Learning and professional development in advisory services: supporting the reflective practitioner

Mark Paine', Ruth Nettle" and Steven Coats"

Abstract

Advisors working in extension have rarely been viewed with equivalent status to researchers in farming systems projects. This paper investigates the possibilities of improving the professionalism of extension by referring to a national series of workshops for advisors. The content for these workshops was based on the findings from a learning research project for building professional learning relationships between farmers and advisors. A series of six workshops spread throughout the main dairying regions of Australia provided an opportunity to gather quantitative and qualitative data from advisors in the field about issues and perceptions challenging the development of professionalism in extension. Thematic analysis explains advisors' perceptions relating to professionalism in routine work situations, challenges to the profession, needs for professional development and the role of learning research, together with specific assessments of the workshops. We conclude the extension profession is undergoing a crisis of identity but that this could be resolved if more effective inter-disciplinary research methods were used in farming systems projects. The development of these methods depends in part on the effort made by investors to support research into learning and change management.

Keywords

Professional development, advisors, learning research.

The changing world of extension

The period spanning the mid 1980's through to the mid 1990's witnessed some exceptional developments in the conceptualisation of experiential learning (Kolb, 1984), professional service provision (Schon, 1983; Schon, 1987) and the role of science in society (Latour, 1987; Pickering,1992). For those of us working in the area of farming systems this provided a stimulus to reflect on the ways we were approaching our research and extension activities. It was hoped that critical reflection on our areas of work would identify new methodological advances to address environmental and productivity issues confronting Australian land management.

Unfortunately these eagerly anticipated advances were not realised during the period from the mid 1990's to the present. In this paper we suggest some reasons for extension and adult learning disciplines failing to develop sustainable communities of practice that effectively engage with other communities. While this failure is in part due to global trends, it is primarily a consequence of our own making. We offer a constructive response to this situation based on learning research that developed into a national program for advisors. This paper will report on the development experiences and observations arising

^{*} University of Melbourne

^{**} University of Melbourne

^{***} Dairy Australia

from a series of workshops with advisory practitioners. Our work is guided by the question, 'is it possible to improve the professionalism of service providers across an entire service sector?'

Professional advisory practice

Argyris and Schon (1974) observed that all professional practitioners need to not only be competent in their actions, they also need to reflect on their actions as a means of improving their competence. They claim that professional actions have corresponding theories (or logically interconnected propositions) that enable practitioners to explain, predict and/ or control their actions. Theories may be espoused (what we claim to be the basis of our actions) or 'Theories in use' (what actual informs our actions). Schon described science-based professions as following a technical rationality to perform in practice, "With research-based theories and techniques, agronomists solve problems of agricultural productivity, soil erosion, plant disease and insect control.' (Schon, 1983, p.169). He observed that this problem solving description of professional practice was incomplete as practitioners often encounter situations and issues that do not fit well known categories and therefore need use strategies to cope with these situations.

Schon describes these strategies as 'reflective conversations' akin to a design process, more artistic than scientific in character. Advisory professional therefore draw on some combination of scientific and experiential knowledge to perform in practice. Experiential (or tacit) knowledge is typically less formalised or systematically organised compared to scientific knowledge. Regardless, professionals possess a capacity to recognise the variation in competent performance among their peers – an aspect of professions that has attracted criticism as those 'outside' the profession observe an 'exclusive club' that tends to protect one another from external critique. Yet critique is a powerful stimulus to the renewal of professional practice. Critique can therefore arise from within a profession or from outside a profession as circumstances change. The conditions under which Australian dairy advisory services operate have been a powerful stimulus for change in recent times. We briefly outline these pressures for change before introducing our work with advisors in the field.

Global trends influencing learning and extension programs

Recent trends in technological innovations for agriculture in developed countries are, like healthcare, dominated by higher investments in biotechnology and information technologies. Our analysis of these trends is specifically in relation to service providers. Here we encounter a growing concern about the privatisation of knowledge, the growing complexity of farming systems and the acceleration of the technological treadmill.

The privatisation of knowledge

Of most concern to authors writing about trends in privatization of extension services is the impact of knowledge markets or the privatization of knowledge on innovation within the agri-environmental sector.

Leeuwis (2000) is concerned that a 'supply and demand' approach to knowledge carries with it the idea of a clear division of tasks between users and providers of knowledge and disregards the studies of innovation that refute such a linear model. He argues that in everyday practice researchers, extension

agents and farmers are all occupied with the development, exchange and use of knowledge, and that it is precisely the recognition of this non-linear and non-exclusive task-sharing that can contribute greatly to the achievement of successful innovation (Engel, 1995; Röling, 1996; Leeuwis, 1995).

Leeuwis (2000) raises three main issues when considering market-oriented knowledge policies: Exclusion risks (some farmers will be excluded from relevant knowledge), substitution risks (research and extension will focus on those issues and/or methods for which money is easily available, that is on well-resourced clients), and possibly high transaction costs ('bureaucratisation').

In conceptual terms, the key problem here seems to be that applied knowledge and information are considered as ready-made 'end-products'. However, in the context of sustainable agriculture it is probably more accurate to consider applied knowledge and information as 'building blocks' for local-level innovating. Innovation requires numerous knowledge 'transactions' and exchanges. Leeuwis (2000) thereby challenges the idea that the capacity to innovate towards sustainable agriculture can be optimally maintained through a knowledge market. Institutional arrangements other than markets are likely to be more effective when generating relevant knowledge for innovation at the local-level.

Complexity in farming systems

The agriculture sector is under increasing pressure to bridge a growing tension between a neo-classical economic view of farming as a small business food and fibre factory; and a liberal socialist view of farming as one of several "multi-functional" uses of landscapes. The latter view requires land managers to recognise the ecological, social, educational, aesthetic, and local economic development attributes (eg, tourism, food services etc.) that at times require the development of sophisticated collective methods in communities (Barrio and Vounouki, 2002).

Historically farming has been viewed as a food and fibre business. The growing influence of consumers and urban interests in debates about the merits of the food derived from our farming systems the sustainability of these systems is resulting in more voluntary regulations of farming practices (through pricing instruments) and compulsory regulations (using legislation).

With the growing privatisation of knowledge resources farmers also find themselves adapting their practices to comply with patents and property right regulations over genetic resources, or to register procedures and maintain individual animal records for traceability requirements for market access.

Complexity at the level of farm management has corresponding implications for those working in the knowledge systems that service farmers. Advisors are now required to have well developed technical skills across a broad range of farming systems. Perhaps even more demanding than this technical requirement is the need for advisors to have well developed socio-political perspectives on the place of farming in society, and a competency to debate these perspectives across diverse social forums (Wenger, 2003). Those working in learning professions therefore need to move beyond participation to engagement in social transformative processes involving food and landscape systems (Paine and Beilin, 2003).

Managing the technological treadmill

Cochrane (1958) first coined the phrase 'technological treadmill' to explain the phenomenon of more capital inputs, larger scales of productions and reducing margins from productivity gains that is

associated with an increasing dependence on technological innovation for competitive advantage over other suppliers. The net effect is that small and 'inefficient' producers are driven out of the industry by larger businesses, and those that allocate their resources more effectively.

Hubert and others (2000) referred to some of the negative effects of this 'treadmill' such as aggravating rural poverty and the promotion of unsustainable farming systems. This position was criticised by Petit (2000) who claimed the position of Hubert ignored the interventions of governments, and the opportunities arising from product differentiation for small farming businesses. Joly (2003) has since argued that neither position is adequate as an explanation of technological innovation because government assistance has not improved the lot of the small farmer, nor is it correct to claim that deregulated markets exacerbate the treadmill effect. Under deregulation it is possible for small producers to effect more product differentiation if adequately supported by policy and knowledge resources/ processes.

The challenge for learning professions in farming systems is not to equate the technological treadmill with deregulation and therefore oppose liberalisation policies, but rather to catalyse and support innovations by farmers and scientists that fit diverse farming systems over a range of ecological and market circumstances.

A call to address learning as a dairy sector wide issue

The organisation of advisory services for dairy production in Australian varies from State to State. Some States are fully privatised (South Australia) and others provide extensive public sector extension services (Victoria). At a federal level research and extension is 'purchased' with a view to improving the sectors capacity to compete in international markets by Dairy Australia (previously the Dairy Research and Development Corporation). Learning has been identified as a sector wide strategy for capacity building of producers and service providers (McKenzie, 2002). Managing the growing demand for evidence of responsible farming practice, and managing the complexity outlined above, depends on the capacity of people in the sector to manage change, regardless of the different public/ private provider policies and infrastructures across the States. It was to this capacity building requirement that the Learn Plans project was launched.

A project was designed on the assumption that an effective learning environment in the dairy sector required a farming population that was empowered to demand services that developed their skills for capturing future business opportunities. A farmer empowerment process would require advisors who appreciate the perspectives that farmers had in relation to their multiple roles when managing a farm and family business. These advisors also had to foster the empowerment of farmers in relation to different needs that arise at different stages in a farming career. Furthermore an empowered farming population would become an effective partner with advisory service managers in an effort to continuously improve services.

The "Learning Plans" project as a response to the call

A Dairy Australia funded research project "Learning Plans" was implemented in Victoria, Australia in 2001 and 2002 to investigate ways to build relationships between advisers and farmers that improve the performance of farming systems, create demand for learning that in turn develops the capacity of both advisers and farmers to manage change. The survey and action research components of this study were

reported at a previous conference (Paine and Kenny, 2002). Use was made of a previous market research survey to provide a preliminary insight into various types of grazing management as practiced by farmers in the South-West dairy region of Victoria. Four case studies were undertaken of farmers who were selected by extension staff with extensive networks and experience in the region. Three farming systems were identified through this process: extensive (low input - low output systems); intensive (high input – high output systems); and consolidating (systems that have undergone extensive change). We also determined a difference in orientation to grazing management: responsive management practice was characterised by adaptation to the environmental and situational pressures operating on the grazing system; transformational management practice was a more proactive approach to create the grazing system desired by the farmer.

Findings from the case studies, combined with results from the market research, were used to design a semi-structured questionnaire that was then conducted with farmers who corresponded to the general types of farming systems described above. This second round of interviewing focused on issues of learning and change in relation to farming practice. Additional interviews were conducted with new farmers until no new concepts nor issues were uncovered with respect to each type of grazing system: extensive (n = 6); intensive (n = 5); consolidating (n = 8). The duration of each interview was approximately two hours. Qualitative analysis of the interview data culminated in the development of a conceptual model that explained the learning behaviour of farmers who practice dairy grazing management.

Action research with advisors in the field

Research on learning plans aimed to improve the definition of farmer learning needs as a way to improve extension programs. This work extended beyond mere description to embrace a group of extension workers in a development process for building a methodology for facilitating the emergence of learning partnerships with farmers. This paper reports on the next stage of the project that used outputs from the research stage to build a professional development program for advisors.

The conceptual model referred to above was used in a second stage of this project that involved an action research group who were charged with the task of using the initial research findings to develop practical outcomes for the Target 10 program. Five advisors from the program participated in the action research team. A series of workshops and piloting of workshop outputs (eg. methods etc.) were conducted by advisors and ourselves as researchers to document process. After about 12 months of development work the team organised their findings into a methodology referred to as 'Germinator'. This methodology provides the advisor with a series of tools organised in a simple step-wise process that together facilitates the formation of a learning partnership with the farmer. The first step was to develop a profile of the farmers' learning needs, this was followed by a step that investigated key aspects of the farmers' learning needs. Having established the needs and context for learning the advisor then moved to investigate issues relating to the change of practice as defined by the farmer. The methodology concluded with a step that assessed the fit of extension resources with the learners' requirements (effectively a negotiation phase that often involves consideration of both institutional and inter-personal issues).

From research to workshops

A series of workshops were designed to use results from the research project in a way that focused on the needs of extension professionals around Australia, locating workshop activities at their place of work.

The aim of this stage was to:

- Foster effective adviser-client learning relationships using key messages from the research phase as a resource for workshop activities;
- Introduce a "model" for the role of extension in building effective client-adviser relationships. It was hoped this model might have relevance for extension professionals in their routine work.
- Draw on regional and local advisory experiences using interactive exercises.

A premise in these workshops was that the adviser-client relationship could be improved using results from the earlier research on learning processes. Prior to attendance, participants were asked to make a note of a particular client relationship (individual or group) that they would like to improve.

Participants were introduced to a concept of learning as a relatively permanent change in behaviour, with behaviour including both observable activity and internal processes such as thinking, attitudes and emotions (Burns, 2002). Learning was described as fundamental process for managing change (Beckhard & Pritchard, 1992). Farmer learning was initially represented to participants based on the work of Kilpatrick and others (1999) who had found that Australian farmers were overwhelmed with choices of products when trying to fulfil their needs for new knowledge and skills. Risks attached to wrong choices included opportunity costs for time, negative experiences with learning and inappropriate learning outcomes. This situation was exacerbated by the ad hoc way farmers' planned to learn – they rarely set formal plans to acquire new learning skills.

We then contrasted this farmer learning situation with the role of the advisor by stating that it was no longer tenable for the adviser to behave as a walking reference manual – what was now needed was an adviser-farmer relationship that was amenable to adaptation according to the farming situation.

Principles for building effective advisory relationships were then introduced to participants using a workbook approach that embodied outcomes from the learning research (Paine and Kenny, 2002). These principles were directed at understanding learning needs; distinguishing between learners' actions, intentions and worldviews, and making sense of interactions between these factors in the learning relationship. Workshop participants then applied these principles to cases in their work situations using tools and processes provided in a manual developed from the Learning Plans project (Nettle and Paine, 2003). This manual provided methods for determining learning needs; embodied tools to help better position extension as a response to these needs; outlined methods for creating a demand for learning (using action as the starting point for learning); and included guidelines for building the learning relationship (building professionalism in extension, meeting client demand and using a tool to build the advisory relationship). The session was designed as a one day exercise culminating with each participant developing an action plan that provided a framework for continually improving their advisory relationships, while simultaneously extending their own professional development.

Six workshops were delivered at sites that corresponded with all but one of the Regional Development Program regions of the Australian dairy sector. A workshop was planned for Northern Victoria but a severe drought was occupying advisors in the region at the time. Nevertheless, 75 of the 80 professional advisors employed by State Departments across Australia participated in the workshops between May to June 2003. A comprehensive evaluation of the workshops provided quantitative and qualitative data on the contribution of the sessions towards improving professional practice.

The remainder of this paper draws on the perspectives and feedback from professionals during the workshop sessions. In a way the workshop can be viewed as a type of research instrument, providing a mechanism to focus professionals on their learning relationships, and then capturing experiences from these advisors using a mix of data collection methods (review sheets, group based evaluations, semi-structured questionnaires etc.). Quantitative responses and written qualitative responses were gathered from 65 participants (10 participants did not return forms or had missing data). Group based responses were gathered from 75 participants.

Professionals, learning relationships and development issues

Participants used a five point scale to express their views on the relevance of the learning research for the extension profession. Their views varied from 'Very Relevant' (35%), to 'Relevant' (51%), and 'Neutral' (11%) for all regions. Using a similar scale they considered the workshops were either 'Very Useful' (15%) or 'Useful' (72%). Some participants were 'Neutral' (11%) about the usefulness of the workshop to their professional practice. This differed from their more distributed assessment of the usefulness of the workshops for their team: 'Very Useful' (21%); 'Useful' (54%); 'Neutral' (21%).

The professionalism of advisors was explored in relation to learning and change using six qualitative questions. These were coded and analysed thematically.

1. What are the current issues you encounter when going about your routine extension work? Advisors are seeking improved methods to engage people who have a desire to change their current practices. An ethical issue is recognised by advisors in situations where farmers feel they are performing adequately, yet advisors believe the current performance is unsustainable – is it appropriate for the advisor to create a sense of dissonance as part of a needs analysis with farmers? Advisors are seeking improved methods for tracking changes at the level of practices (improved pasture management) and systems design (alternative feedbase management systems). This tracking of changes needs to contribute to more effective advisor work practices such as setting priorities on the types of farmers to work with and the selection of services to use with these farmers. They recognise a need to improve the customisation of services to meet a range of farmer needs. Advisors want to build on their professional relationships to engender cultural changes and empower a type of farmer client who can reposition the role of advisors, from acting as a reference source to becoming a partner that supports managers as they plan and communicate change when adapting to challenges within and beyond the farm.

2. How is the extension profession being challenged?

An issue of identity is challenging the extension profession. Advisors are asking questions about their core business, their place relative to other service providers, and the balance between building local networks versus strengthening linkages with science teams. The profession is aware others do not recognise extension as a science. Concern is therefore expressed about the diminishing support for advisors in the field, with declining numbers of workers resulting in a loss of critical mass. This has a negative impact on the mentoring of new entrants, and on the career opportunities for experienced workers. Advisors recognise a need provide more evidence to investors regarding the value of extension and change management programs. Evaluation is of increasing concern to field workers who are

required to operate in projects. Monitoring is less difficult in project work, but advisors are having difficulty legitimizing non-project work. Information management (quality of information, helping farmers cope with numerous information demands etc.) is a perennial issue for the profession. However advisors are now referring to the need to combine their services with others to cope with this information issue. Environmental issues are particularly challenging as Government policies change. These issues often involve changes that need to extend beyond the life of a project, and the responses usually require inter-disciplinary teams to address complex problems. An associated challenge is the need for advisors to influence and inform the design of policy, rather than take a reactive role to policies developed by others.

3. What professional development are advisors seeking?

Professional development needs to start with new entrants to the profession and continue throughout their careers. Advisors are looking for a practicum approach (Schon, 1987) whereby advisors acquire new skills and capabilities through specialised workplace activities that have specified learning outcomes and a high degree of supervisory support. Advisors recognise the need to build stronger linkages with research and development in areas of learning, change and professionalism in extension. Part of this linkage ought to include researchers joining project teams periodically to provide independent but informed critiques of practice in the field while simultaneously identifying new research questions. Professional development ought to also include opportunities for inter-state and international exchanges and sabbaticals.

4. What R&D in learning and extension will be required in future?

Research teams needed to interact more with advisors in the field using these types of workshops as they provided an opportunity for all participants to reflect on their discipline. Advisors were enthusiastic about the focus on farmer driven RD&E and on improving the interplays between the practices of farming, extension and research. Time was a critical constraint to many advisors who want to participate more in research activities as part of their routine practice. Regular publication and distribution of research work was also called for. Advisors requested a style of communication about research findings that included the use of many examples and the development of case studies that would provide participants with an opportunity to determine how the research related to their professional practice.

5. Where should RD&E in change management focus its efforts?

Advisors are seeking more effective evaluation frameworks and tools that provide robust non-economic tools to measure change and assist with defining the attributes of the client they are working with. Improving partnerships with other professionals and improving the overall professional performance of extension were high priorities. Some technical competencies were identified as deficient across the current population of advisors, including skills with supply chain management and dealing with environmental challenges like water use efficiency and biodiversity. Extension needs to develop a research orientation to its practice that continuously explores and refines advisory processes, informs policy and helps resolve dilemmas between regional, national and local development priorities.

6. How relevant was this learning research to the profession of extension?

Pragmatic requirements raised by advisors during the workshops included questions about the robustness of the approach – how to apply it in different forums, with different groups that were working on a range of issues. Assessments of relevance were conditional on follow-up activities that ensured practices were embedded in the routines of advisors in the field. The very act of explaining what professionals actually do was highly valued by many advisors who have had difficulty positioning their work relative to that of others like scientists or policy makers. A number of participants requested more time to think through the material from the workshop as they operate in the field. Tools introduced during the workshop were

considered important to building a professional image among others and contributing towards improving professional standards. More work was called for in the area of evaluation that would underpin position statements from extension to Government and policy makers.

Professional development as reflective practice?

We questioned whether it was possible to improve the professionalism of advisors across an entire service sector. Our tentative conclusion is that the series of exploratory fieldwork, action research and professional development workshops have gone someway to assisting advisors reflect on their professional practice. Ultimately changing professionalism is determined by the advisors themselves. By using workshops that focused on improving the learning relationships between advisors and farmers an excellent opportunity was created to explore perceptions of professionalism in extension. We concluded from our analysis that improving the professional status of extension is primarily an issue of self organisation to enable a more effective representation of advisory work to others. Unfortunately many advisors are suffering from considerable 'self-doubt' about their profession which hinders the formulation of a strategy, or the development of a compelling vision to engage others. Advisors are calling for better methods to undertake their routine work and to provide more evidence that their contributions are making a change in the primary sectors. The strength of ties between field practitioners, researchers and professional development workers are currently fragmented. This situation is likely to become more critical as numbers in public service institutions decline and private sector organisations have to take more responsibility for the development of new entrants to the advisory profession. Paradoxically, the complexity and indeterminate issues that are arising from new environmental and rural social policies may provide a catalyst to stimulate more effective collaborations between public and private sector organisations to resource initiatives that address this impending crisis for advisor services in future.

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