

Panel Discussion: Translating Current Animal Welfare Science into Best Practices to Diverse Audiences

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From Science to Practice: How Does it Work at the Farm Level?



J. Dairy Sci. 96:2671–2680
<http://dx.doi.org/10.3168/jds.2012-5976>
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**Dairy calving management: Description and assessment
of a training program for dairy personnel**

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- Format
- Timing
- Retention
- Attendance
- Follow up
- Literacy
- Language

**Science-Based
Practice**

“P-value” >> Biological Effect >> Practical

Teaching

Reading
Synthesis
Comprehension
Practice
Application



--PROTOCOL--

How to Build & Monitor Effective Teams?

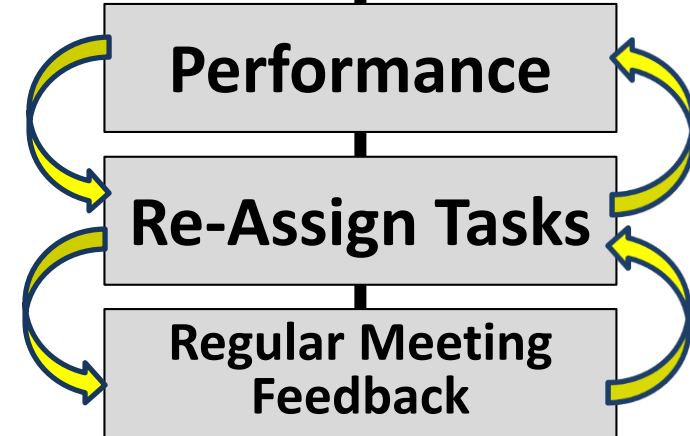
Establish SOPs



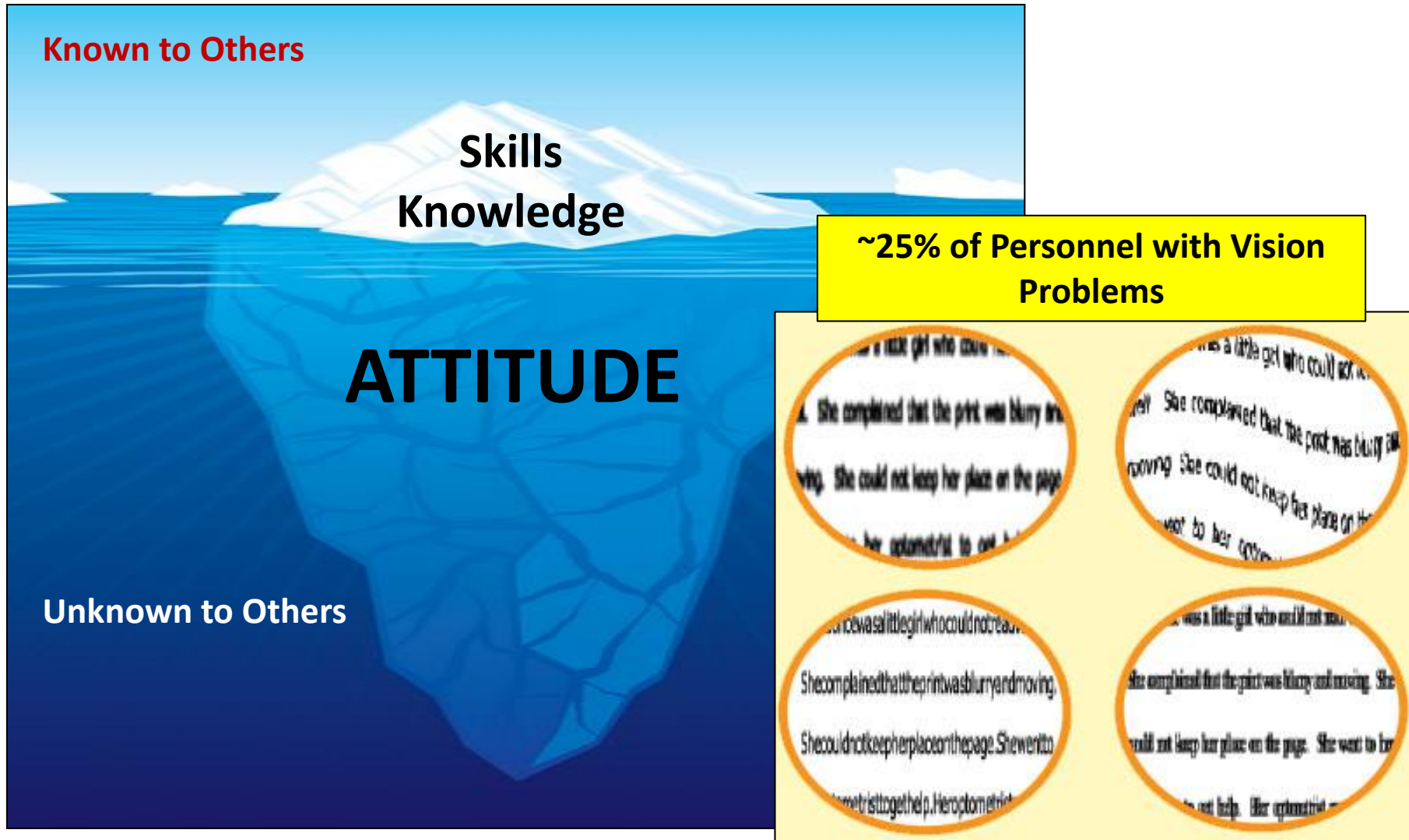
Knowledge

Skills

Hands-on Training



Where is the Problem?



(Source: <http://www.cdc.gov/visionhealth/about/resources.htm>)

Teamwork Matters for Performance

(Schuenemann, G.M., and J.D. Workman, 2017)

Worker Performance



$$P = (K + S) * A$$



Knowledge



Skills



Attitude



Scoring Performance (0-2 points)

(Schuenemann, G.M., and J.D. Workman, 2017)



$$P=(0.95+0.95)*0.90 = 1.71$$

↑ Performance



$$P=(0.90+0.90)*0.30 = 0.57$$

↓ Attitude



$$P=(0.80+0.80)*0.65 = 1.04$$

Average



$$P=(0.70+0.70)*0.95 = 1.33$$

↑ Attitude

What Problem Needs to be Addressed to Improve Your Work?

(feedback from 2,900 workers, 450 dairy herds, and 11 US states)

(Schuenemann et al., 2017 ADSA)



Training Program Integrated with Facilities and Consistent with Established Protocols

Fresh Cow Protocol Drift



"Smart" Cows



Positive "Human-Animal" Interaction



(Courtesy of Dr. S. Garcia)

Bedding Management and Cow COMFORT: ↑DMI and ↑Milk (~3 kg/d)

(Biological Response Trail; Gorgerino and Schuenemann, 2018)



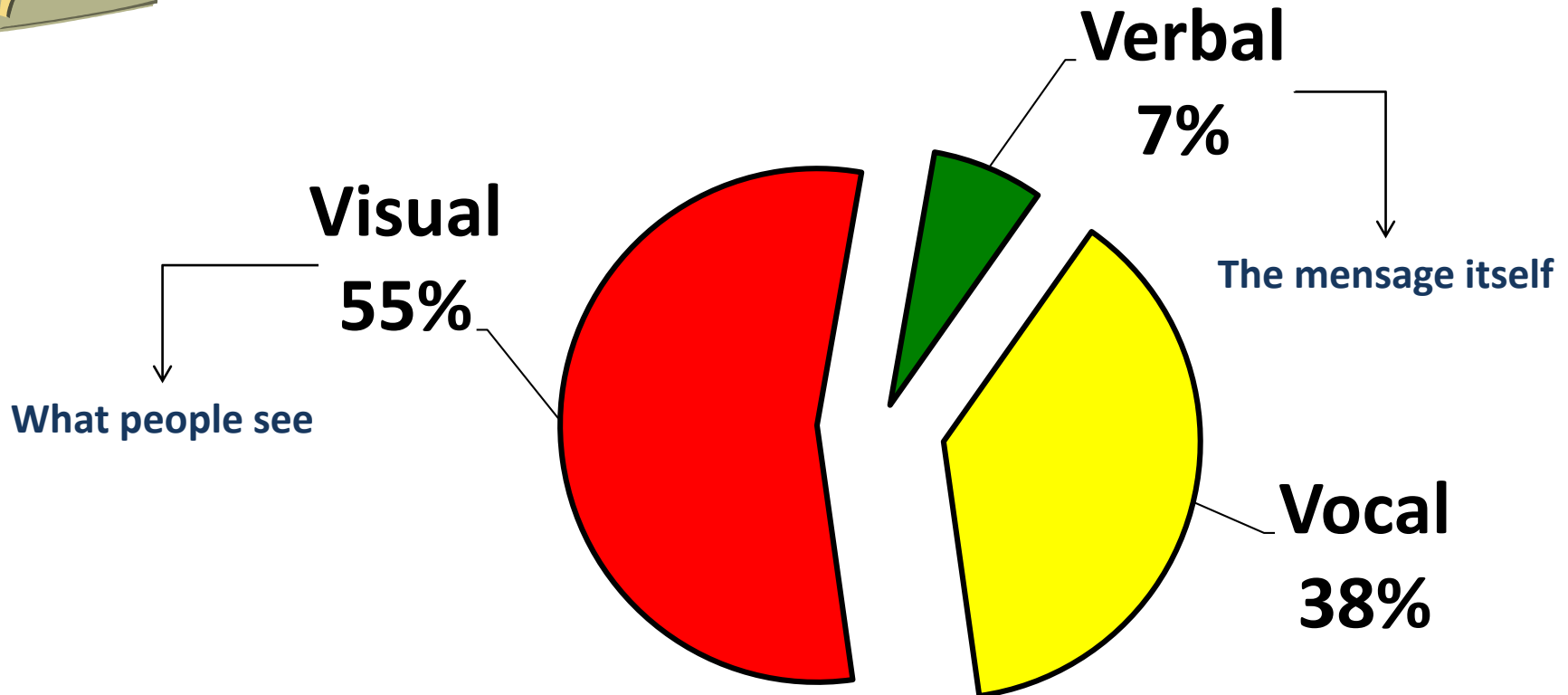
Proper Animal Handling Practices



Most Communication Is Non-Verbal



7 Seconds for
First Impression



(Albert Mehrabian , UCLA)

“System-in-Place” with Emphasis on Prevention and Continuous Improvement

- **PRODUCTIVITY**: COMFORT and HEALTH
- **BEST WELFARE**: Integrated facilities and management (people and protocols) with COMFORT and HEALTH ... good life for animals!
- Positive **“people-animal”** interactions
- ...

Fiction vs Reality

Farm



Smart Glasses

CALVING MANAGEMENT

Opportunities

- 1) Cultivating a positive work culture by ensuring that best dairy welfare practices are incorporated into the values and mission of operations
- 2) Improving the “working environment”



Break room and food
Work clothing
Housing
Time-off
Learning opportunities
...



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THANK YOU!



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