Assessing Training Methods to Educate Dairy Workers

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Abstract
Training employees is fundamental for dairy producers to achieve efficiency in order to increase profitability. Training videos offered online are becoming more common and recommended to train employees. The goals of this survey were to evaluate the comfort level of dairy employees in using computers and tablets, and preferred training delivery methods. A total of 71 employees from 6 dairies were interviewed. Interviews were conducted in the preferred language of the interviewee – English or Spanish. Of the respondents, 52 and 65.6% of employees consider computers and tablets easy to use, respectively. More than half of the employees reported that they do not use computers or tablets on a regular basis. The majority of employees (70%) would rather have a training session in a face-to-face format than a computer-or tablet-based format. This survey suggests that dairy employees may not be comfortable using computers in training sessions, which may limit the utility of some specific technologies to educate employees.

Keywords
employee training, survey, technology

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Summary
Training employees is fundamental for dairy producers to achieve efficiency in order to increase profitability. Training videos offered online are becoming more common and recommended to train employees. The goals of this survey were to evaluate the comfort level of dairy employees in using computers and tablets, and preferred training delivery methods. A total of 71 employees from 6 dairies were interviewed. Interviews were conducted in the preferred language of the interviewee – English or Spanish. Of the respondents, 52 and 65.6% of employees consider computers and tablets easy to use, respectively. More than half of the employees reported that they do not use computers or tablets on a regular basis. The majority of employees (70%) would rather have a training session in a face-to-face format than a computer- or tablet-based format. This survey suggests that dairy employees may not be comfortable using computers in training sessions, which may limit the utility of some specific technologies to educate employees.

Key words: employee training, survey, technology

Introduction
Improved labor efficiency in dairy herds may be achieved by educating employees through training sessions. Training sessions may provide knowledge related to management practices and help employees understand the reason protocols are in place. Explaining the reasoning behind each task may reduce protocol deviation, which is key to minimize inadequate practices and achieve efficiency.

In addition to limited training courses being available for dairy employees, hiring consultants to educate workers at farms may not be feasible because of cost. Considering the widespread use of technology in the U.S., allied industry and university professionals have been creating online materials as an alternative resource to educate dairy workers. Several institutions have developed online materials in English and Spanish to enable a large audience to utilize these resources.

We conducted a survey to assess dairy employees’ (1) exposure to technology, (2) comfort level in using computers and tablets, and (3) preferred training delivery methods.
Experimental Procedures

During research and extension farm visits in January and February of 2016, dairy employees \((n = 71)\) from 6 Kansas dairy farms were randomly chosen to be interviewed by a bilingual individual. Interviews were conducted in the preferred language of the interviewee, either in English or Spanish. Before starting the interview, participants were informed that questions were being asked as part of the K-State Research and Extension project: “Assessing training methods to educate dairy workers.” In addition, participants were informed that the responses were anonymous, and questions did not have to be answered if they did not want to answer them. Questions assessed employees’ access to computers, tablets and smartphones; comfort level in using technology; preferred training method; and literacy in English and Spanish.

Results and Discussion

More than half of the employees responded that they do not have a computer at home \((57.7\%)\) and never use computers \((54.9\%; \text{Table 1 and 2})\). Approximately half of employees \((52.1\%)\) consider computers easy to use. Of the respondents, 56\% of employees responded they have tablets at home. In addition, 52.1\% of all employees answered that they had never used a tablet \((\text{Table 1 and 2})\). Ten percent of employees were not able to answer the question if tablets are easy to use because they had never used a tablet. Among the participants that answered the question, 65.6\% consider tablets easy to use. These results indicate that approximately half of the employees from the dairies that participated in the survey are not using computers and tablets on a daily basis, but are exposed to digital technology because most employees have smartphones \((84.5\%; \text{Table 1})\).

The majority \((97.2\%)\) of the interviews were conducted in Spanish because it was the preferred language of the interviewees. Furthermore, 91.5\% of employees responded that could read in Spanish \((\text{Table 1})\), but only 19.7\% of employees can read in English. This suggests that materials created for education of dairy employees must be developed in English and Spanish. Furthermore, training sessions must be offered in both languages to be certain that dairy workers will fully understand the information being provided to them.

Seventy percent of employees preferred being trained in-person instead of using a computer or a tablet \((\text{Figure 1})\). Because the preferred training delivery method is in-person, it is likely that participants may retain more information in courses where the delivery method is in-person, compared with online videos. Although this is just a speculation, it would be an important aspect to consider in training courses because several institutions (e.g., private companies and universities) are investing resources to create online materials to educate dairy employees.

In conclusion, despite the fact that technology is widespread in the U.S., depending on online materials alone to educate dairy employees may not fulfill immediate needs in expanding the knowledge of the current workforce, because of their limited comfort level in using computers and tablets. In addition, the finding that the majority of employees would rather be trained in-person than using a device suggests that face-to-face interactions are extremely valuable in training courses, which may result in greater
engagement. Even though information may be disseminated via digital devices, face-to-face interactions may be required to educate and coach dairy employees in order to gain the greatest benefit of training sessions. It is key to keep in mind that if technology is used to educate employees, all materials should be available in English and Spanish and support must be provided to individuals with limited computer knowledge.

Acknowledgments
The authors thank the owners of the collaborating dairies.

Table 1. Access to technology, comfort level in using computers and tablets, and literacy in English and Spanish of 71 employees from 6 dairy operations

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>More or less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have a computer at home?</td>
<td>42.3</td>
<td>57.7</td>
<td></td>
</tr>
<tr>
<td>For you, are computers easy to use?</td>
<td>52.1</td>
<td>29.6</td>
<td>18.3</td>
</tr>
<tr>
<td>Do you have a tablet?</td>
<td>56.3</td>
<td>43.7</td>
<td></td>
</tr>
<tr>
<td>For you, are tablets easy to use?</td>
<td>65.6</td>
<td>21.9</td>
<td>12.5</td>
</tr>
<tr>
<td>Do you have a smartphone?</td>
<td>84.5</td>
<td>15.5</td>
<td></td>
</tr>
<tr>
<td>Can you read in English?</td>
<td>19.7</td>
<td>63.4</td>
<td>16.9</td>
</tr>
<tr>
<td>Can you read in Spanish?</td>
<td>91.5</td>
<td>5.6</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Table 2. Frequency of dairy employees using computers and tablets

<table>
<thead>
<tr>
<th>Question</th>
<th>Every day</th>
<th>Once a week</th>
<th>Less than once a week</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you use computers?</td>
<td>25.4</td>
<td>12.7</td>
<td>7.0</td>
<td>54.9</td>
</tr>
<tr>
<td>How often do you use tablets?</td>
<td>21.1</td>
<td>19.7</td>
<td>7.0</td>
<td>52.1</td>
</tr>
</tbody>
</table>
Figure 1. Preferred method of training sessions of dairy employees from 6 Kansas dairies.