Interim Survey Results

45 Teaching Errors

The 10 Percent Problem

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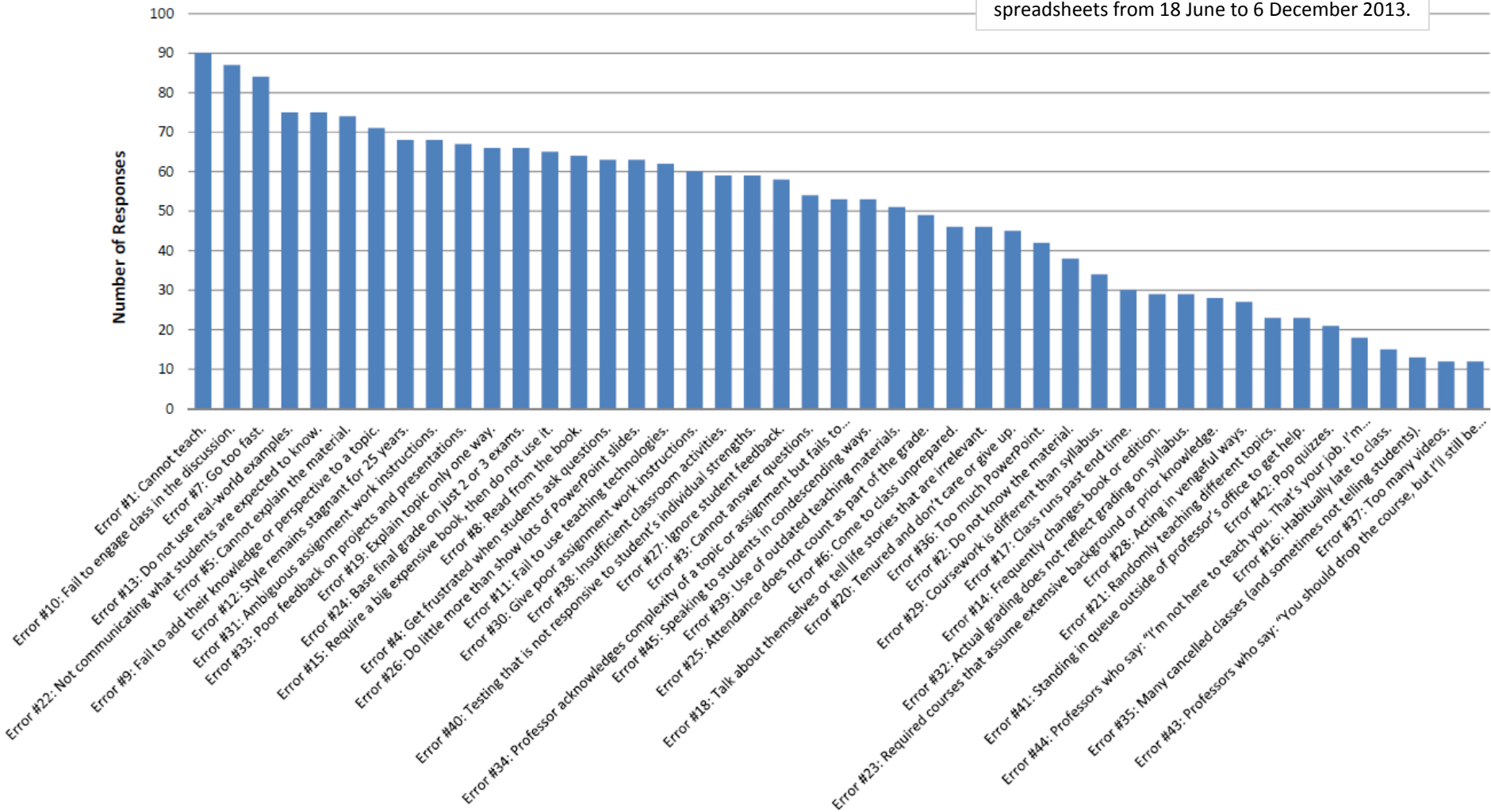leanprofessor.com

As of 6 December 2013

45 Teaching Errors

Definition: "Quality is the absence of known or obvious teaching errors."

- Cannot teach.
- Do not know the material.
- Cannot answer questions.
- Get frustrated when students ask questions.
- Cannot explain the material.
- Come to class unprepared.
- Go too fast.
- Read from the book.
- Fail to add teacher's knowledge or perspective to a topic.
- Fail to engage class in the discussion.
- Fail to use teaching technologies.
- Style remains stagnant for 25 years.

- Attendance does not count as part of the grade.
- Do little more than show lots of PowerPoint slides.
- Ignore student feedback.
- Acting in vengeful ways.
- Coursework is different than the syllabus.
- Give poor assignment work instructions.
- Ambiguous assignment work instructions.
- Actual grading does not reflect grading on syllabus.
- Poor feedback on projects and presentations.
- Professor acknowledges complexity of a topic or assignment but fails to explain it to students.
- Many cancelled classes (and sometimes not telling students).
- Too much PowerPoint.

- Does not use real-world examples.
- Frequently changes book or edition.
- Requires a big expensive book, then does not use it.
- Habitually late to class.
- Class runs past end time.
- Talk about themselves or tell life stories that are irrelevant.
- Explain topic only one way.
- Tenured teachers who don't care or give up.
- Randomly teaching different topics.
- Not communicating what students are expected to know.
- Required courses that assume extensive background or prior knowledge.
- Base entire grade on 2 or 3 exams.

- Too many videos.
- Insufficient classroom activities.
- Use of outdated teaching materials.
- Testing that is not responsive to student's individual strengths; e.g. multiple choice vs. essay (essay being the way some students would prefer to answer test questions).
- Standing in queue outside of professor's office to get help.
- Pop quizzes.
- Professors who say: "You should drop the course, but I'll still be teaching it next semester."
- Professors who say: "I'm not here to teach you. That's your job. I'm here to test you."
- Speaking to students in condescending ways.

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Teaching Errors

Number of Responses

Error #1: Cannot teach.
Error #10: Fail to engage class in the discussion.
Error #7: Go too fast.
Error #13: Do not use real-world examples.
Error #22: Not communicating what students are expected to know.
Error #5: Cannot explain the material.
Error #9: Fail to add their knowledge or perspective to a topic.
Error #12: Style remains stagnant for 25 years.
Error #31: Ambiguous assignment work instructions.
Error #33: Poor feedback on projects and presentations.
Error #19: Explain topic only one way.
Error #24: Base final grade on just 2 or 3 exams.
Error #15: Require a big expensive book, then do not use it.
Error #8: Read from the book.
Error #4: Get frustrated when students ask questions.
Error #26: Do little more than show lots of PowerPoint slides.
Error #11: Fail to use teaching technologies.
Error #30: Give poor assignment work instructions.
Error #38: Insufficient classroom activities.
Error #40: Testing that is not responsive to student's individual strengths.
Error #34: Professor acknowledges complexity of a topic or assignment but fails to...
Error #27: Ignore student feedback.
Error #3: Cannot answer questions.
Error #45: Speaking to students in condescending ways.
Error #39: Use of outdated teaching materials.
Error #25: Attendance does not count as part of the grade.
Error #18: Talk about themselves or tell life stories that are irrelevant.
Error #6: Come to class unprepared.
Error #20: Tenured and don't care or give up.
Error #36: Too much PowerPoint.
Error #2: Do not know the material.
Error #29: Coursework is different than syllabus.
Error #17: Class runs past end time.
Error #14: Frequently changes book or edition.
Error #32: Actual grading does not reflect grading on syllabus.
Error #23: Required courses that assume extensive background or prior knowledge.
Error #28: Acting in vengeful ways.
Error #21: Randomly teaching different topics.
Error #41: Standing in queue outside of professor's office to get help.
Error #44: Professors who say: "I'm not here to teach you. That's your job, I'm...
Error #42: Pop quizzes.
Error #16: Habitually late to class.
Error #35: Many cancelled classes (and sometimes not telling students).
Error #37: Too many videos.
Error #43: Professors who say: "You should drop the course, but I'll still be...

Chart by Kamna Tiwari

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45 Teaching Errors

Findings:

Teaching errors do not follow an 80-20 rule. Instead of 80 percent of the responses come from 60 percent of the errors (n = 28).
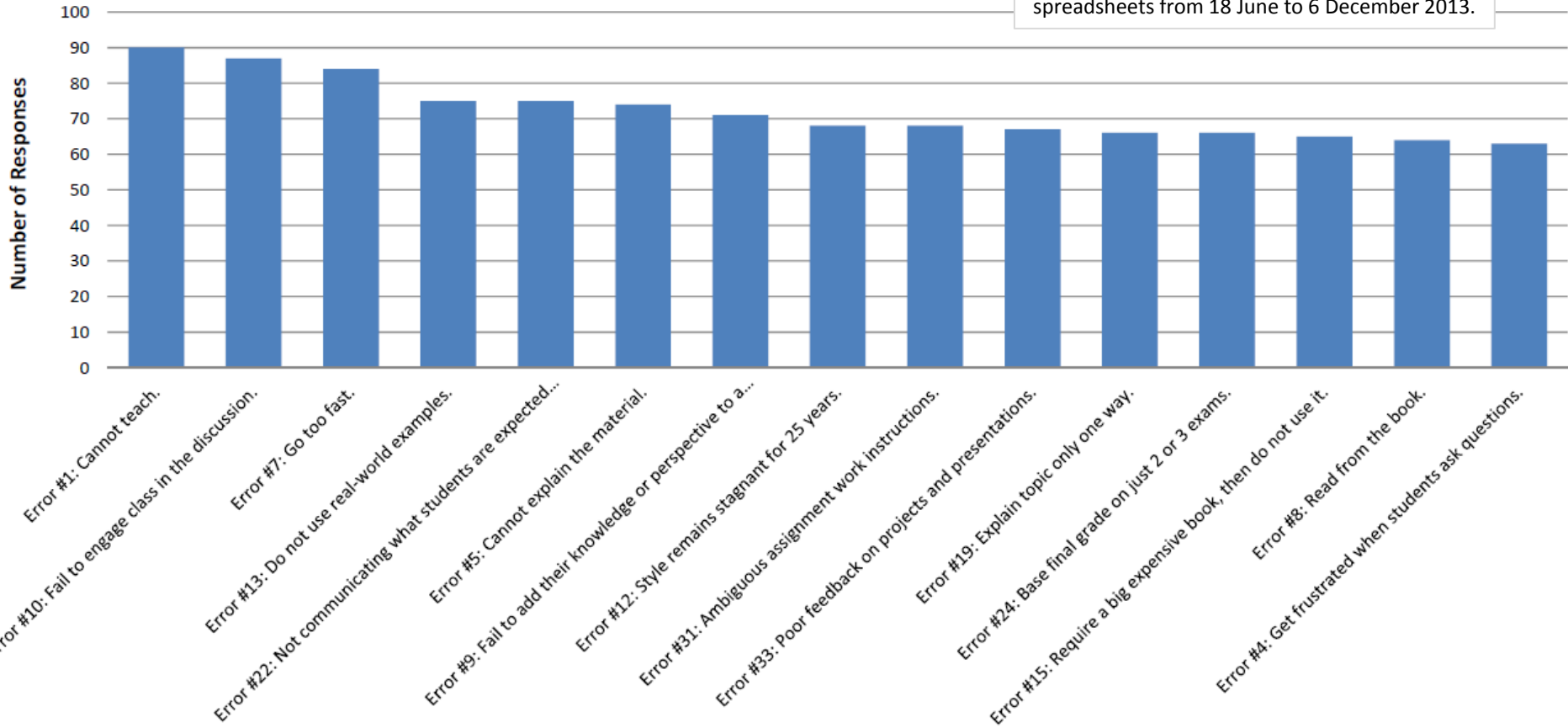
Students experience numerous teaching errors

A source of significant dissatisfaction for students.

Could this be a significant driver of the 10 percent problem?

Top 15 Teaching Errors

Based on 123 responses recorded in Google Docs spreadsheets from 18 June to 6 December 2013.

Number of Responses (y-axis: 0 to 100)

- Error #1: Cannot teach. — 90
- Error #10: Fail to engage class in the discussion. — 87
- Error #7: Go too fast. — 84
- Error #13: Do not use real-world examples. — 75
- Error #22: Not communicating what students are expected... — 75
- Error #5: Cannot explain the material. — 74
- Error #9: Fail to add their knowledge or perspective to a... — 71
- Error #12: Style remains stagnant for 25 years. — 68
- Error #31: Ambiguous assignment work instructions. — 68
- Error #33: Poor feedback on projects and presentations. — 67
- Error #19: Explain topic only one way. — 66
- Error #24: Base final grade on just 2 or 3 exams. — 66
- Error #15: Require a big expensive book, then do not use it. — 65
- Error #8: Read from the book. — 64
- Error #4: Get frustrated when students ask questions. — 63

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45 Teaching Errors

Top 5 Errors:

Error #1: Cannot teach.
Being a professor does not mean one can teach.
Professionalism requires deep study and practice.
Practice is abundant but study of teaching is missing.

Error #10: Fail to engage class in the discussion.
Lecturing without asking for or soliciting questions from students suggests faculty want to be done with each class as soon as possible and with the least amount of effort.
This error is closely connected to Error #7.

45 Teaching Errors

Top 5 Errors:

Error #7: Go too fast.
Most courses are over-contented. Taking out some material will help teachers slow down. Ask: "What are the 5 most important things that students should know from this course?"

Error #13: Do not use real-world examples.
Perhaps lack of industry work experience makes real world seem abstract and irrelevant to faculty. Real-world examples are what students want.

45 Teaching Errors

Top 5 Errors:

Error #22: Not communicating what students are expected to know. Faculty are educational supervisors to students. Basic supervisor's error is failing to establish expectations.

There should be a determined focus by individual faculty and by institutional leadership to eliminate the 45 teaching errors.

Do this is by improving teaching processes (kaizen).

The 10 Percent Problem

When asked, students say they had 3 or 4 really good professors as an undergraduate student (out of 40)

Why are only 10 percent of professors remembered by students as having been really good?

The 10 Percent Problem

Were the other professors that bad?

Or merely forgettable as a result of average teaching abilities?

Is the response personality-driven?

Or an accurate reflection of the quality of instruction?

Fishbone Diagram: 3 or 4 really good profs out of 40

Equipment
- Does Not Use Equipment
- Old Equipment
- Cumbersome Equipment
- Ineffective Equipment
- Equipment Underused
- Equipment Overused

People*
- Lack of Technical Experience in Industry
- Lack of Management Experience in Industry
- Don't Know
- Ignore Feedback
- Don't Care
- Seeking Tenure
- Awarded Tenure

Environment
- Management Does Not Know
- Students Fear Complaining
- Complaints Ignored
- Poor Leadership
- Management Complacency
- Focus on Results (enrollments and graduation rate) vs. Process (learning)

3 or 4 really good profs out of 40

Methods
- No Teacher Training
- Poor Teacher Training
- Teaching Methods Not Shared
- Focus on Results vs. Process
- No Mentoring
- Ineffective Mentoring

Measures
- No metrics
- Poor Metrics
- No Follow-Up
- Metrics Not See by Leaders
- Metrics Ignored
- Batch Processing

Materials
- Too Many
- Too Much
- Unfocused / Confusing
- Not Relevant
- Out of Date
- Batch Processing

Environment

Based on 137 responses recorded in Google Docs spreadsheets from 18 June to 6 December 2013.

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The 10 Percent Problem

The category "Environment" means the overall university environment with respect to its priorities. On the survey form, "Focus on Results" was presented as: "Focus on Results (enrollments and graduation rate) vs. Process (learning)."

Survey respondents felt that the focus on results, which is driven by top administrators, is the primary driver of the 10 percent problem for the "Environment" cause category.

Administrators today are more strongly focused on results – enrollments and graduation rate – than in previous years.

Teaching will continue to fall below students' expectations in the future because improving teaching is not the primary focus of higher education leaders.

People

Based on 137 responses recorded in Google Docs spreadsheets from 18 June to 6 December 2013.

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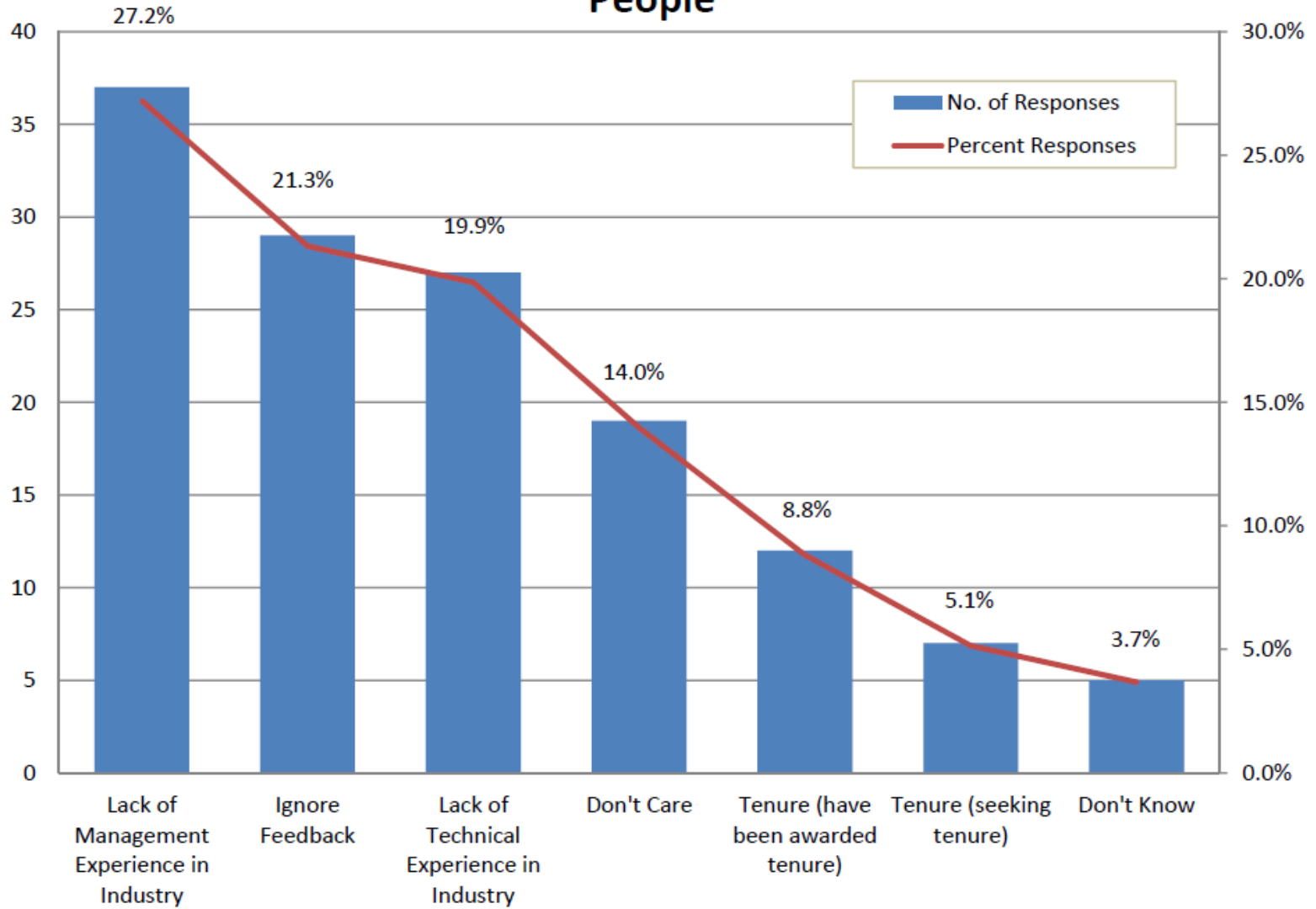
The 10 Percent Problem

On the survey form, "People" was presented as: "People (professors -- no-blame)."

Survey respondents indicate that teachers who lack industry experience are not as good at teaching as those who do have management and technical work experience in industry.

Education would be of greater value to students if more professors had spent time in the types of work environments that students will eventually occupy.

Institutions of higher education place low value on industry work experience as a prerequisite for teaching. Faculty hiring processes should be improved to incorporate what students see as adding value to their educational experience.

Equipment

Based on 137 responses recorded in Google Docs spreadsheets from 18 June to 6 December 2013.

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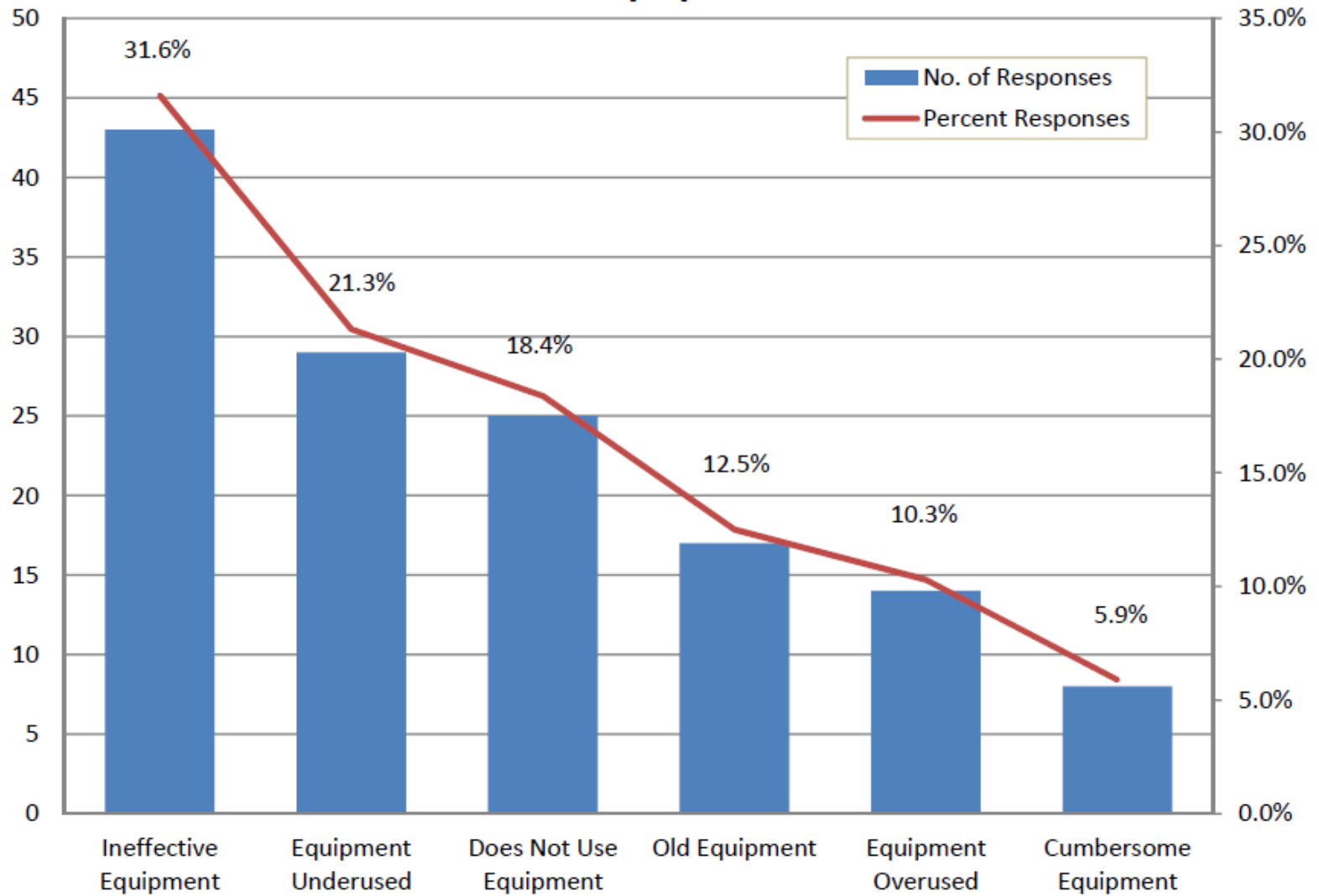
The 10 Percent Problem

On the survey form, "Equipment" was presented as: "Equipment (includes software, learning management systems, and related technologies)."

Suggests a lack of training for faculty in how to use equipment; the purchase of inferior, unnecessary, or difficult to use equipment by administrators; or faculty unwillingness to use new equipment.

Is new technology or equipment is actually necessary to do a job?

To be consistent with the "Respect for People" principle, equipment or technology must serve people – not the other way around.
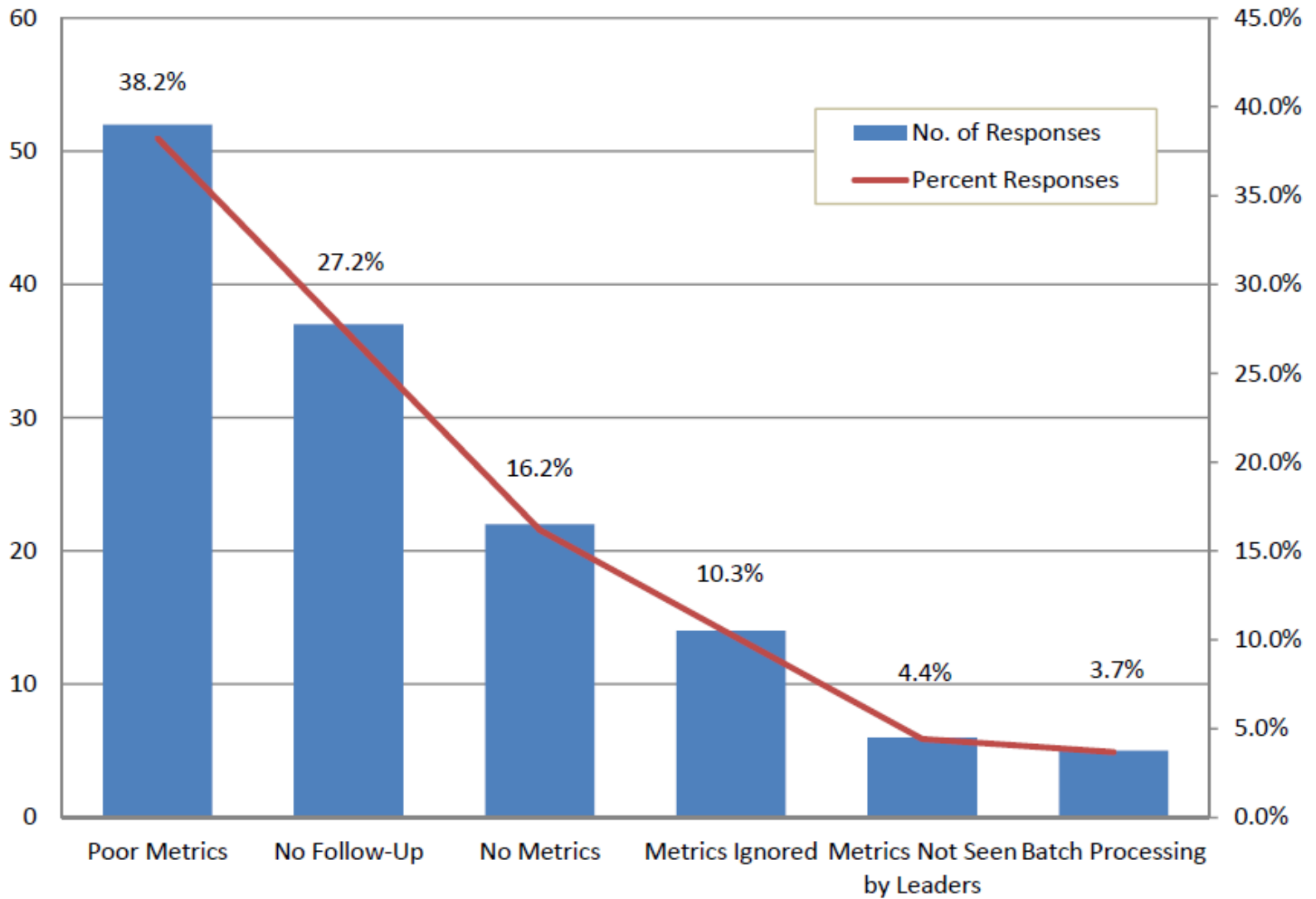
Material

Chart legend: No. of Responses (blue bars), Percent Response (red line)

Category	No. of Responses	Percent Response
Unfocused / Confusing	~59	43.4%
Not Relevant	~23	16.9%
Batch Processing	~22	16.2%
Out of Date	~19	14.0%
Too Much	~9	6.6%
Too Many	~4	2.9%

Based on 137 responses recorded in Google Docs spreadsheets from 18 June to 6 December 2013.

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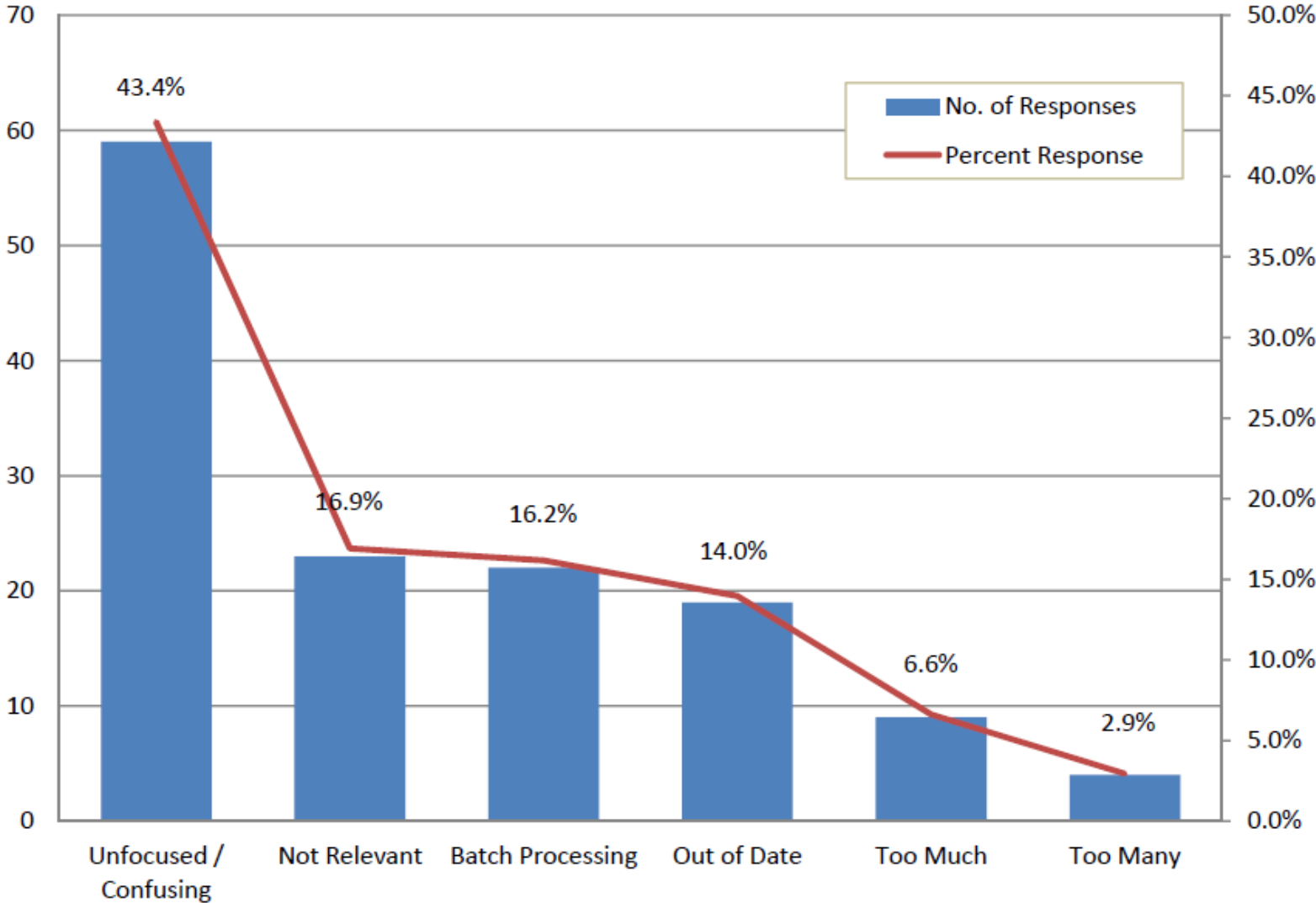
Lean Teaching

The 10 Percent Problem

On the survey form, "Material" was presented as: "Materials (used in teaching)."

Results indicate that the biggest problem is teacher's use of unfocused and confusing teaching materials, and teaching materials that were not relevant or were out of date.

"Batch Processing" reflects the batch processing nature of students' assignments that use the teaching materials (e.g. term papers, mid-term or final exams, etc.).
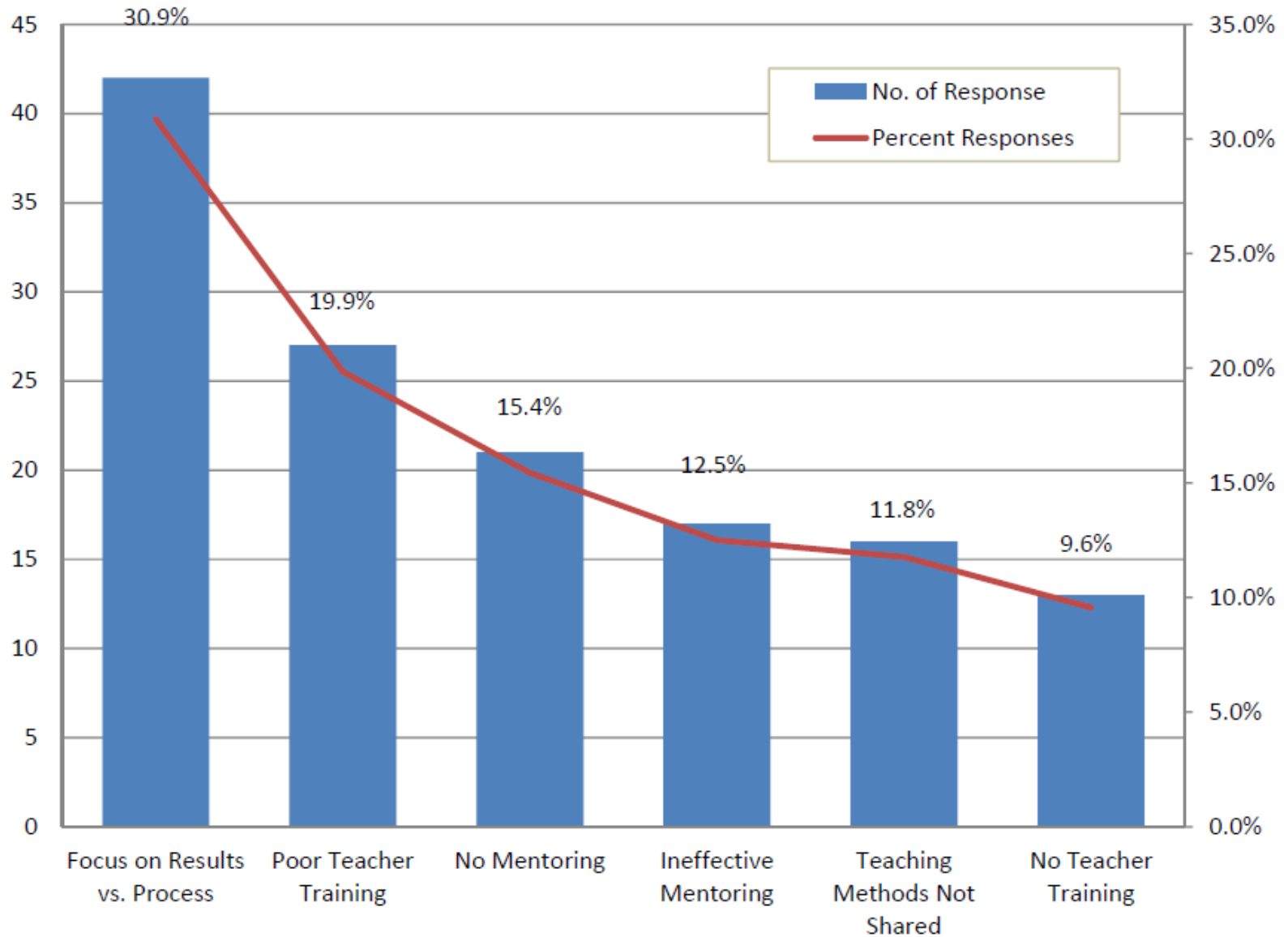
Measures

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The 10 Percent Problem

On the survey form, "Measures" was presented as: "Measures (pertaining to teaching)."

Survey respondents seem to feel that the 10 percent problem is partly caused by using metrics that are poor in their ability to discriminate between good teaching and poor teaching.

The next category suggests that whatever the metric(s) used, good or bad, the result is unlikely to be acted upon by faculty (or administrators).

Some survey respondents thought that teaching metrics did not exist, or that the teaching metrics of individual faculty were not reviewed by top administrators.

Methods

Legend:
- No. of Response
- Percent Responses

Bars (No. of Response / Percent Responses):
- Focus on Results vs. Process — 30.9%
- Poor Teacher Training — 19.9%
- No Mentoring — 15.4%
- Ineffective Mentoring — 12.5%
- Teaching Methods Not Shared — 11.8%
- No Teacher Training — 9.6%

The 10 Percent Problem

On the survey form, "Methods" was presented as: "Methods (related to developing teaching skills)."

Survey respondents indicate that the result of having taught a course is more important than the process to teach a course well.

Whether fact or perception, poor teacher training, a lack of mentoring, ineffective mentoring, teaching methods not shared, and no teacher training should not be the characteristics of organizations that exist for the purpose of educating people.

The 10 Percent Problem

Top drivers of the 10 percent problem are:

- Focus on Results (enrollments and graduation rate)
- Lack of Management Experience in Industry
- Ineffective Equipment
- Unfocused/Confusing (teaching materials)
- Poor (teaching) Metrics
- Focus on Results (teach the course) vs. Process (how to teach well).

Efforts to improve teaching should begin with these.

The preferred process for doing that is kaizen.

Charts and analyses represent preliminary data and preliminary findings, and they are subject to the limitations of Internet survey research.

Routes to Improvement

Application of Lean Principles and Practices:

- Individual Effort

- Faculty Team Effort (with a department or school)

- Institutional Leadership Leads Cross-Functional Teams