

# **North American Perspectives on Successful Strategies in Extension and Technology Transfer**

**James E. Johnson  
College of Natural Resources  
Virginia Tech**

**Eric R. Norland  
Natural Resources and Environment Section  
USDA-CSREES**

**Janean H. Creighton  
Department of Natural Resource Sciences  
Washington State University**

# Background

- *Building Capacity Through Collaboration*  
6<sup>th</sup> IUFRO Extension Party Conference  
(Troutdale, Oregon – October 2003)
- Focus on “successful strategies” as a preliminary step to “Best Practices” .
- Report and compare key strategies from projects around the world.

# Best Extension Practices (BEP'S)

- Based on and shaped by a needs assessment and use of a planning model.
- Focused on a target audience and built on an understanding of audience skills and interest.
- Content and delivery determined in cooperation with target audience and stakeholders.

# Best Extension Practices (BEP'S)

- Relevant to and accessible by people with diverse backgrounds and influences.
- Based on accurate and balanced information, incorporating different perspectives.
- Involves quality and creative instruction.

# Best Extension Practices (BEP'S)

- Values lifelong learning.
- Builds on environmental literacy based on key principles underlying environmental education.

Source: <http://wateroutreach.cfmxtest.uwex.edu/beps/essential.cfm>

*Retrieved on October 22<sup>nd</sup>, 2004*

# Objectives

1. Identify a suite of successful strategies in forestry extension.
2. Determine the degree to which strategies are used by members of the IUFRO Extension Working Party.
3. Showcase those strategies determined to be widely used and acceptable.

# Methods

- Review of 35 papers from 2003 conference.
- Papers presented from 11 countries.

Australia

Kenya

Canada

Norway

Chile

Philippines

Germany

Slovenia

India

USA

Indonesia

# Methods

- 119 successful strategies identified.
- Condensed to 45 in three categories:
  - *Strategies associated with learners: 16*
  - *Strategies associated with extensionists: 7*
  - *Strategies associated with educational approach: 22*

# Methods

- Focus group in Washington DC (Aug 2004)
- Participants included:
  - Inter-American Development Bank
  - US Agency for International Development
  - Peace Corps
  - USDA-CSREES
  - USDA – Forest Service
  - Virginia Tech/Tennessee State University
- Further refined concepts of “Best Practices” and “Successful Strategies”.

# Methods

- Survey the IUFRO Extension Working Party membership (500 members: 70 countries).
- Use of 5-point Likert Scale to assess degree of use of 45 strategies

# Results

	Canada	US
	n=38	n=121
# usable responses	7	53
Rate of response	18%	44%

# Results

	Canada (n=7)	US (n=53)
Gender (%)		
<b>Male</b>	<b>71</b>	<b>95</b>
<b>Female</b>	<b>29</b>	<b>5</b>
Mean age (yrs)	41	50
Mean years experience	10	18

# Results

Employed by (%)	Canada	US
Government Agency	28	6
Research Institute	1	4
School/College/University	14	86
Non-governmental org.	57	0
Consultant	0	2

# Strategies associated with learners – *Percent of those used often or sometimes*

Strategy	Canada	US
Allow opportunities for feedback from learners to extensionists	100	94
Survey target audience to determine needs, wants, desires, and barriers to adoption	100	90
Focus initial extension efforts on innovators and early adopters	100	84
Facilitate peer-to-peer learning opportunities within the target audience	85	83

# Strategies associated with learners – *Percent of those not used*

Strategy	Canada	US
Use farmer-to-farmer (forest owner-to-forest owner) approaches in which the trainers are paid to provide educational services to their peers.	86	75
Emphasize human welfare in educational programs.	86	28
Hire learners to work on projects to build trust and spend project funds locally.	71	64
Formalize the roles and responsibilities of partners through MOU's.	43	45

# Strategies associated with extensionists

*Percent of those used often or sometimes*

Strategy	Canada	US
Extensionists build trust with learners.	90	88
Extensionists involve learners in project planning.	85	84
Extensionists establish rapport with landowners, particularly if extensionists are strangers.	87	71
Extensionists are members of a professional society or association.	57	90

# Strategies associated with extensionists – *Percent of those not used*

Strategy	Canada	US
Extensionists receive training and licensing.	71	17
Extensionists receive in-service training and leadership development.	71	11

# Strategies associated with educational approaches – *Percent of those used often or sometimes*

Strategy	Canada	US
Deliver practical and up to date information.	100	100
Ensure educational programs meet the needs of the target audience.	100	96
Utilize information technology when appropriate – www, satellite.	100	96
Adapt educational programs to local conditions.	100	96

# Strategies associated with educational approaches – *Percent of those used often or sometimes*

Strategy	Canada	US
Encourage learner participation through personal invitations.	100	89
Target educational programs to the needs of learners.	100	91
Maintain a close collaboration between research and extension.	85	98
Use a variety of teaching methods to accommodate different learning styles.	85	96

# Strategies associated with educational approaches – *Percent of those not used*

Strategy	Canada	US
Identify and engage underserved audiences in extension programs.	57	33
Involve learners in the delivery of educational programs.	57	17
Employ principles of quality management for educational programs.	43	34

# Strategies associated with educational approaches – *Percent of those not used*

Strategy	Canada	US
Develop and use a prototype extension model that can be modified based on initial feedback.	28	35
Use on-farm or in-forest applied research plots for demonstration purposes where appropriate.	56	24

# Barriers that prevent use

- Lack of funds, staff, and time.
- Lack of training opportunities for extensionists.
- Difficulty with identifying and engaging target audiences.
- Lack of minority extensionists.

# Summary

- Extensionists most often base their educational programs on a needs analysis, allow for feedback, and support peer-to-peer learning.
- Extensionists do not typically provide direct funding to learners for peer-to-peer learning (though 28% of US respondents indicated they would like to try this approach).
- Extensionists build trust and rapport with learners as a means to achieve adoption.
- Extensionists deliver practical and up-to-date information, maintaining a close collaboration with research, use IT, and adapt training methods to be effective.