camps' with a view to possibly develop them as part of the Blue Light suite of programmes.
- A useful insight into the 4-H programme and how elements of it could be developed in N.Z.
- Beginning to develop an international community looking at the outcomes and research around farm safety programmes.

### **Conclusions and Recommendations:**

This was a highly relevant and useful study. There were many parallels between the two countries that made for a thought provoking and challenging analysis. Both countries

face similar issues in broadly similar contexts. Of particular interest was that these contexts were also looking to develop programmes that are both educational, but also are a vehicle for longer term attitudinal change within communities through working with young people and their families.

### **Conclusions:**

Farms Safety educational programmes for young people have to be:

- Highly engaging
- Highly relevant
- Long term
- Continually evolving and changing to maintain status and profile amongst young people
- Linked to quality online resources
- Involve the whole community in the development and promulgation of programmes

### **Recommendations:**

- Blue Light updates its farm safety programme booklet both in terms of some content and delivery modes on a bi-annual basis
- Blue Light reviews the programme content in light of the content obtained and developed in the U.S. and incorporate where relevant.
- Blue Light looks to develop in consultation with communities, schools and Worksafe:
  - A format for Farm Safety community days
  - A format for a 2 day overnight Farm Safety Camp – possibly for less privileged young people.
  - Look to connect with 4-H in N.Z. to develop a similar programme of support within N.Z.
- Promote in the media more effectively the work that Blue Light is doing in the realm of farm safety.

## Appendix 1

### **A Brief Summary of the Blue Light Farm Safety programme:**

Students in years 3 – 6 of their primary school education are presented with a highly engaging workbook to work through with their families in the home, outside of class time. It is designed to be a part of the National Curriculum, and is accompanied by curriculum statements and resources. In this way parents and caregivers are part of the learning process and are involved as the ‘teacher’. Parents have to ‘buy into’ the ethos of the programme and have real and meaningful discussions with their children about what constitutes rural safety and how to improve it in an authentic way that builds on improving attitudes within the family. As students complete sections of work the parents mark this off by giving the students stickers to show their progress. When completed the booklets are returned to school, with a survey completed by the parents, and students take part in a school awards assembly where they are given certificates of completion.

*The key component is involving adults in the process of education and therefore working to promote attitude change in the home.*

The activity book:

- Builds on prior knowledge and that of the parents
- Engages child and parent equally in the learning process
- Makes real connections to the child’s environment
- Provides step by step learning and is engaging and motivating
- Requires discussion and feedback – step by step learning
- Is carried out over a longer period of time with short bursts of instruction
- Is meaningful
- Fosters a sense of success for the student through the sticker programme
- Encourages the student to work with others i.e. their family
- Provides for mastery learning.

## Appendix 2

### **Questions underpinning the research:**

- Have Farm Safety Programmes resulted in a reduction in accidents and fatalities and if so which interventions have been shown to be the most effective?
- Have particular interventions been identified in the research as being effective and what do they look like?
- What are the main components of a successful programme that involves young people?
- How young people respond to and engage in the various programmes?
- How effective are the programmes in terms of changing attitudes and is this shown in the research?
- How are families and communities involved?
- How do the programmes achieve longevity?
- What can we transpose to the N.Z. Context?
- Are there practices that we can and should adopt in N.Z.
- and what does this mean in terms of modifying our own programme so that it is more effective?
- How successful are the programmes in terms of young people being the catalyst for change in their communities?

## **Appendix 3**

### **Background to the 4 – H programme.**

#### **What is 4-h?**

Much of the extra-curricular work done with young people in the U.S. is carried out under the guise of the 4-H programme.

4-H is a community of young people across America and the Globe who are learning leadership, citizenship, and life skills through largely university programmes as they work in partnership with caring adults.

4-H is committed to helping young people develop skills that will help them succeed in life and empowering all youth to reach their full potential. Not unlike the goals of Blue Light Ventures Inc. There being many synergies with the two organisations which have made this study particularly relevant to us.

**4-H** is a global network of youth organizations whose mission is "engaging youth to reach their fullest potential while advancing the field of youth development".

Its name is a reference to the occurrence of the initial letter H four times in the organization's original motto 'head, heart, hands, and health' which was later incorporated into the fuller pledge officially adopted in 1927. In the United States, the organization is administered by the National Institute of Food and Agriculture of the United States Department of Agriculture]

#### **4-H Is Positive Youth Development**

In 4-H, youth learn by doing projects that are designed to fit their needs at different ages through a variety of projects—from food and forestry to rockets and rabbits. 4-H gives children and teens opportunities to learn life skills, to practice them, and become confident in their ability to use them in the future. 4-H teaches young people how to meet their needs for belonging, mastery, independence, and generosity in positive ways.

More specifically, 4-H programming is built around Eight Essential Elements, sometimes also called the Eight Key Elements:

#### **Belonging**

##### **Essential Element 1: A Positive Relationship with a Caring Adult**

A caring adult acts as an advisor, guide and mentor. The adult helps set boundaries and expectations for young people. The adult could be called supporter, friend, or advocate.

##### **Essential Element 2: An Inclusive Environment**

An inclusive environment is one that creates a sense of belonging, and encourages and supports its members with positive and specific feedback. Healthy groups celebrate the success of all members, taking pride in the

collective efforts of all participants.

### **Essential Element 3: A Safe Emotional and Physical Environment**

Youth should not fear physical or emotional harm while participating in a 4-H experience, whether from the learning environment itself or from adults, other participants or spectators.

### **Mastery**

#### **Essential Element 4: Opportunity for Mastery**

Mastery is the building of knowledge, skills, and attitudes and the demonstration of the competent use of this knowledge and skill by a proficient practitioner. The level of mastery is dependent on the developmental ability of the individual or youth. The development of mastery is a process over time.

#### **Essential Element 5: Engagement in Learning**

An engaged youth is one who is mindful of the subject area, building relationships and connections in order to develop understanding. Through self-reflection, youth have the ability to self-correct and learn from experience. The engaged learner has a higher degree of self-motivation and an inexhaustible capacity for creativity.

### **Independence**

#### **Essential Element 6: Opportunity to See Oneself as an Active Participant in the Future**

The ability to see oneself in the future is to have hope and optimism to shape life choices, which facilitates the transition into participating in the future.

#### **Essential Element 7: Opportunity for Self-Determination**

Believing that you have impact on life's events rather than passively submitting to the will and whims of others is self-determination. Youth must develop a sense of influence over their lives, exercising their potential to become self-directing, autonomous adults.

### **Generosity**

#### **Essential Element 8: Opportunity to Value and Practice Service to Others**

Finding yourself begins with losing yourself in the service of others. Service is a way for members to gain exposure to the larger community and, indeed the world itself.