

# Quality Culture – A Tale of Two Laboratories

2025 Environmental Measurement Symposium

Elizabeth Turner

[elizabeth.turner@et.eurofinsus.com](mailto:elizabeth.turner@et.eurofinsus.com)

*Quality Assurance Director*



Environment Testing

# Quality Culture



Do the wise thing and the kind thing too, and make the best of us and not the worst.

- Hard Times by Charles Dickens

# Quality Culture

Quality culture refers to the collective beliefs, attitudes, values, behaviors, and practices within an organization that prioritize and promote quality as a fundamental aspect of its operations.

Customer Focus	Training and Development
Continuous Improvement	Data-Driven Decision Making
Accountability	Leadership Commitment
Communication and Collaboration	Employee Engagement

# Quality Culture Challenges

Resistance to Change	Lack of Measurement and Feedback Systems
Lack of Leadership Commitment	Time and Resource Constraints
Insufficient Training & Awareness	Lack of Employee Engagement & Ownership
Siloed or Fragmented Approach	Factors External to Local Lab

# Case Study Approach

Real-life application of how  
Leadership,  
Communication,  
Training,  
Metrics, and  
Corrective and Preventive Actions  
influenced the quality culture of an  
organization.

Disclaimer: Case study is from a laboratory I  
encountered some time in my 25+ years of laboratory  
experience.

# A Tale of Two Laboratories



It was the best of laboratories, it was the worst of laboratories, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of light, it was the season of darkness, it was the spring of hope, it was the winter of despair.

- Adapted from A Tale of Two Cities by Charles Dickens
- 

# Have You Ever Heard or Said...

- We analyze thousands of samples a year, why is this failure a big deal?
- Repeat PT failures are the cost of doing business and are expected.
- We are a larger lab so we should be allowed to have more failures.
- We are not accredited for that method so we do not need to have an SOP or DOCs.
- Staff do not have time to come to your quality training.
- Is this an isolated event or an indicator of a systemic issue?
- We should not have repeat PT failures. How can we improve our investigations?
- Please do a thorough audit. I want us to be the best.
- Everyone must have a DOC before they can work independently.
- Schedule multiple sessions and I will ensure people attend.

PT = Proficiency Test   SOP = Standard Operating Procedure   DOC = Demonstration of Capability

# Quality Culture Transformation

- We analyze thousands of samples a year, why is this failure a big deal? →
- Repeat PT failures are the cost of doing business and are expected. →
- We are a larger lab so we should be allowed to have more failures. →
- We are not accredited for that method so we do not need to have an SOP or DOCs. →
- Staff do not have time to come to your quality training. →
- Is this an isolated event or an indicator of a systemic issue?
- We should not have repeat PT failures. How can we improve our investigations?
- Please do a thorough audit. I want us to be the best.
- Everyone must have a DOC before they can work independently.
- Schedule multiple sessions and I will ensure people attend.

Which laboratory has the highest risk of nonconformances?



# Leadership

The most important thing in life is to stop saying, 'I wish' and start saying, 'I will'. Consider nothing impossible, then treat possibilities as probabilities.

- David Copperfield by Charles Dickens

# Leadership (Change)

## Set the Vision and Expectations related to Quality

- Focus on the needs of the client

## Fostered employee involvement

- Provided a feedback mechanism
- Held all staff meetings
- Ensured that employees recognized the value of their work
- Was a “tile walker”

# Leadership (Change)

## Promoted continuous improvement

- Led the annual management system review
- Promoted innovation

# Communication

Electronic communication will never be a substitute for the face of someone who with their soul encourages another person to be brave and true.

- Adapted from The Wreck of the Golden Mary by Charles Dickens

# Communication

## Inclusive in-person management meetings

- Safety
- Quality
- Operations

## All Staff Meetings

- Safety initiatives / metrics
- Quality initiatives / metrics
- Operational initiatives / metrics
- Budget indicators

A day wasted on others is not wasted on one's self.

- A Tale of Two Cities by Charles Dickens

# Training

## Onboarding

- Discussed organization's vision and mission
- Connected individual roles to the organization's mission
- Emphasized the “why” of analytical testing
- Include Ethics and Data Integrity

# Training

## Training on quality topics on a quarterly basis

- Ensured staff attended training (accountability)
- Topics
  - Document Control,
  - Traceability & Records Management,
  - Root Cause & Corrective Actions,
  - Proficiency Testing,
  - Regulations,
  - And many others.



# Metrics

Now, what I want is, Facts. Teach these boys and girls nothing but Facts. Facts alone are wanted in life.

- Hard Times by Charles Dickens

# Metrics

Safety Metrics

Operational Metrics

Quality Metrics

- PTs status
- SOP status
- Certification status
- Complaints and client feedback
- Audits
- Corrective action status
- **Average time to close a corrective action**

# Corrective & Preventive Actions

You will profit by the failure, and will avoid it another time.  
I have done a similar thing myself, in construction, often.  
Every failure teaches a man something, if he will learn....

- Little Dorrit by Charles Dickens

# Preventive Actions

## Upheld change management

- Method verification and validation
- Instrument verification
- Change management plans for renovations / new accreditations

## SOP and process changes

- Updated SOPs
- New DOCs, as applicable

# Corrective Actions

Training on corrective action process

Trend Analysis on Corrective Action Activities

- Is one department impacted more than others?
- Is one method impacted more than others?
- **Re-occurrence of issues?**
- **Average time to close a corrective action?**

# Sustaining a Quality Culture

That was a memorable day to me, for it made great changes in me. But it is the same with any life. Imagine one selected day struck out of it, and think how different its course would have been. Pause you who read this, and think for a moment of the long chain of iron or gold, of thorns or flowers, that would never have bound you, but for the formation of the first link on one memorable day.

- Great Expectations by Charles Dickens

# Sustaining a Quality Culture

## Quality Champion

- Laboratory Leadership
- Unofficial leaders at bench level

## Communication

- Regular lab walk throughs
- All staff meetings
- Multiple formats of communication: meetings, posters, e-mails

# Sustaining a Quality Culture

Regular review of metrics

Commitment and Accountability

- No short cuts
- Build on successes
- Emphasis on client needs

Foster Continuous Improvement



# Benefits of an Improved Quality Culture

## Improved client satisfaction

- Reduction in data inquiries and complaints

## Reduction in the cost of poor quality

- Reduced nonconformances

## Improved communication and sense of belonging

- Improved employee engagement
- Reduction in staff turnover


## Improved risk mitigation

# References



# References



- International Society for Pharmaceutical Engineering. *How Leader Actions and Behaviors Influence Quality Culture*. November/December 2016.
  - Harvard Business Review. *Creating a Culture of Quality*. 2014.
  - Quality.org. *Building a Quality Culture*. 2022.  
<https://www.quality.org/article/building-quality-culture>
  - Scott Siders. *Use of Performance Metrics in an Environmental Testing Laboratory*. 2021 National Environmental Monitoring Conference
  - Raja Waheed Anwar. *What is a Quality Culture? Key Characteristics, Benefits and Measurement*. Linked-In. April 9, 2023.
- 

## Final Quote

What greater gift than the love of a cat.

- Charles Dickens



# QUESTIONS?

Elizabeth Turner  
Elizabeth.Turner@et.eurofinsus.com



Environment Testing

