

Professional Extension Capability Pathways

Technical Practice – Guiding Principles

Version 1

TNQ

Drought Hub



tnqdroughthub.com.au



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Relational Practice – Building and Sustaining Self and Relationships with Others

The TNQ Drought Hub brings together farmers, Indigenous landholders, communities, researchers, and businesses to co-design approaches and solutions for drought resilience in Tropical North Queensland. The Hub explores and shares innovative approaches to solutions towards building drought resilience in the region. Key to our activities is enhancing connectivity and collaboration between various groups and service providers in our region.

Technical Practice

The technical knowledge and skills of the extension officer includes: specific knowledge and understanding of: industry and agricultural production systems; current science and research; evaluation – critical thinking and data analysis; and natural systems and the environment.

Extension officers bring specific skills to the sharing of technical knowledge. They design interventions that facilitate engagement with farmers, and support organisations and farming communities. Extension officers identify the most suitable intervention for the stakeholder/target group to increase the likelihood of success. They have an ability to adapt, apply and share new technical and other information with farmers in a way that is appropriate for them.¹

Introductory Comments

This document sets out some guiding principles to support decision making related to extension practice. It is essentially a summary document to support the scoping out of a project or program for an early career extension professional or a more seasoned professional that may wish to review an alternate approach. It is intended to support your decisions, there are three complementary resources setting out some guiding principles associated with Change, Technical and Relational Practice. Each of the documents can be considered as required to support effective extension practice decision making.

Context

Extension officers provide specific technical knowledge and influence change through their technical expertise and established relationships. Designing interventions that facilitate engagement with producers, organisations, and communities. Extension officers identify the most suitable intervention for the stakeholders and/or target groups to increase the likelihood of success. Extension officers adapt, apply, and share new technical and other information with producers in a way that is appropriate for them.²

¹ https://www.rch.org.au/uploadedFiles/Main/Content/ccch/images/Qld-EMP_Report.pdf

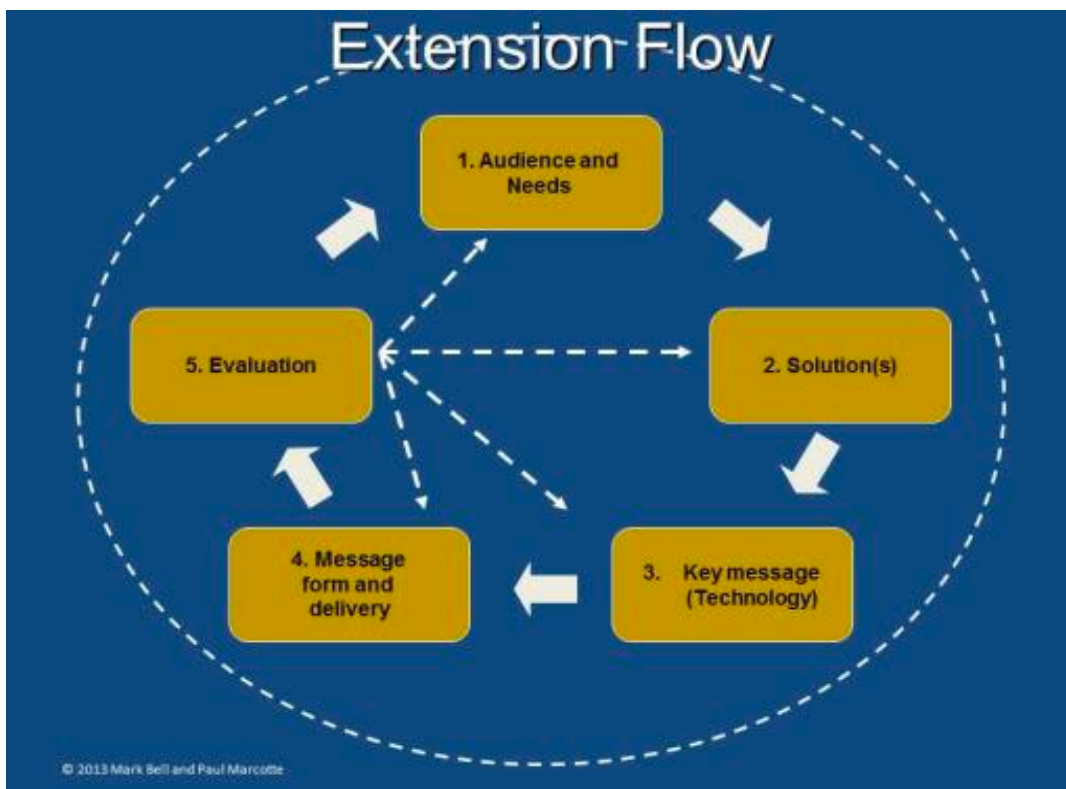
² https://www.rch.org.au/uploadedFiles/Main/Content/ccch/images/Qld-EMP_Report.pdf

This guideline supports the identification of effective technical practices to achieve successful program or project delivery. It is important to understand how to review the opportunities and challenges presented as part of successful extension practices across the TNQ Hub region.

What is Extension and why it is important?

Extension can be defined as: *“getting knowledge to your audience, so that they will make a positive change”* and can be implemented as a 5-part framework:

1. **Audience and Needs** - Who are the audience and what do they need?
2. **Solutions** – What are the viable, appropriate solutions?
3. **Key message** – Which part of the solution message do people need to hear (to understand and be able to change)?
4. **Message – Form and delivery** – What is the best way to package and deliver the message to help people make a positive change?
5. **Evaluation** – How can you collect information to improve both the extension process and the message while also identifying emerging needs and opportunities?³



ASK ME offers a simple way to remember the important elements in an extension program, - Bell and Marcotte, 2012

³ https://ucanr.edu/sites/Professional_Development/files/343984.pdf

In agriculture, technology meets adoption largely through the communication and extension efforts of producer groups and their networks. Extension strategies need to be well thought through and context driven to achieve the outcomes they are targeted to achieve. There are various extension challenges and opportunities⁴:

Challenges	Opportunities
<p>Resourcing extension programs</p> <ul style="list-style-type: none"> • Lack of control over how extension is done, it is dictated by a focus on defined contracts • Funding bodies fund Research and Development, not extension activities • Lack of resourcing to do extension well • Diverse sources of funding with multiple objectives and reporting mechanisms • Limited knowledge of extension preferences in modern industry 	<p><i>Collaboration</i></p> <ul style="list-style-type: none"> • Learning from experiences, a shared understanding of what does and doesn't work so we can collectively manage funders expectations • Collaboration between the national stakeholders • Memorandum of Understanding (MOU) from transactional partnerships • Improve our sharing of extension impact • Increase agency of producer systems groups through national collaboration • Better understanding of national and regional objectives • A clear plan for what projects can deliver in building capacity for effective extension delivery • Prioritisation of efforts
<p>Producer challenges</p> <ul style="list-style-type: none"> • Faster adaptation to faster changing challenges to farming i.e. markets, climate, water, pressures • Sociology of change for famers with rapid change and threats • Producers are time poor, with a huge volume of information overwhelming producers, resulting in some producers questioning the value • Complexity of innovation/technology adoption - numerous barriers for producers 	<p><i>Capacity building</i></p> <ul style="list-style-type: none"> • Better understanding of how we can build capacity to deliver extension, developing a national framework for extension training • Have clarity of Australian Ag extension needs in the mid to long term • A clear vision for extension building in capacity in extension with common goals and detailed actions • Have a plan that we take to industry to get buy in

⁴ <https://agex.org.au/wp-content/uploads/2023/08/Extension-Strategy.pdf>

<p>Industry</p> <ul style="list-style-type: none"> • Industry acceptance of extension as a critical professional part of adoption and innovation • Antagonism between corporate agronomy consultants and independent agronomists 	<ul style="list-style-type: none"> • To know more about the capability development needs of producer groups • Increase extension skills within producer groups
<p>Extension knowledge, skills and capacity to deliver</p> <ul style="list-style-type: none"> • Knowing what the best delivery model is • Lack of clarity about what extension is and how it is done effectively • Resourcing organisations to build capacity as there is a lack of investment in skill development • Few extension training opportunities for Farming Systems Groups, agronomists, and industry representatives • Lack of capacity and ability to maintain capacity in the regions to do extension well • Lack of innovation in extension • Understanding what producers want and need, and how to engage effectively 	<p>Extension development and delivery</p> <ul style="list-style-type: none"> • Strategic approach to project development • Define target audience, identify numbers, defined outcomes, specific needs and the methodology to be applied • Look at innovative extension practices to increase producer uptake • Identify on-line solutions and options • Recognise the challenges in staying up to date with advancements in agtech and connectivity solutions.

Adapted from: <https://agex.org.au/wp-content/uploads/2023/08/Extension-Strategy.pdf>

Guiding Principles for planning and implementation

The following provides a guide as to issues you may want to consider and go through in planning and implementing your behavioural change project.

1. Describe the need/opportunity that you perceive exists to make a positive change in a sustainability or resilience issue.
2. Define your objectives both in the short and long term. What information/data have you utilised that has confirmed your initial observation? Do all stakeholders believe that these objectives are both realistic and applicable?
3. Develop a plan of action as to how these objectives will be realised. What tasks do you require to complete to meet the objectives? Can you identify and overcome the barriers, and identify the drivers and use them to your advantage? What assumptions underpin your theory of change? Are there external factors that can impact on the project's success? What tools and resources will you use? How do you intend to evaluate the project?
4. Develop an evaluation plan based upon the needs of your stakeholders and upon the objectives you have outlined previously. Is the evaluation plan feasible (skills, resources, time) and meaningful (does it answer the important questions, and lead to further action)?⁵

How to Develop a Monitoring and Evaluation Plan

Step 1. Identify your evaluation audience. Identify who the evaluation audience or stakeholders are.

Step 2. Define the evaluation questions. Evaluation questions should be developed upfront, and in collaboration with the primary audience(s) and other stakeholders who you intend to report to.

Step 3. Identify the monitoring questions. To answer evaluation questions, monitoring questions must be developed that will inform what data will be collected through the monitoring process.

Step 4. Identify the indicators and data sources. The next step is to identify what information you need to answer your monitoring questions (indicators) and where this information will come from (data sources).

Step 5. Identify who is responsible for data collection and timelines. It is advisable to assign responsibility for the data collection so that everyone is clear of their roles and responsibilities.

Step 6. Identify who will evaluate the data, how it will be reported, and when.

Step 7. Review the Monitoring and Evaluation Plan. Assess the plan to review the following questions:

⁵ https://evaluationtoolbox.net.au/index.php?option=com_content&view=article&id=50&Itemid=128

- Focus on the key evaluation questions and the evaluation audience?
- Capture all that you need to know to make a meaningful evaluation of the project?
- Only asks relevant monitoring questions and avoids the collection of unnecessary data?
- Know how data will be analysed, used and reported?
- Works within your budget and other resources?
- Identify the skills required to conduct the data collection and analysis?⁶

Supporting Resources

Various source documents are referenced in the development of this guideline. The reader is encouraged to review the full source documents where further detailed information is required in your decision-making processes.

⁶ https://evaluationtoolbox.net.au/index.php?option=com_content&view=article&id=20&Itemid=159