

# Training Spanish-Speaking Livestock Workers: Theory and Practice

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## Abstract

In this decade, Hispanics are projected to be the fastest growing minority group in the United States. With greater numbers of non-English-speaking, foreign-born workers employed in the animal agricultural industries, language and cultural barriers may exacerbate pre-existing shortcomings with personnel management and worker training on certain operations. Improved worker training methods have recently been identified by Colorado dairy producers as a priority issue. However, there appears to be much variability in the Colorado dairy industry in the method of delivery of such training, its nature and scope, and its efficacy in preparing workers for their jobs. Veterinarians can play a key role in improving worker training on livestock operations by assuming a greater role as trainers of the dairy workforce, particularly in regard to skills that involve direct interactions with animals, such as sick cow identification and treatment, calving management and milking parlor procedures. Cultural sensitivity, bilingual teaching aids, hands-on demonstrations, consistent follow-up and retraining, outcome assessment and patience are necessary to maximize the benefit of such educational initiatives.

## Résumé

Pendant cette décennie, les hispanophones devraient représenter le groupe minoritaire le plus en expansion aux États-Unis. Avec l'augmentation du nombre d'employés dans l'industrie de l'agriculture ayant une langue maternelle autre que l'anglais et étant nés à l'étranger, la langue et les barrières culturelles pourraient exacerber les déficiences qui existent déjà au niveau de la gestion du personnel et de la formation des employés dans certaines unités de production. L'amélioration des méthodes de formation des employés

a déjà été identifiée par les producteurs laitiers du Colorado comme étant une grande priorité. Toutefois, il semble qu'il existe une grande variation au sein des producteurs laitiers du Colorado dans la manière d'envisager cette formation de même que dans la nature, les limites et l'efficacité de cette formation dans la préparation des employés à leur travail. Les vétérinaires peuvent jouer un rôle clef dans l'amélioration de la formation des employés travaillant dans l'industrie du bétail en s'impliquant davantage dans la formation des employés des fermes laitières et ce plus particulièrement au niveau des compétences reliées aux interactions directes avec les animaux telles l'identification des vaches malades et leur traitement de même que la régie du vêlage et des procédures dans la salle de traite. Pour maximiser les bénéfices de ces initiatives éducationnelles, il sera nécessaire de faire preuve de sensibilité culturelle et de patience et il faudra utiliser des méthodes d'enseignement bilingues et des démonstrations pratiques tout en faisant un suivi continu pour évaluer le développement et les besoins de nouvelle formation.

## Introduction

As the fastest-growing minority group in the United States (US), Hispanics constitute a significant proportion of the working population.<sup>8</sup> Foreign-born workers were responsible for 48% of the 6.7 million – person net increase in the US labor force between 1996 and 2000.<sup>3</sup> Even though the total number of farm workers has decreased in the last twenty years, the number of Hispanic farm workers has increased from 183,000 to 364,000 in that time period.<sup>6</sup> The proportion of US farm workers of Hispanic ethnicity increased from 15.9% in 1983 to 47.4% in 2002.<sup>6</sup> However, only 3.0% of 1,125 farm owners and managers included in this survey were of Hispanic ethnicity.<sup>6</sup> This disparity in ethnicity among workers and

management is notable, and may serve as a rough indication of potential for language and cultural barriers to effective communication between these two groups.

Nearly 80% of the Hispanic population in the United States speaks Spanish at home, and two-fifths of Mexican-born Americans (the largest Hispanic minority group in the United States) do not speak English “very well.”<sup>5,7</sup> With a farm worker population predominantly Hispanic, foreign-born and Spanish speaking,<sup>9</sup> and possessing variable levels of formal education and previous livestock experience, it is not surprising that, in recent informal surveys, Colorado livestock producers identified worker training as a critical need to be addressed by university-based and extension-based adult education programs.<sup>1,2</sup> Farm workers are the primary animal caretakers and, hence, critical in animal health management and disease prevention. However, many livestock producers do not possess the necessary skills in education, language and cultural awareness to effectively train their employees.

In this review, central principles of cross-cultural education will be addressed, and the potential role of the veterinarian in Hispanic worker training programs will be discussed.

### **Language Barriers**

Lack of English-language proficiency by the workers, and lack of Spanish-language proficiency by the farm manager or owner, may make everyday communication and task-related training difficult. Bilingual individuals who can serve as a communication bridge are extremely helpful and are frequently sought by livestock producers. Many producers utilize certain bilingual workers to bridge the communication gap between Anglophone management and Spanish-speaking labor. Obviously, this solution can be inefficient and inconsistent if the bilingual individual is not directly at hand to promptly address all potential verbal interactions among these two groups. In a survey of Colorado dairies, the authors found that most new employees are educated verbally by either management (herd managers, personnel supervisors, or the owner) or by co-workers. However, the organization, formality, scope and efficacy of such training programs is not perceived as optimal by either management or the workforce.<sup>4</sup>

### **Cultural Barriers**

Even if the language barrier between management and the labor force is effectively bridged, variables related to the cultural background of the two parties can impact critical facets of effective communication. Cultural variations can make intercultural communication a challenge.<sup>10</sup>

When cultures are described by their sense of collectiveness, Latin Americans are categorized as a “very collective” culture.<sup>10</sup> Hence, an ideal learning environment for Latin Americans can be described as one constructed around group learning and group endeavors. Relative to Hispanics, white, non-Hispanic Americans tend to be far more individualistic.<sup>10</sup> Therefore, group education may be culturally more preferable to a foreign-born Hispanic individual than the one-on-one instruction so often sought by US- or Canadian-born individuals. The unprepared instructor might not understand why foreign-born Hispanic students prefer to do group work and spend more time consulting with other students than their US- or Canadian-born counterparts. Moreover, the students might seem poorly motivated because of the lack of aggressiveness that characterizes individualistic and recognition-seeking non-Hispanic students.

According to Wlodkowski,<sup>10</sup> another cultural difference among these two groups reflects the “degree to which power, prestige and wealth are unequally distributed in a culture,” a characteristic termed “power distance.” Latin American countries possess a high sense of power distance because the magnitude of the inequity of power and wealth can be marked in their countries of origin, while in the United States and Canada, the sense of power distance is relatively low. Therefore, in the mind of the foreign-born Hispanic laborer, the farm manager, farm owner and the well-educated veterinarian may represent an authority far separated in society from themselves. Because of a high sense of power distance, students in a Hispanic audience might not feel comfortable asking questions or disagreeing with what the instructor has presented to the class. Because the instructor represents authority, the students might decide to show only positive emotions, as they might fear negative consequences as a result of expressing discontent. Instructors must also be aware of the cultural differences that can make them initially appear to be more distant from the audience than they would prefer.

High- and low-context communication and degree of expressiveness are two other cultural dimensions that can influence cross-cultural communication.<sup>10</sup> While low-context cultures are “highly verbal and preoccupied with specifics and details,” high-context cultures are characterized by communication in which little of the message is explicit.<sup>10</sup> Low-context cultures are found in the United States and Canada, but Latin American countries exhibit high-context communication, with more emphasis on facial expressions, movements and other subtleties of the interaction.<sup>10</sup> Besides exhibiting high-context communication behaviors, Latin Americans are highly expressive. Expressive cultures make eye contact, keep closer distances, smile, touch and use vo-

cal animation during a conversation.<sup>10</sup> An Anglo-Saxon instructor might seem unexpressive to his or her Hispanic audience because of lack of the facial expressions or hand gestures that can play a powerful role in non-verbal communication among Hispanics.

To address these cultural nuances, instructors wishing to train Hispanic livestock workers should strive to do so in a group-learning atmosphere in which the students feel comfortable asking questions and where their input is welcomed. All participants must clearly understand that management and labor are working for common goals, and the employee plays an important role in improving the operation's productivity. With this approach, potential cultural differences related to collective versus individual initiatives, power distance, expressiveness, and low-and high-context communication styles can be minimized to create an optimal learning environment.

The producer and veterinarian must carefully define the problem to be addressed by a worker training session. Current training methods used to prepare the workforce must be clarified, and objectives for a given training session must be clearly defined. The veterinarian and producer must avoid developing unrealistic expectations for changes in worker performance before such training is administered. Worker training conducted by the veterinarian is simply a novel and often more formal means of teaching skills and knowledge to personnel on a livestock operation. Management oversight and involvement in continued worker training, assessment of worker performance, and assessment of health and performance parameters on an operation are essential components of human resources management.

### **What to teach?**

With cultural differences understood and minimized, delivery of instruction on animal care, handling, or evaluation is the remaining task. When developing a training session, each veterinarian may prefer an approach to delivery of materials that best suits his or her comfort level. All veterinarians have sat through innumerable lectures and demonstrations, and it is important to remember that good instructors are rarely born; rather, their expertise develops with time. One must keep this in mind if the role of instructor to a group is a novel experience. "Practice runs" of verbal and demonstrated instruction are highly recommended. If the veterinarian knows a member of the intended audience well, an informal critique of the learning session by this individual can greatly help to iron out rough spots in communication ahead of time. The owner or a senior manager should be present to provide comments on the session's content. If an interpreter is to be used, a dry run is particularly essential for clarification of medical

terminology and discussion of any concepts that are to receive particularly strong emphasis.

Subjects covered in training sessions to Hispanic workers may include proper milking technique, calving and dystocia management, and sick and lame cow identification, evaluation and treatment. Management at all levels (owners and employee supervisors) should be strongly encouraged to attend the training sessions, not only to learn, ask questions and offer input themselves, but to demonstrate to the employees their commitment to employee training. The training sessions are best conducted in English and Spanish, with either a bilingual veterinarian or a bilingual worker serving as the source of instruction in the Spanish language. Computer software can be used to develop a presentation rich in digital pictures or video, complemented with verbal explanations of the presented concepts. Presentations can occur with several individuals sitting around a laptop or desktop computer; alternatively, a projector may be used for display to larger audiences. Ideally, photographs of pens and equipment on the subject dairy are inserted into the presentation to bring familiarity into the lesson. The instructor should remember to frequently solicit questions from the audience about the presented concepts and procedures.

This didactic experience can be followed with a "laboratory" session in which students have the opportunity to experience hands-on learning. For milking procedure lessons, this usually involves hands-on demonstration in the parlor. For calving management, cadaver calves in a mock-up bovine reproductive tract can be used to demonstrate such skills as chain placement, mutation and traction. Such mock-ups are rarely readily available to the practitioner, but consultation with local community or agricultural colleges may allow the veterinarian to obtain such equipment. Failing that, a cadaver calf on a tabletop can be used to demonstrate and practice relevant manual skills. During the hands-on laboratory, students can be encouraged to share previous experiences with the instructors, further breaking down any unseen barriers in communication and culture that may exist between instructor and audience.

### **Outcomes Assessment**

Informal or formal, subjective reviews of training courses can be obtained through follow-up interviews with the producers and workers. Truncated refresher courses can be provided for a few months after the primary session, where new experiences are shared and further questions entertained. The instructor may then subjectively gauge the effectiveness of the initial teaching experience by judging the audience's grasp of materials previously presented. However, such subjective data can be flawed by biased evaluations by the audi-

ence as well as biased interpretations of progress by the instructor. To obtain the most objective data on the effect of veterinary-conducted worker training, specific parameters of animal health and production that are directly or indirectly addressed by the training must be tracked before and after the training session. These data are essential to demonstrate positive change in worker skills over the long-term.

For example, to measure effectiveness of a calving management course, rate of stillbirths, calf survival in the first 24 hours of life, incidence of retained placentas, and uterine and vaginal tears could be monitored for several weeks before, and indefinitely after, the course. If these parameters improve post-education, success is implied. However, a change for the worse in any of these parameters may be the trigger for repeated education. Health parameters such as calf survival may be influenced by multiple variables other than the skills and knowledge of the attending personnel, so care must be taken when assigning cause to any favorable or unfavorable trends in such parameters that may occur following formal worker training sessions. Worker training initiatives developed by the veterinarian can best be considered as one of the many means whereby the health and productivity on an operation can be improved.

Several universities, community colleges, extension agencies and veterinary practitioners offer programs for livestock worker training. The scope and nature of these programs varies extensively, from structured didactic or web-based courses, to video- or audio-taped seminars, to on-farm, verbal and demonstration-based training sessions conducted in person by the educator(s). Relatively advanced training schools are available for farm supervisory or management personnel. Schools are often offered at a central location, and interested producers, employee supervisors, or mid-level managers leave their farms or ranches to attend what is often a multi-day course. The intent of such training is to educate management and upper-level employees in animal health issues, with the assumption that these individuals will return home and train the lower-level employees. While travel costs and limited labor resources often restrict the number of individuals that can attend a centralized training school, such schools can be highly effective for creation of a skilled management force.

Once attendees return to the farm, subsequent training of lower-level employees is largely reliant on the manager/supervisor's ability to effectively communicate, instruct and motivate employees. Furthermore, depending on the structure of the centralized courses, problems unique to a particular operation may or may not be fully addressed. Follow-up evaluations of worker performance, as well as continued training of lower-level personnel over time are not easily accomplished with centralized training schools. On the other hand, veterinary practitioners who design worker training programs

for a particular farm or ranch can readily customize a training experience to fit the operation's unique needs. Veterinarians can conduct on-farm training sessions with upper-, mid-, and lower-level employees in attendance, thereby delivering the important educational messages uniformly to all employees at the same time. If some attendees have had the opportunity to participate in centralized formal training, incorporating those individuals and their learning experiences into the group training session can be advantageous. Lastly, the veterinarian is well-situated to provide follow-up training and feedback to employees on animal health issues. Through analysis of animal health and performance parameters, the veterinarian can accurately adjust the content of worker training programs over time to best address an individual operation's changing needs.

## Conclusions

Veterinarians have the potential to effectively train livestock workers. When necessary, worker training programs should be conducted bilingually, with due consideration given to cultural factors affecting communication between the educator and the audience. Such training programs can readily be constructed to address the unique problems of individual livestock enterprises and can be delivered directly and, importantly, on a repeated basis over time to individuals involved in the critical day-to-day tasks of effective animal husbandry and health care.

## References

1. Garry FB: Unpublished data, *Needs for Livestock Worker Training* (survey). Annual Meeting, Colorado Livestock Association, Greeley, CO, March 2000.
2. Garry FB: Unpublished data, *Needs for Livestock Worker Training* (survey). Annual Meeting, Colorado Livestock Association. Copper Mountain, CO, August 2001.
3. Migration News. Security: Hearings, Detention, Visas. *Migration News*, September 9(9), <http://www.hispanicvista.com/html/092302kn.htm>, 2002.
4. Roman-Muniz IN: Dairy worker safety education: current status and future needs in the Colorado dairy industry. MS Thesis, Colorado State University, 2004.
5. Suarez L, Ramirez AG: Hispanic/Latino health and disease, an overview. In R.M Huff & M.V Kline (eds), *Promoting Health in Multicultural Populations, A Handbook for Practitioners*. Thousand Oaks, California, Sage Publications, Inc, 1999, pp 115-136.
6. U.S. Bureau of Labor Statistics: *Employment and Earnings, Monthly*. Unpublished data and January issue, <http://www.census.gov/prod/2002/01statab/labor.pdf>, 2004.
7. U.S. Census Bureau: The Hispanic population, census 2000 brief May, 2001, <http://www.census.gov/prod/2001pubs/c2kbr01-3.pdf>.
8. U.S. Census Bureau: U.S. Interim Projections by Age, Sex, Race, and Hispanic origin, <http://www.census.gov/ipc/www/usinterimproj/natprojtab01b.pdf>, 2004.
9. Von Essen SG, McCurdy SA: Health and safety risks in production agriculture. *West J Med* 169: 214-220, 1998.
10. Wlodkowski Raymond J: *Enhancing adult motivation to learn: a comprehensive guide for teaching all adults*, ed 2. San Francisco, Jossey-Bass, 1999, pp 89-99.