

A review of mentoring in agriculture: Another learning option for the next generation of New Zealand farmers?

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Abstract. Mentoring, or one-to-one coaching, offers an alternative or complementary learning option that has not been particularly well embraced by the industry. It could help to achieve an increase in farm productivity and profitability. This article looks at some case studies to determine what can be learned from previous experience and why mentoring programmes so often fail to deliver their potential. The main reasons for failure appear to be a mismatch between mentor and mentee, insufficient training, support and resourcing. This study found that: mentoring offers another method of supporting young farmers to become better farm business managers; successful mentoring requires a strong commitment to the process by mentors and mentees and a good match between the two; and best practice suggests that suitable training for both parties is required, along with a support coordinator who can act on regular feedback.

Keywords: one-to-one coaching, expert guides, mentee, trust relationships

Introduction

This article provides a brief review of mentoring in agriculture. Relevant literature and four case studies of agriculturally-focussed mentoring programmes which have been undertaken in Canada, Australia and New Zealand are discussed. It looks at why some of these programmes have not been long-lived and makes recommendations for developing successful mentoring programmes.

Consider this situation. A family farm of 300 cows had been staffed by the son and one part-timer. With the addition of a lease block next door, the herd has grown to 650 cows and the son has been promoted to farm manager. The new herd manager and farm assistant have similar abilities and this is creating tension on the farm. The son doesn't like confrontation and lacks the people skills and experience to defuse the tension and provide clarity to both staff. He doesn't have the time to attend a leadership course and is already struggling to learn the other business management skills he needs. He is likely to face three to four challenging years to develop these skills, making lots of mistakes along the way. The business has changed overnight but there is no transition or stepwise change for him. Could mentoring help him?

This is a situation faced by many young farmers in the New Zealand dairy industry. The dairy industry has been growing steadily and dairy farms now cover 60 per cent more land in the 20 years since 1990/1991. Herd sizes have grown 135 per cent, to 386 cows and with the growth of large-scale farms, the number of employees per farm has increased.

There are around 20,000 people employed in the industry, of which approximately a quarter are in positions of assistant manager/2IC (second-in-charge), production manager or farm manager (Taylor 2011). There are a further 4,034 sharemilkers (LIC 2012). As a result there are greater numbers of people in managerial positions than in the past. Farm managers, contract milkers and sharemilkers are faced with gaining higher levels of managerial skills, often in a relatively short period of time, as career progression can occur quite rapidly within the industry. The trend towards larger farms is likely to continue along with an increasing importance in physical resource management and business skills (Speight 2006; Allen and Waugh 2012). O'Sullivan and Nettle (2004, p. 28) suggest that 'employment management is increasingly becoming one of the prime competencies for sustainable dairy farming'. Furthermore, employees need to be continuously learning to meet changing skill needs (Moses 2010).

As well as the need for employment skills, agriculture is becoming an increasingly complex industry with a need for knowledge far beyond the technical aspects of producing milk, meat and fibre. Farmers need to have an understanding of the potential impacts of climate change, water use, greenhouse gas emissions, biosecurity and food safety. In addition, farmers need advanced business skills and leadership ability, risk management, financial planning, people and environmental management, strategic thinking, negotiation and decision-making (Bitsch et al. 2006; Pratley 2008; Industries Development Committee Workforce Training and Skills Working Group 2009; Nana et al. 2011).

Such knowledge is gained in many ways. A minority of farmers has a relevant tertiary qualification but most learn their skills on the job (Hudson and Stuart 2005), through Primary ITO courses (industry training organisation), discussion groups and various informal courses.

Many farmers learn from friends, family and peers. At the farm business management level, formal training becomes more difficult as evidenced by the low uptake of Primary ITO's Diploma in Agribusiness Management and the abysmal pass rates of those who do enrol. This training is needed at a time in the farmer's career when he/she faces huge time constraints and it is difficult to set aside the time required (Greenhalgh 2012). Balancing work and study is the most often discussed barrier to learning (Industry Training Federation 2007; McDonald and Alkema 2011). DairyNZ suggests that the current uptake of formal farm business management (FBM) training is significantly less than is required to meet the industry goals for qualifications and skills (DairyNZ et al. 2009).

We do know that Farmers prefer working with each other, either one-to-one, in organised small groups or as clubs that are led and managed by professional facilitators or advisors' (A.N. Scholz & Associates Inc and Qu'anglo Communications & Consulting 2012, p. 1); from 'networks of known contacts and that the learning process was socially embedded and continual' (Eastwood et al. 2012, p. 12). Any learning system needs to take these farmer learning preferences into account. Thus, mentoring or one-to-one coaching could offer an alternative or complementary learning option that may help to meet some farmers' learning needs. It is not new in agriculture, but has not been particularly well embraced by the industry (Pritchard et al. 2008).

The remainder of this article outlines the benefits that mentoring offers. It compares some selected examples of formal mentoring programmes that come from the agricultural field and highlights the reasons for failure of some programmes. It concludes with recommendations for a successful mentoring programme.

Mentoring and the benefits it offers

The term mentoring is derived from Greek mythology. When Odysseus was called away to participate in the Trojan War he entrusted the responsibility of educating and developing the character of his son to Mentor (Crisp and Cruz 2009; Holland 2009; Kobeleva and Strongman 2010; Tahau-Hodges 2010). Thus, a mentor is often seen as a 'father figure' who sponsors, guides and helps in the development of a younger person. Mentoring can be defined as a process 'where the expert [mentor] guides and supports the novice' (Hooker 2011, p. 4). In the information offered to prospective participants, DairySage Mentoring advises that mentoring is 'a supportive and private relationship between two people and provides the individuals with an opportunity to share and develop their knowledge, experience and skills. Mentors facilitate constructive reflections of actions, behaviours and learning journeys' (DairySage Mentoring 2013).

In the past mentoring was usually an informal relationship between a younger person and an older person, but as the benefits of mentoring have become more apparent, a more organised, formal approach to mentoring has developed, particularly in the medical field (Barondess 1995). Literature reviews indicate that formal mentoring programmes offer considerably more benefits than drawbacks (Hansford et al. 2004). There is much to gain from being a mentee through having a role model, personal coach and/or learning sponsor (Hagen-Hall and Verhaart 2008). Apart from the learning opportunities there are also the expanded professional networks which may aid career development.

While the mentee would appear to be the beneficiary, mentors also gain benefits through improving their listening skills, and becoming more confident and organised with a better understanding of the new generation of farmers. In addition, the skills they learn transfer beyond the mentoring relationship (Pritchard et al. 2008). Mentors have the opportunity to develop coaching, communication and leadership skills while enhancing their people, management and relationship-building skills (Dymock 1999; Billett 2003). An open minded mentor is also likely to be able to learn something from the mentee (Lamm and Harder 2011).

Mentoring is not a substitute for existing learning methods; it is complementary and will work particularly well for farmers who do not have existing strong social networks. Heather Watson (Executive Director, Farm Management Canada, 2013, pers. comm., 7 January) who, when talking about effective farmer learning, says, 'there needs to be something for everyone and some sort of coaching through to implementation and ongoing follow-up'. Mentoring can be used in almost any learning situation, whether it is for a mentor to help those in formal training, a mentor for career changers or for new migrants, or a mentor for a specific purpose as in the Tasmanian 20/12 Pasture Business Project described below. It offers a different type of learning for some farmers and certainly helps with the implementation of any new learning, whether it is technical or managerial.

The following section looks at some agricultural mentoring programmes; the way they are organised and issues that have arisen.

Agricultural mentoring in practice

An on-farm mentorship programme in Canada – STEP UP

Farm Management Canada (FMC) offers STEP UP which is an on-farm mentorship programme for those who are either managing or intending to manage a farm and are interested in learning farm business management skills in a hands-on setting. Mentees are paired with an experienced farm manager. They live and work on his farm for at least eight weeks to learn about the day-to-day management of his operation to see how goals are set, decisions are made, and to extend their professional network (Farm Management Canada 2012).

Both mentor and mentee submit application forms and the STEP UP coordinator matches the applications and sends them out to each party for consideration. A learning contract must be completed and signed by both parties prior to the placement, using a conference call if necessary. Once the mentee is on the farm, two feedback reports are required to monitor the success of the relationship; one halfway through the placement and the second one at the end. A 'Summary of Success' is produced by the coordinator and shows the participants the mentorship accomplishments. STEP UP provides transport costs and the mentee will be paid (negotiable between the two parties) while working on the farm. Mentors receive a C\$2,000 honorarium. While feedback on the programme is good and there are plenty of applications for mentors, mentees can be hard to get (Farm Management Canada 2012).

Other Canadian groups offer different types of mentorship including mentors going onto the mentees' farm and virtual mentorship, where technology substitutes for face-to-face meetings, so that farmers in more isolated situations are not prevented from developing a mentor-mentee relationship.

Farmer coaches in the Tasmanian 20/12 Pasture Business Project

In the Tasmanian 20/12 Pasture Business Project (how to grow 20 tonnes of drymatter on irrigated pasture and 12 tonnes on dryland) retired dairy farmers and milk supply officers (mostly ex-dairy farmers) were recruited to help farmers implement the learning from two pasture management workshops by providing regular group coaching (Davey and Maynard 2007). The aim of using coaches was to increase capability around pasture management and to encourage the development of coaching skills. The farmers recruited into the project were selected on the basis of showing a high level of commitment, which was assessed through a questionnaire, and their potential to apply the principles from the workshops on their farms. Some of the farmers had support from farm consultants on a one-to-one basis, while others had regular group meetings facilitated by coaches. Their skill levels were assessed as increasing from 29 per cent to 75 per cent for those who had consultants, and from 43 per cent to 71 per cent for those participating in the coach assisted groups. This represented a benefit cost ratio of 23:1, indicating a very successful outcome from a mentoring approach for a very specific purpose (Davey and Maynard 2007).

DairySage mentoring in Australia

The DairySage Mentoring project started in 2007 as an initiative to connect mentors and mentees in dairying with the aim of increasing the participation of young people; developing young business leaders and decision makers; improving the skills and confidence of both parties; and linking mentees to a valuable source of knowledge and information. The programme has been delivered in two phases; from 2007-2010 and then 2011/12. Over 200 people have taken part in the project with a further 60 people participating in a mentoring activity based on the principles of DairySage. It is currently unfunded (Baum K 2013, Project Manager for DairySage Mentoring, pers. comm. 13 May). The initial pilot programmes included an application process, a training session for mentors followed by a matching and training session for both mentors and mentees, six months of contact supported via teleconferences with a combined meeting at the end to discuss their experiences (Pritchard et al. 2008). The matching process was achieved by using a speed dating method where the mentees were given a profile of each mentor and then moved between the seated mentors spending four minutes with each one. This process worked well but the time each mentee had with each potential mentor was felt to be too short. The mentees listed their top three preferences then a matrix was used to match them with the most appropriate mentor (Campbell et al. 2010).

The programme was focussed on developing individual's skills but it was believed to have positive flow-on effects for the industry in terms of capability. The main issues to arise out of the programme were: the difficulties in attracting mentees; the importance of defining the

mentee's goals in the application process; the ability to have face-to-face meetings between mentor and mentee (those at a distance struggled to maintain the relationship); and time constraints preventing regular communication, which inhibited the development of the closeness and sustainability of the relationship.

While the report noted that people had difficulty in differentiating between mentoring and coaching or counselling, it failed to identify what these differences were. Their motto: 'Most people may have the instinct to be a mentor, but to do the role well requires a capacity to hold back and allow people to learn for themselves' (Clutterbuck 2004, p. 3) suggests that mentors do not actually offer advice.

Rural mentor programme in New Zealand

This Rural Mentor programme is a new initiative directly funded by DairyNZ, Beef+Lamb New Zealand, Sustainable Farming Fund and Organics Aotearoa New Zealand. It offers training, mentor-mentee matching and a full support service to farmers across New Zealand. It is 'designed to offer mentees guidance, support, encouragement and personal development through a confidential partnership with an appointed mentor' (Rural Mentor 2013). It appears to be a well-designed and well thought out programme, with secure industry support.

This programme emerged, indirectly, out of an earlier mentoring programme initiated by AgFirst NZ Ltd, an agricultural consultancy firm, who had built their programme around the NZ Business Mentoring model. Both parties applied on-line using a very basic form which collected data on what the individuals were doing. They held a training day where mentors attended a morning session and mentees an afternoon session, with a shared lunch to get to know each other. Mentees chose their mentor from this meeting.

A review of the project by AgFirst (Hobson 2008) indicated that while both parties recognised the benefits from the relationship, there were issues which created problems for each party. Both parties faced time constraints. For the mentors, it was around having an agenda to structure sessions. The mentees faced greater issues: getting employers to allow time off for the meetings; convincing employers of the benefit for employer and employee; geographical distance from mentors involving travel time; and a reluctance to use the telephone as a time-saving meeting method to replace face-to-face meetings.

Hobson (2008, p 4) noted that 'the more successful relationships appear to be where the Mentee has really seen value in the relationship and taken steps to ensure they kept their Mentor well informed, are organised prior to and following meetings'. It appears that while the Mentors were committed to the programme, there was less commitment from the mentees, but it could not be determined whether this was due to time constraints, a lack of appreciation as to what such a programme could achieve for them, or because some did not attend the training session.

A pilot project in Southland found that the relationships did not endure. Consequently, the approach has been modified to ensure that each group works through a goal-orientation session and draws up a plan to achieve their goals. Both parties will provide a more detailed profile including more information about themselves and an attempt will be made to match a mentor with strengths in the areas with which the mentee needs help. The formal relationship will last for one year after which it is up to the two parties to decide if they wish to continue. A six month on-line survey will provide feedback on the initial success of the programme. It is intended to carry out on-going monitoring of the relationships and to provide extra support where required. A high public profile of the programme will be needed to ensure that the industry can assess the value of mentoring.

Barriers to successful mentoring in agriculture

From the programmes outlined above, it appears that there are several reasons why mentoring has not produced the benefits identified in the literature, in some programmes. While it is a very old concept, formal mentoring programmes are a relatively new phenomena in agriculture. Thus, those who might be mentees are probably largely unaware of what constitutes a mentor relationship and how they might benefit from it. Mentors are more forthcoming than mentees in most programmes. Incorporating both the practice and theory of mentoring in agricultural training at vocational and university levels would one way of both raising awareness and developing an industry culture in favour of mentoring.

The lack of mentees and the lack of mentee commitment may result from more than just a lack of awareness. Time constraints obviously play a part for those mentees in a managerial stage of their career. Alternatively, the training offered for the programme may be inadequate or there may be insufficient support. The reality is that it is not clear what would work for agricultural

mentees. Research in this area could benefit the development and sustainability of mentoring programmes.

Furthermore, the numbers of mentees participating in formal programmes in the industry will be small, and so their impact and the benefits of the mentoring programme are likely to be undervalued by the industry as a whole. This discourages industry funding which creates an inward declining spiral rather than an expansion and enculturation. DairySage and AgFirst have both suffered from insufficient resourcing, but the industry good organisations in New Zealand are currently supporting the Rural Mentor Programme. Campbell, Roberts and Tolmer (2010) suggest that participants need to develop networks and the success stories must be communicated to the wider industry to develop the programme's reputation. In industries with a longer history of mentoring, mentees often become mentors (Barondess 1995).

Recommendations for successful mentoring programmes

The case studies and the literature suggest that the barriers to successful implementation of a mentoring programme include: a lack of time for mentoring; poor planning of the mentoring process; unsuccessful matching of mentors and mentees; a lack of understanding about the mentoring process; inadequate support and/or resources; a lack of commitment, passion and vision by programme managers; mission and goals are not integrated into all parts of the programme; the cost along with a lack of partnering and/or networks within the community (Sherk 1999; Hansford et al. 2004; Holland 2009). If enduring programmes are to be developed then there has to be an initial industry commitment to long term funding in order for the benefits to become disseminated and visible.

Mentoring is a highly complex, dynamic and interpersonal relationship. The key characteristics for mentors and mentees are time and trust (Heyes 2008; Michael and Technical Information Service 2008; Holland 2009; Larose et al. 2009). Thus, to deliver a successful mentoring programme that has a good chance of success requires:

- a clear mission and goals that are communicated to mentors and mentees during promotion or recruitment
- highly motivated mentees with a strong desire to learn
- mentors who have the appropriate knowledge and are tolerant, non-judgemental, sensitive and respectful towards others
- a strong level of commitment from both parties
- well-planned, adequately resourced programmes
- well-designed training programmes for both mentors and mentees
- a matching process that ensures a good fit between mentor and mentee
- strong support from those responsible for overseeing the programme;
- continual feedback from participants and on-going evaluation of the programme
- support for the programme from employers and the wider industry
- an industry-wide culture that recognizes and values the benefits of mentoring as a tool for learning and is prepared to provide financial support for mentoring programmes.

Conclusion

Mentoring could be offered at many different levels within agriculture: at the PrimaryITO training level whereby prior trainees could mentor newer trainees; at the herd or farm manager stage where developing technical knowledge is very important; at the point where farm employees move into farm business management so that production managers, contract milkers, or new sharemilkers are supported by more experienced managers; or where potential leaders are targeted and mentored towards leadership. Mentoring of new migrants would be invaluable in teaching them both about New Zealand farming conditions and helping them integrate into a new culture.

The barriers to sustainable mentoring programmes of a lack of mentees, a lack of understanding of the value of mentoring and a lack of resourcing arise from a lack of commitment and thus, a lack of long-term funding by industry. It will take time to develop a culture within the industry where mentoring is seen as a valuable process and younger farmers will recognise the potential it has for enhancing their learning, and thus seek out mentorship. This would be helped if teaching about the concept of mentoring was embedded in all formal agricultural training and educational programmes. Making mentoring more highly visible through the promotion of successful case studies would also help in cementing its place as a learning option. The formal mentoring process deserves to become an established option in the suite of tools that farmers can use at all stages of their career. For this to occur it will have to be valued and financially supported by the wider agricultural industry.

References

- AN Scholz & Associates Inc and Qu'anglo Communications and Consulting 2012, '2020 Business management needs of Canadian farmers', (Report prepared for Farm Management Canada), <www.farmcentre.com/publications/>, [accessed 28 January 2013].
- Allen J and Waugh N 2012, 'Ensuring a viable progression path in the dairy industry', Report, <www.fedfarm.org.nz/>, [accessed 28 January 2013].
- Barondess J 1995, 'A brief history of mentoring – Presidents Address', *Transactions of the American Clinical and Climatological Association*, 106: 1-24.
- Billet S 2003, 'Workplace mentors: demands and benefits', *Journal of Workplace Learning*, 15(3): 105-113
- Bitsch V, Kassa G, Harsh S and Muger A 2006, 'Human resource management risks: Sources and control strategies based on dairy farmer focus groups', *Journal of Agricultural and Applied Economics*, 38(1): 123-136.
- Campbell J, Roberts K, Tolmer Z 2010, 'Evaluation of DairySage mentoring: Improving mentorship for dairy' (Final Report prepared for DairySage), Roberts Evaluation Pty, Melbourne, Australia.
- Clutterbuck P 2004, *Everyone needs a mentor: Fostering talent in your organisation*, Chartered Institute of Personnel and Development, London.
- Crisp G and Cruz I 2009, 'Mentoring college students: A critical review of the literature between 1990 and 2007', *Review of Education Research*, 50(6): 525-545.
- DairyNZ, DCANZ, and Federated Farmers of New Zealand 2009, 'Strategy for New Zealand dairy farming – 2009/2020', <www.naut.is/files/skra_0041910.pdf>, [accessed 28 January 2013].
- Dairy Sage Mentoring 2013, 'Information for Prospective Participants', <www.westvicdairy.com.au/>, [accessed 28 January 2013].
- Davey & Maynard Consulting 2007, '20/12 Pasture Business Project Evaluation 2005-2007', Final Report prepared for Department of Primary Industries, Water and Environment, Australia.
- Dymock D 1999, 'Blind date: a case study of mentoring as workplace learning', *Journal of Workplace Learning: Employee Counselling Today*, 11(8): 12-17.
- Eastwood C, Chapman D and Paine M 2012, 'Networks of practice for co-construction of agricultural decision support systems: Case studies of precision dairy farms in Australia', *Agricultural Systems*, 108: 10-18.
- Farm Management Canada 2012, *STEP UP – where enthusiasm meets experience*, <www.fmc-gac.com/step-up>, [accessed 7 January 2013].
- Greenhalgh J, 2012, 'Constraints to formal learning (AgITO Levels 5/6)', (Report prepared for DairyNZ), Lincoln University, New Zealand.
- Hagen-Hall K and Verhaart M 2008, 'Mentoring students to improve academic performance', in S Mann and M Lopez (eds), *Proceedings of the Twenty First Annual Conference of the National Advisory Committee on Computing Qualifications (NACCQ 2008), 4-7 July, Auckland, New Zealand*, pp. 59-65.
- Hansford B, Enrich L and Tennant L 2004, 'Formal mentoring programs in education and other professions: a review of the literature', *Educational Administration Quarterly*, 40(4): 518-540.
- Heyes J 2008, 'Mentoring-coaching: moving beyond the theory', Report, <www.educationalleaders.govt.nz/>, [accessed 28 January 2013].
- Hobson S 2008, 'Pilot dairy mentoring', Report, AgFirst, Hamilton, New Zealand.
- Holland C 2009, 'Workplace mentoring: a literature review', <akoatearora.ac.nz/>, [accessed 28 January 2013].
- Hooker T 2011, 'An Investigation into the benefits of Peer Coaching: Students Supporting Students', unpublished Master of Education thesis, University of Waikato, Hamilton, New Zealand, <researchcommons.waikato.ac.nz/>, [accessed 28 January 2013].
- Hudson F and Stuart D 2005, 'AgITO Employer-Employee survey', Report prepared for AgITO, Wellington, New Zealand.
- Industries Development Committee Workforce and Training and Skills Working Group 2009, 'Workforce, Training and Skills Issues in Agriculture', <www.daff.gov.au/>, [accessed 28 January 2013].
- Industry Training Federation 2007, 'Learners perceptions of industry training', <www.itf.org.nz/assets/>, [accessed 28 January 2013].
- Kobeleva P and Strongman L 2010, 'Mentoring: the socialisation of learning', Working Papers No.10-4, Lower Hutt, New Zealand: The Open Polytechnic of New Zealand, <repository.openpolytechnic.ac.nz/>, [accessed 28 January 2013].
- Lamm A and Harder A 2011, 'Using Mentoring as a Part of Professional Development' (Report), University of Florida IFAS Extension, <edis.ifas.ufl.edu/>, [accessed 28 January 2013].
- Larose S, Cyrenne D, Garceau O, Harvey M, Guay F and Deschenes C, 2009 'Personal and social support factors involved in the students' decision to participate in formal academic mentoring', *Journal of Vocational Behavior*, 74: 108-116.
- LIC 2012, 'New Zealand Dairy Statistics 2011-2012', Hamilton, New Zealand, <www.dairynz.co.nz/>, [accessed 28 January 2013].
- McDonald H and Alkema A 2011, 'Trainees' perspective on qualification completion', Report, Heathrose Research Limited, Wellington, New Zealand.
- Michael A and Technical Information Service 2008, 'Mentoring and coaching', Topic Gateway Series No. 50, London, United Kingdom, <www.cimaglobal.com/>, [accessed 28 January 2013].
- Moses K 2010, 'Key factors affecting learner motivation to successfully complete qualifications through workplace learning', Industry Training Federation, Wellington, New Zealand, <www.itf.org.nz/assets/>, [accessed 28 January 2013].
- Nana G, Sanderson K, Stokes F, Dixon H, Molano W and Dustow K 2011, 'Industry training: an overview', Business and Economic Research Limited (BERL), Wellington, New Zealand, <www.itf.org.nz/assets/>, [accessed 28 January 2013].

- O'Sullivan J and Nettle R 2004, 'Innovation in employment: A project to support innovative working relationships between employers and employees', Industrial Relations Victoria and Melbourne University, Melbourne, Australia.
- Pratley J 2008, 'Workforce planning in agriculture: Agricultural education and capacity building at a crossroads', *Farm Policy Journal*, 3(3): 27-41.
- Pritchard E, Pakula B and Roberts K 2008, 'Evaluation of Dairy Sage mentoring: Improving mentoring for the future of dairy', First interim Report prepared for WestVic Dairy, Dairy Australia and the Gardiner Foundation, Roberts Evaluation Pty Ltd, Melbourne, Australia.
- Rural Mentor 2013, *Welcome to rural mentors*, <www.ruralmentor.co.nz/> [accessed 28 January 2013].
- Sherk J 1999, 'Best practices for mentoring programs', The EMT Group, <www.iyi.org/resources/>, [accessed 28 September 2012].
- Speight M 2006, 'Cradle to grave project – Retention of people to the dairy industry through exploring different pathways for career progression', Dexcel, New Zealand, <www.dairynz.co.nz/>, [accessed 28 January 2013].
- Tahau-Hodges P 2010, 'Kaiako pono: Mentoring for Maori learners in the tertiary sector', Te Puni Kokiri, Ako Aotearoa and Tertiary Education Commission, <ako.aotearoa.ac.nz/>, [accessed 28 January 2013].
- Taylor G 2011, 'An assessment of the balance in demand and supply of skilled employees in the on-farm workforce', Report, DairyNZ, Hamilton, New Zealand.