TRANSFERRING KNOWLEDGE AND EXPERIENCE TO STRENGHTEN THE AGRICULTURAL INDUSTRY: STEP $UP^{TM} - A$ MENTORSHIP PROGRAM FOR CANADA'S FUTURE FARM MANAGERS

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Abstract

In the realm of knowledge transfer, our thoughts primarily turn to academic and scientific communities and the transfer of theoretical research into practical terms. And, while we have a solid appreciation for the importance of farm transfer and succession for the ongoing prosperity of the agricultural industry, oftentimes our sentiment is limited to matters pertaining to finance and legalities. However, in the agricultural context especially, knowledge transfer must also relate to the transfer of inherent knowledge and experience of one generation of farmers to the next. Intellectual capital must be placed in greater consideration in order for Canada's future farmers to stand on the shoulders of giants - a foundation from which to secure Canada's agricultural industry, and a platform from which to launch into continued prosperity and success. Young farmers and new entrants are the future of the Canadian agriculture industry. In order to succeed in knowledge transfer however, we must be conscious of the learning preferences and practices of the apprentice, in order to receive, apply and prosper from the knowledge gained - to ultimately change behaviour at the farm level. While we have succeeded in providing experiential learning in production techniques, we must also consider how we can embrace experiential learning to successfully transfer business management skills and best practices amongst the farming community. The success of any farm enterprise is directly related to the business-management skills of the farm manager. This paper focuses on Farm Management Canada's STEP UPTM Mentorship program as an example of a practical approach to business skills development. STEP UP^{TM} is an on-farm learning placement that matches experienced farmers with beginning, new, potential and transitioning farmers to learn critical aspects of farm business management in a hands-on setting.

Keywords: farm, management, succession, transition, education, Canada

1. Introduction

In the realm of knowledge transfer, our thoughts primarily turn to academic and scientific communities and the transfer of theoretical research into practical terms. And, while we have a solid appreciation for the importance of farm transfer and succession for ongoing prosperity of the agricultural industry, oftentimes our sentiment is limited to matters pertaining to finance and legalities.

However, in the agricultural context especially, knowledge transfer must also relate to the transfer of inherent knowledge and experience of one generation of farmers to the next. Intellectual capital must be placed in greater consideration in order for Canada's future farmers to stand on the shoulders of giants – a foundation from which to secure Canada's agricultural industry, and a platform from which to launch into continued prosperity and success.

Young farmers and new entrants are the future of the Canadian agriculture industry. In order to succeed in knowledge transfer however, we must be conscious of the learning preferences and practices of the apprentice, in order to receive, apply and prosper from the knowledge gained to ultimately change behaviour at the farm level.

Farmers are often "show-me" types who respond to learning in a practical, tangible way, and cherish the advice of other farmers in adopting best practices.

While farmer mentorship is not a new concept, Canada's programs typically focus on production skills. And, while we have succeeded in providing experiential learning in production techniques, we must also consider how we can embrace experiential learning to successfully transfer business management skills and best practices amongst the farming community.

The success of any farm enterprise is directly related to the business-management skills of the farm manager.

Farm Management Canada's STEP UPTM Mentorship program has taken a practical approach to business skills development through on-farm mentorship, with a focus on first-hand farm management experience. STEP UPTM is an on-farm learning placement that matches experienced farmers with beginning, new, potential and transitioning farmers to learn critical aspects of farm business management in a hands-on setting.

FMC is helping build a culture of lifelong learning and farm business management for beginning farmers, established farmers and for those in sectors in transition by providing the necessary tailored tools and resources to meet changing needs and realities.

2. The future of Canada's farmers: rising age, complex farms, shifting assets

Table 1. Average operator age of the canadian farmer

	Average operator			
Province	age			
	2011	2006	2001	
Newfoundland and Labrador	55.0	52.3	50.5	
Prince Edward Island	54.2	51.4	49.3	
Nova Scotia	55.4	53.2	51.0	
New Brunswick	55.5	52.8	51.0	
Quebec	51.4	49.3	47.0	
Ontario	54.5	52.6	50.7	
Manitoba	53.1	51.2	49.0	
Saskatchewan	54.2	52.6	50.5	
Alberta	54.5	52.2	49.9	
British Columbia	55.7	53.6	51.4	
Total Canada	54.0	52.0	49.9	

Source: Statistics Canada, Census of Agriculture, 2001 to 2011

The average age of the Canadian farmer is rising. Statistics Canada's 2011 Census of Agriculture1 observed the average age of the Canadian farmer has risen by 2% to 54 years of age, compared to 52.0 in 2006 and 49.9 in 2001.

The rising age of Canada's farmers indicates an immense shift of vast amounts of farm assets through farm succession and transfer in the next ten years. Furthermore, Canada's farms are becoming increasingly complex.

According to the latest Census, the average size of a Canadian farm has increased by 6.9% since 2006, while farms with \$500,000 and over in gross farm receipts account for 11.5% of farms in 2011, compared to 8.6% in 2006. And, farms with \$1 million or more in gross farm receipts increased significantly from 3.2 to 4.7% of farms in Canada.

Small or large, farm diversification is leading to complex farm businesses with many farms running diverse business streams within the farm business

including retail outlets and custom contracting, to name a couple examples. And, as farms become increasingly complex, farmers must maintain a diverse skill set to manage operations. It is vitally important to have a mechanism for today's Principal Decision Makers (PDMs) to pass this vast, diverse knowledge onto the succeeding generation.

²⁰¹¹ Census of Agriculture, Statistics Canada. http://www.statcan.gc.ca/ca-ra2011/index-eng.htm

Therefore, asset transfer to Canada's future farmers is not limited to financial assets, but also includes knowledge and experience – passing on lessons learned and best practices to the succeeding generation and new entrants.

This begs the question, Are agriculture's new entrants and the next generation of farmers prepared for the responsibilities that come with managing Canada's agricultural industry?

2.1. Working together makes sense

Statistics Canada's 2011 Census of Agriculture indicates an increase in gross farm receipts when younger (under 35 years of age) and older (over 35 years of age) generations worked together on a farm operation. The table below shows average gross farm receipts almost double for farms with under-35 operators alongside over-35 operators versus farms with all operators under 35 years or farms with all operators over 35 years of age. This indicates the need for the younger and older generations of farm operators to be working together and learning from one another.

Table 2. Gross farm receipts and number of farms

Gross farm receipts	2011	2006	Percent
	number of		change
	farms		2006 to
			2011
Less than \$10,000	43,95	45,749	-3.9
\$10,000-\$24,999	32,85	36,971	-11.1
\$25,000-\$49,999	25,76	30,227	-14.8
\$50,000-\$99,999	25,46	31,119	-18.2
\$100,000-\$249,999	31,67	40,382	-21.6
\$250,000-\$499,999	22,46	25,108	-10.6
\$500,000-\$999,999	13,98	12,499	11.8
\$1,000,000-\$1,999,999	6,304	4,614	36.6
\$2,000,000 and over	3,298	2,704	22.0
Total	205,7	229,37	-10.3

Source: Statistics Canada, Census of Agriculture, 2006 and 2011

Table 3. Average gross farm receipts for younger operators, Canada 2010

Farm category	Average gross	
	farm receipts	
	(\$)	
Farms with all operators under 35 years	204,558	
Farms with under-35 operators	450,485	
alongside older operators		
Farms with all operators over 35	240,027	
All farms	248,199	

Source: Statistics Canada, Census of Agriculture, 2011

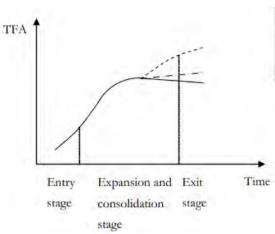
2.2. The succession effect

The Succession Effect2 relates to the phenomena whereby having an identified successor to the farm business prolongs the PDM's investment into the farm business. Potter and Lobley3 further contend that the Succession Effect can take place throughout the farm manager's career and is not reserved to the time at which a farmer is contemplating retirement. Therefore, the Succession Effect can greatly affect the way business decisions are made, leading up to business succession. In Figure 1 below, TFA represents Total Farm Assets.

The Succession Effect demonstrates the importance of raising awareness of farm transition and succession, and bridging the gap between the exiting generation of farmers and new entrants in terms of knowledge transfer – where enthusiasm meets experience.

² Kimhi A., Kislev Y., Arbel S., 1995. Intergenerational succession in Israeli family farms: Preliminary evidence from panel data, 1971-1988: Department of Agricultural Economics and Management, Hebrew University: 1995.

Potter C., Lobley M., 1992. Ageing and succession of family farms. Sociologia Ruralis 32:317-334.



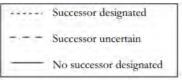


Figure 1. Conceptual Model of the Succession Effect, Calus M, and Van Huylenbroeck G (2008)*

* Calus M., Van Huylenbroeck G., 2008. The succession effect within management decisions of family farms. 12th Congress of the European Association of Agricultural Economists – EAAE; 2008; Ghent, Belgium.

3. STEP UPTM Mentorship Program – where enthusiasm meets experience

STEP UPTM is Canada's only national mentorship program that focuses on developing farm management skills across all regions, production sectors, farm size, and across Canada's official languages. Typically attracting young and beginning farmers, STEP UPTM also caters to those transitioning within the industry, to connect with and learn from leading farm managers.

STEP UPTM is an on-farm learning placement that matches those who are considering a farming career or transitioning to a new production sector with an experienced farm manager for a chance to learn farm business management skills in a hands-on setting. STEP UPTM also provides the experienced farmer with a fresh perspective on their business.

3.1. The Mentors – transferring knowledge

Mentors not only share their knowledge in farm business management and passion for the Canadian agricultural industry, but also inspire Mentees to follow their farming dreams.

Mentors are trainers, guides, teachers, and confidants – all rolled into one. People are often attracted to the role of a Mentor because they are interested in encouraging and inspiring growth, development and success in others. An ideal Mentor has expert knowledge of at least one area of farm business management, knows how to recognize the keys to success, is a good communicator, and has an open mind. Mentors often become lifelong friends with Mentees and the mentorship continues well after the completion of the STEP UPTM program.

3.2. Mentees – learning from the best

Mentees involved in the STEP UPTM program can expect to have a hands-on farm business management learning experience. Mentees receive mentorship from an expert in their topic of interest. Mentorship increases Mentee motivation and confidence while building a wide network of contacts. Being matched with an experienced farmer allows the Mentee to learn and develop new skills and abilities from someone who has applied knowledge and best practices.

Through FMC's partnership with the Canadian Young Farmers' Forum and Canada's Outstanding Young Farmers' Program specifically, FMC enjoys a large pool of distinct farmers from which to draw Mentors.

Mentees interested in receiving a Mentor's help must take the time to analyze their career path and identify what they expect from a Mentor. Mentees and Mentors strive to build an open, candid atmosphere that lends itself to discussing their concerns. They should be receptive to advice and suggestions, although Mentees must never abandon their own judgment, recognizing that a Mentor cannot make decisions for them regarding their farming future.

3.3. The Learning contract

The STEP UPTM Learning Contract is an agreement between the Mentee and Mentor that allows both parties to jointly determine the goals and objectives for the Mentorship experience. It allows Mentees to pinpoint very specific learning goals. STEP UPTM Mentees are not limited by a pre-set curriculum that may or may not address their learning needs. Before a mentorship may begin, farm business management learning goals are negotiated between the Mentor and Mentee, submitted to the STEP UPTM Program by the Mentee, and then tracked through participants' Progress Reports. Some examples of learning goals achieved as reported in Progress Reports include:

- · Cost of production,
- · Farm traceability and food safety measures,
- · Field-worker coordination and team management,
- Purchasing decisions, investment issues, and long-term infrastructure planning,
- CSA (Community Supported Agriculture) planning and management,
- · Canadian Organic Standards and the certification process,
- Import/Export regulations,
- Contingency planning and risk management,
- Customer relations/Customer service and education,
- · Succession and estate planning,
- Time management, scheduling, and prioritization,
- Environmental and resource management.

Mentors and Mentees complete two Progress Reports throughout the duration of the program. The first report is due at the half-way point of the mentorship with the final report due at conclusion of the mentorship. Reporting can be done in a variety of formats, such as a 500-1000 word document, a 5-minute (minimum) YouTube presentation, or a 5 minute (minimum) PowerPoint presentation. Participants are encouraged to be creative and include pictures of their Mentorship experience.

Year-over-year, FMC has been overwhelmed with the quality and detail within the Mentorship Reports. The reports demonstrate the true value of the program, identifying practical, tangible, measurable positive outcomes.

3.4. The STEP UPTM Mentorship Matching Process

As STEP UPTM is a national program, Mentors and Mentees are accepted nation-wide. FMC supports inter-provincial travel in order for participants to gain new insights of farming in other areas of Canada. However, FMC also recognizes that mentorships in the local community are beneficial for ongoing relationships without geographical constraints. The program is flexible to cater to various Mentee needs and desires.

Before beginning the Program the following documents must be submitted:

Mentee Application form Mentor Application form Consent to Disclosure Criminal Record Check

Conference Call

Introductory call (facilitated by the STEP UP Program Coordinator) for the potential Mentor and Mentee

> Mentor/Mentee Release Waiver Indemenity Agreement

Learning Contract

Mentor and Mentee complete the Learning Contract cooperatively. Mentee must submit Learning Contract <u>before</u> the Mentoring experience can commence. Mentor and Mentee must retain a copy of completed document.

Week 1: Check-in Conference Call

One week into the Mentoring experience the STEP UP Program Coordinator will call the Mentee to check-in.

How are things going?

Interim Mentor Report

Due date: Half-way mark of the on-farm Mentorship is complete.

Interim Mentee Report

Due date: Haly-way mark of the on-farm Mentorship is complete.

Final Mentor Report

Due date: One week after the on-farm Mentorship is complete.

Final Mentee Report

Due date: One week after the on-farm Mentorship is complete.

Figure 2. The path through the STEP UP™ Mentorship Program

Program Completion and Summary of Success

STEP UP Program Coordinator provides Mentor and Mentee with feedback summarizing the mentorship accomplishments, certificate of achievement, and resource package of additional resources and learning opportunities.

STEP UPTM welcomes Mentors to the Mentor Roster at any time. Once a Mentor has submitted an application, FMC makes sure the eligibility criteria is met. A summary profile of their farming operation is then created and posted on the FMC website for potential Mentees to view. Mentors are not guaranteed to receive a Mentee.

During the winter season, FMC opens up the application process for Mentees and starts matching Mentees and Mentors according to the learning goals of Mentees and experiences and skills development offered by Mentors. Figure 2 outlines the path through the STEP UPTM Mentorship Program once a preliminary match has been made.

As seen in Figure 2, FMC maintains a connection to the Mentorship throughout the process, checking in with both Mentor and Mentee from time to time.

Mentees are required to stay a minimum of 8 weeks (total time) on the Mentor's farm, but many mentorships last six months or more.

Mentors and Mentees need to complete a Health Information Form and Release, Waiver, Indemnity Agreement before beginning the program. Salary, accommodations, and working/training conditions are negotiated between the Mentors and Mentees when completing the STEP UPTM Learning Contract.

Any wages are settled between the Mentor and Mentee; however Mentors are compensated with a \$2,000 honorarium for participating in the STEP UPTM program, in recognition for the time they are taking out of their day to help teach the Mentee. Payment is made upon submission of each Progress Report.

To help establish the mentorship, FMC provides both Mentor and Mentee with a Mentorship Manual. The Mentorship Manual includes information on legalities including Labour Relations Standard booklet identifying the Minimum Employment Standards for all Canadian provinces and territories. It is important that each Mentor-Mentee relationship is informed of their rights and obligations.

At the end of the mentorship experience, FMC encourages Mentors and Mentees to revisit their Learning Contract, and submit a Final Progress Report.

Upon completion of the mentorship (at least 8 weeks total time), the Mentor and Mentee receive a Summary of Success recording their accomplishments. As well, the program partners provide a resource package to the Mentees to connect them to other additional resources and opportunities within the agricultural industry.

4. A model program

In 2012, FMC took part in the Canadian Agricultural Human Resource Council's On-Farm Work Experience Feasibility Study to inform best practices of leading on-farm learning programs.

The Study found that the STEP UPTM Program's self-directed learning design is ideally suited to facilitate the mentorship process since it recognizes farm managers as subject matter experts.

Not only are Mentees benefitting, but likewise, Mentors are gaining valuable new ideas and insights into their farm business from the fresh perspectives brought by the Mentee.

4.1. The STEP UPTM experience – what participants are saying

"It has been a huge benefit to have a [Mentee] become immersed in and experience our farm.....to ask us questions....this allows us to critically analyze our choices... either reinforcing those decisions or causing us to make changes to our production practices." Mentor Kristian Vester of Blue Mountain Biodynamic Farms Ltd., Alberta.

"I appreciated that the STEP UP program asked us to set goals at the beginning in order to focus on some specific areas of interest. There are many things that I learned throughout my internship, but being able to refer back to set goals allowed me to crystalize the lessons and further understand my new experiences." Mentee Lindsay Fischer.

"Not only are my mentors teaching me a great deal, they are also becoming my friends and will any luck be in my life for many years to come!" Mentee Olivia Ronkainen.

"The STEP UP program has given me the confidence needed to manage a farm business of my own...Based on my experience, I hope to one day mentor aspiring farmers in the future. I am very grateful to have participated in the program, and will use the skills and knowledge I have developed to serve the agricultural community better." Mentee Arden Esqueda.

"One of the biggest lessons I will take from this experience is to not underestimate the importance of solid business practices. You may have the best product/service in the world, but if no one knows about it... or if you can't afford to produce it... then a successful business will remain out of your reach." Mentee Evalisa McIllfaterick.

4.2. An evolution in programming: looking ahead

The STEP UPTM Mentorship program was established in 2007. In 2011, the program was restructured as a partnership between the Farm Management Canada and the Canadian 4-H Council, Canadian Young Farmers' Forum, and Canada's Outstanding Young Farmers' Program. Program partners have established a rich pool from which to draw Mentees and Mentors. Along with establishing a partnership network for recruitment and delivery, STEP UPTM also enhanced its programming with the Learning Contract, Mentorship Manual and a dedicated coordinator, along with marketing and promotional materials to increase awareness of the program and its accomplishments to help grow the initiative. The chart 4 shows the increasing popularity of the STEP UPTM program.

In 3 years, Mentee applications have increased by 64% while Mentor applications have increased by 73%. Currently, the only regions in Canada not represented by program applicants are Nunavut and the Northwest Territories. STEP UPTM will remain a small program with 20 Mentor-Mentee matches supported in 2013-2014. Applicants recognize that it is a privilege to participate in STEP UPTM. STEP UPTM acts as a national umbrella linking work experience programs across the country, creating a mentorship network, and in effect strengthening the overall practice of mentorship and knowledge sharing in agriculture. At the same time, STEP UPTM is able to emphasize the importance of addressing agribusiness skills in mentorship experiences. In order to maximize the impact of the STEP UPTM program, efforts are being devoted to open the program to partnership coordination and delivery. This past year, STEP UPTM broadened its influence by developing a

Table 4. The popularity of the STEP UP^{TM} program

The popularity	2013	2012	2011
# of Mentee Applicants	46	24	10
# of Mentors on Roster	58	32	9
# of Mentor-Mentee Matches	20	13	5
# of Completed Mentorships	N/A*	13	5

^{*2013} Program incomplete at time of submission

Youth STEP UPTM pilot project. The Youth program is similar in structure and design and addresses the learning needs of Mentees aged 15-17 years. This pilot project was a tremendous success and is now packaged and ready to be implemented by 4-H clubs across Canada.

In addition to helping youth develop farm business management skills, opportunities have also been identified for

language training, leadership development and other spin-off focuses while concentrating in business management topics.

Looking to the future, the STEP UPTM mentorship program will continue to collaborate with likeminded organizations in order to promote hands-on farm business management training. With the aim of retaining the quality and consistency of the mentorship program, the STEP UPTM Program Partners are interested in tracking a progressive and thoughtful course for program growth and development.

5. Conclusions

The STEP UPTM mentorship program bring business management skills development into a handson, practical setting, thusly responding to the learning preferences and practices of Canada's farmers.

The program's structured approach to learning helps participants achieve identified goals and keep their learning on track, ultimately changing behaviour at the farm level.

As Canada's aging farmers plan for their retirement, and new farmers get ready to take the reins, we can take comfort in knowing that the foundation for Canadian agricultural excellence will remain unshaken. By passing on experience and best practices, Canada's farmers are leaving their legacy to future generations, ensuring ongoing success and prosperity for Canadian agriculture and its farmers.

5.1. Farm Management Canada Funding

Farm Management Canada is funded in part by Agriculture & Agri-Food Canada under the Growing Forward program, a federal-provincial-territorial initiatives, and a growing number of partners. With this support, FMC is fulfilling a significant role in nurturing a thriving Canadian agriculture industry.

5.2. Farm Management Canada

Farm Management Canada, formerly the Canadian Farm Business Management Council, was established in 1992 to coordinate, develop and disseminate farm business management resources and tools to Canadian farmers. As a national umbrella for farm business management in Canada, Farm Management Canada (FMC) is the only organization dedicated to the coordination, development and delivery of business management information, resources and tools to position Canada's farmers for success. FMC connects the Canadian Agricultural industry and continues to build a culture of business management and best practices at the farm level.

6. References

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