

Put Yourself in the Student's Chair



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Issues of the Day

Declining Enrollments

Student Commitment to Their Major

Retention

Time to Graduation

Graduation Rates

Etc.

Topics Covered

Pull- vs. Push-Based Classroom Assessment

45 Teaching Errors

The 10 Percent Problem

Good Quality Teaching

Pull- vs. Push-Based Classroom Assessment

Everybody Has Gone Assessment Crazy

Professors Push Classroom Assessments onto Students

Which Methods of Assessment Do Students Prefer?

Pull- vs. Push-Based Classroom Assessment

My Question: “Does it make sense to assess student learning using methods that most students perform poorly on?”

Inaccurate assessments of learning are generated if the assessment method used is one in which most students are weak.

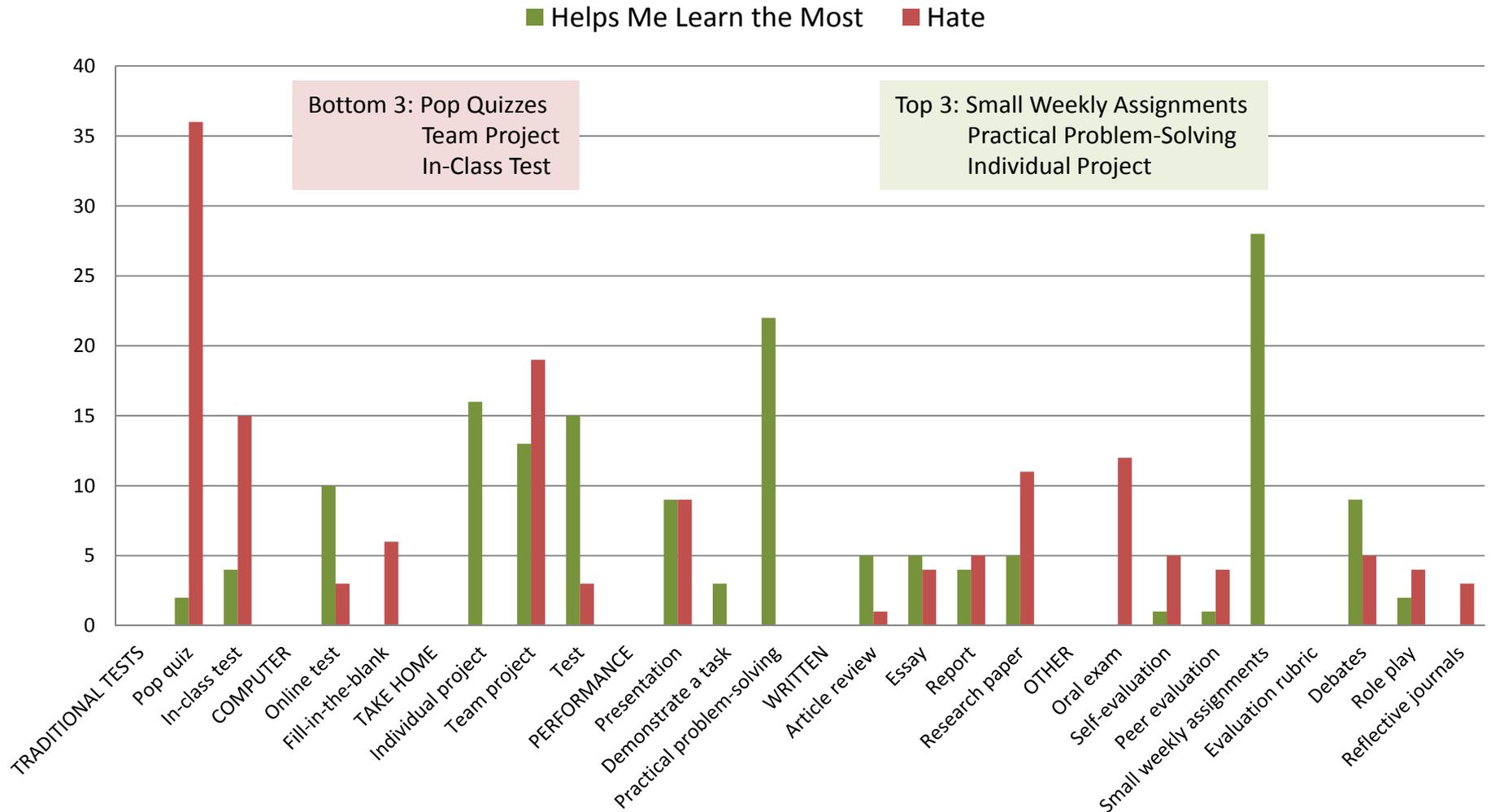
Pull- vs. Push-Based Classroom Assessment

I Asked My Students Two Questions:

“What three mode(s) of learning assessment are most beneficial for you personally, to help you learn the most in a course?”

“What three mode(s) of learning assessment do you hate the most?”

Student Classroom Assessment Preferences



Q1 - What three mode(s) of learning assessment are most beneficial for you personally, to help you learn the most in a course?

Q2 - What three mode(s) of learning assessment do you hate the most?

Pull- vs. Push-Based Classroom Assessment

Findings:

- 1) K-12 methods education carry over into HE.
Not much critical thinking going on.
- 2) The continued use of assessment methods that do not strongly contribute to individual students' learning experience (or greatly detract from it).
A repetitive error by faculty.
- 3) Some assessments methods are clearly more contributive to learning than others, for most students.
Assessment methods that detract from learning should be abandoned.

Pull- vs. Push-Based Classroom Assessment

Findings:

4) Majority of students learn the most they can in a course using these just three assessment methods.

5) Assessment can be customized to individual students' strengths.

6) Top three assessment methods consistent with how people are taught in workplaces.

Faculty not preparing students for work in terms of how learning is commonly assessed in that environment.

Pull- vs. Push-Based Classroom Assessment

Give Students a Choice

How do You Manage the Variety of Assessments?

Will Grading Consume More or Less Time?

Will Assignment Feedback be Better, Worse, or the Same?

TM362 Student Learning Assessment Preference

One-Time Selection (no do-overs)

Instructions: Select any two methods of learning assessment. Place X in box.

Last Name	First Name	Small Weekly Assignments	Visual Control	Practical Problem-Solving	Individual Project	Take-Home Test	Team Project	Research Paper
		X	X					
		X	X					
		X	X					
		X	X					
		X	X					
		X	X					
		X	X					
		X	X					
		X	X					
		X	X					
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		X	X					
Number of Assessments		N = 10	N = 1	N = 2	N = 1	N = 2	N = 1	N = 1

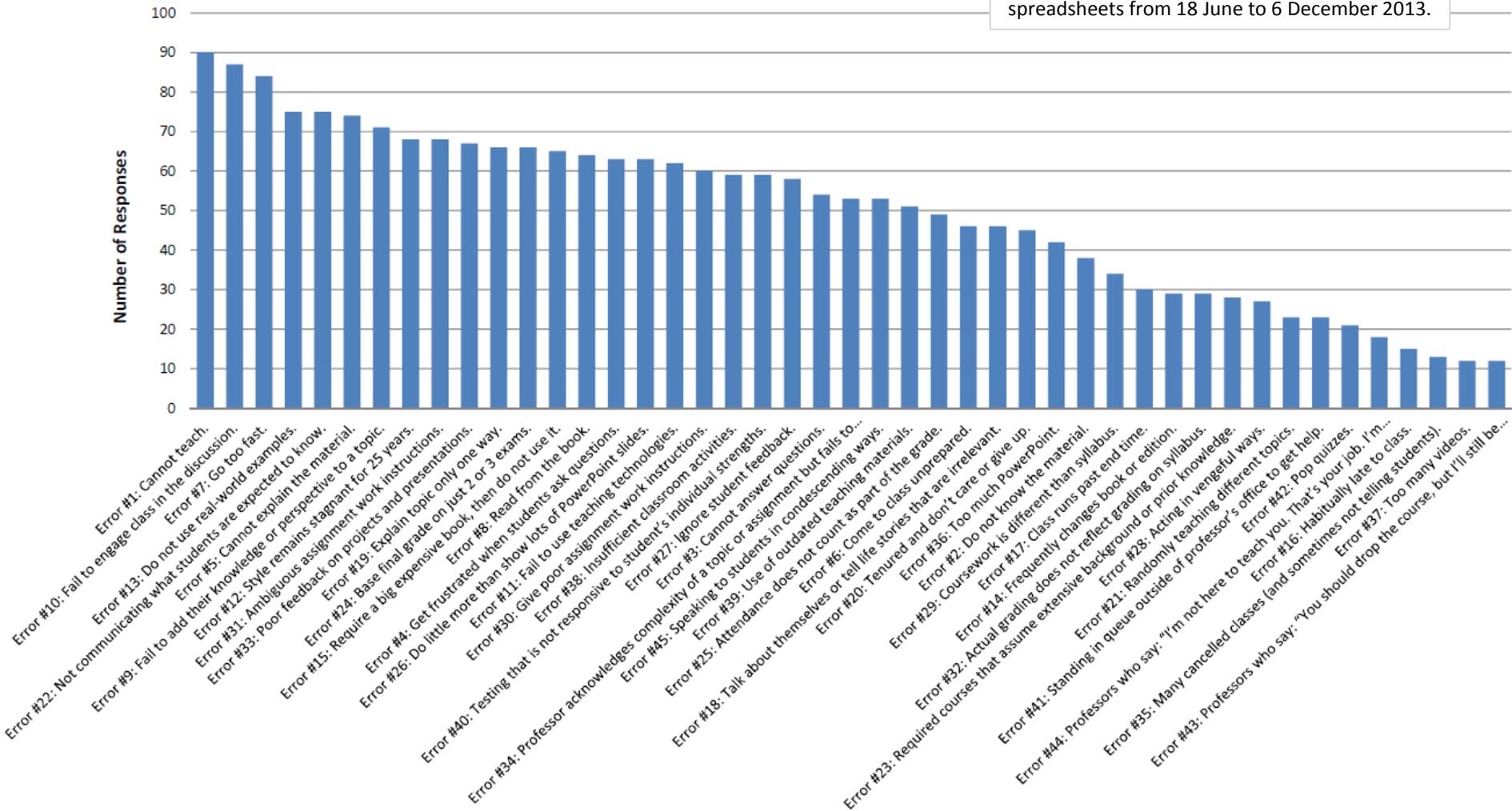
Definition: "Quality is the absence of known or obvious teaching errors."

45 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.

Teaching Errors

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



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).

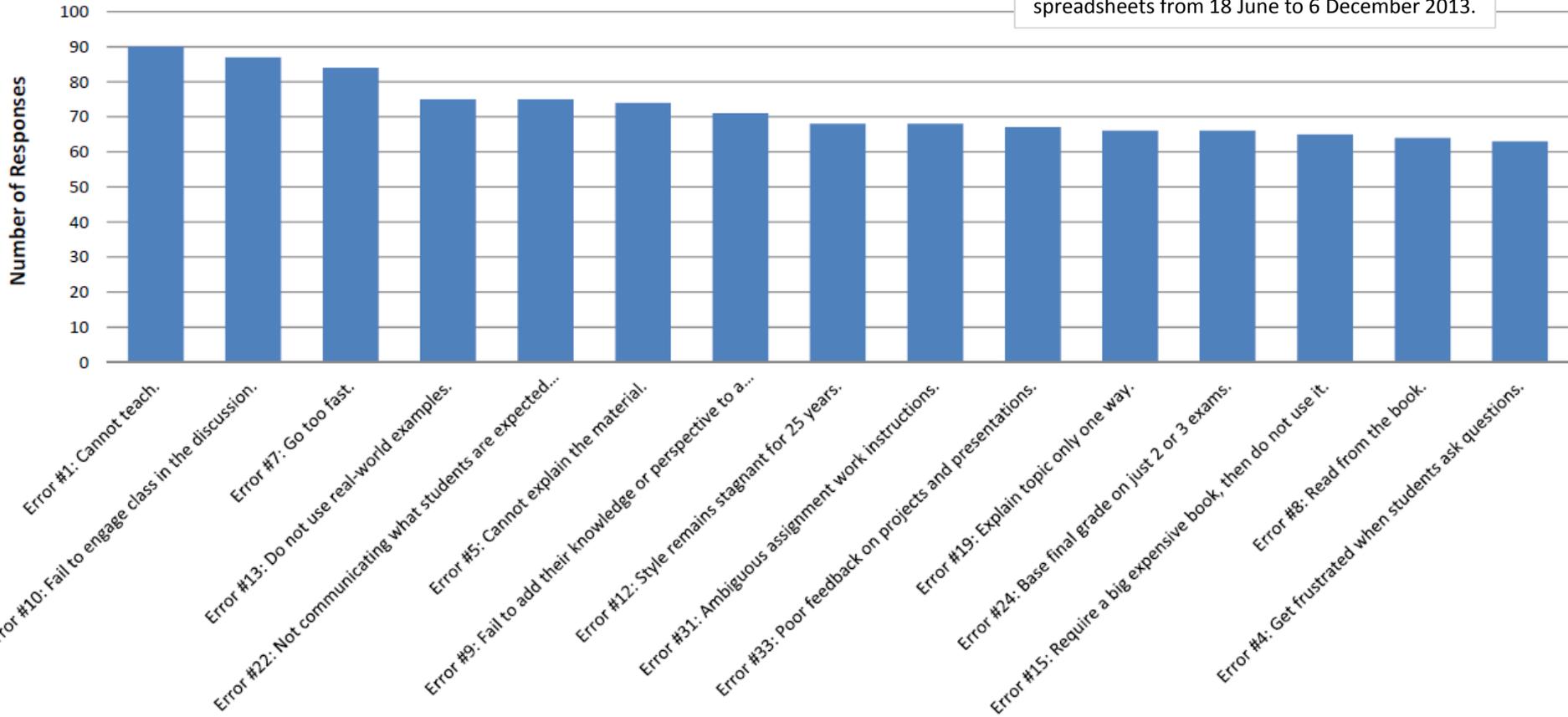
Students experience numerous teaching errors

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.



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

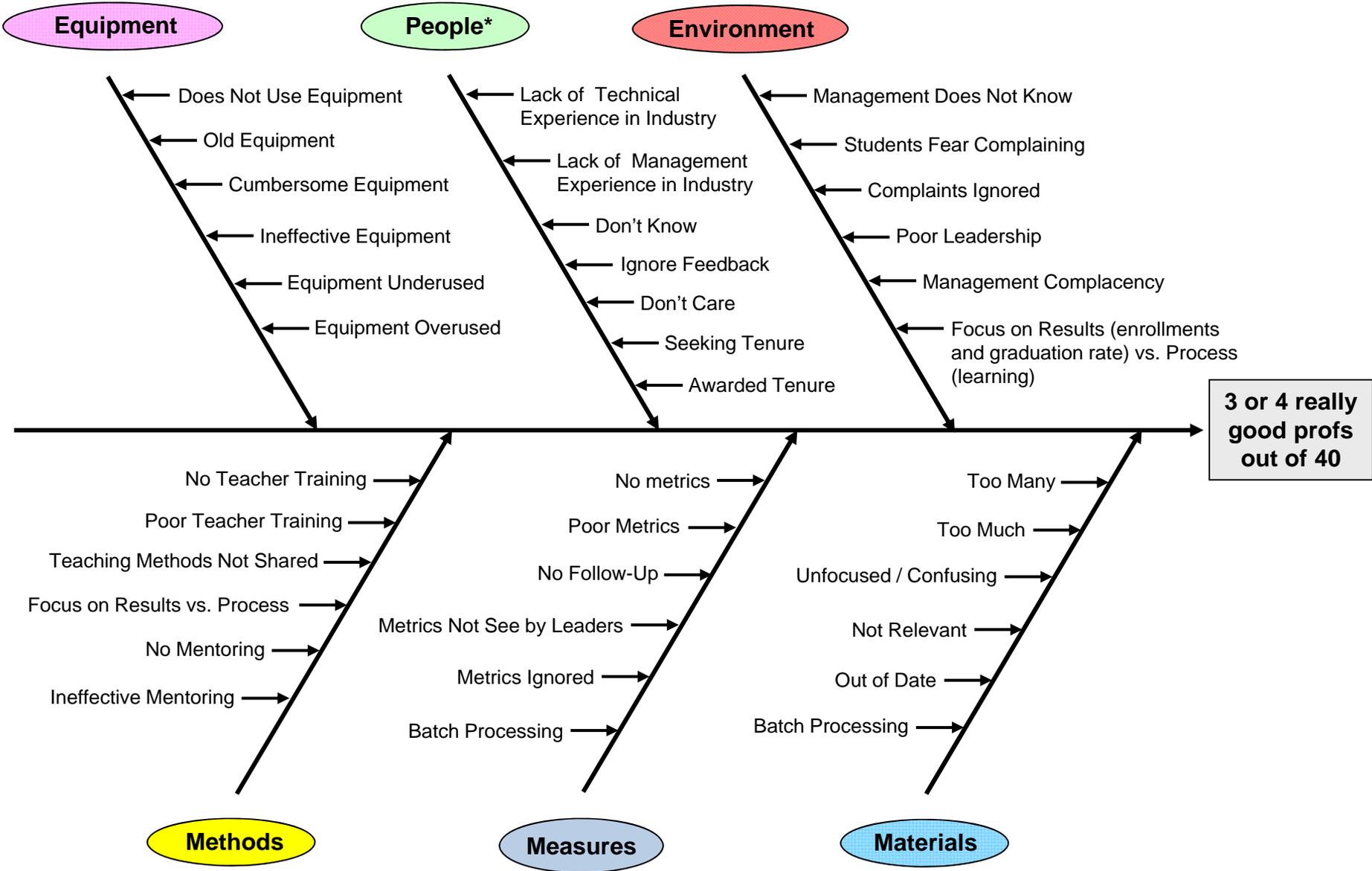
Were the other professors that bad?

Or merely forgettable as a result of average teaching abilities?

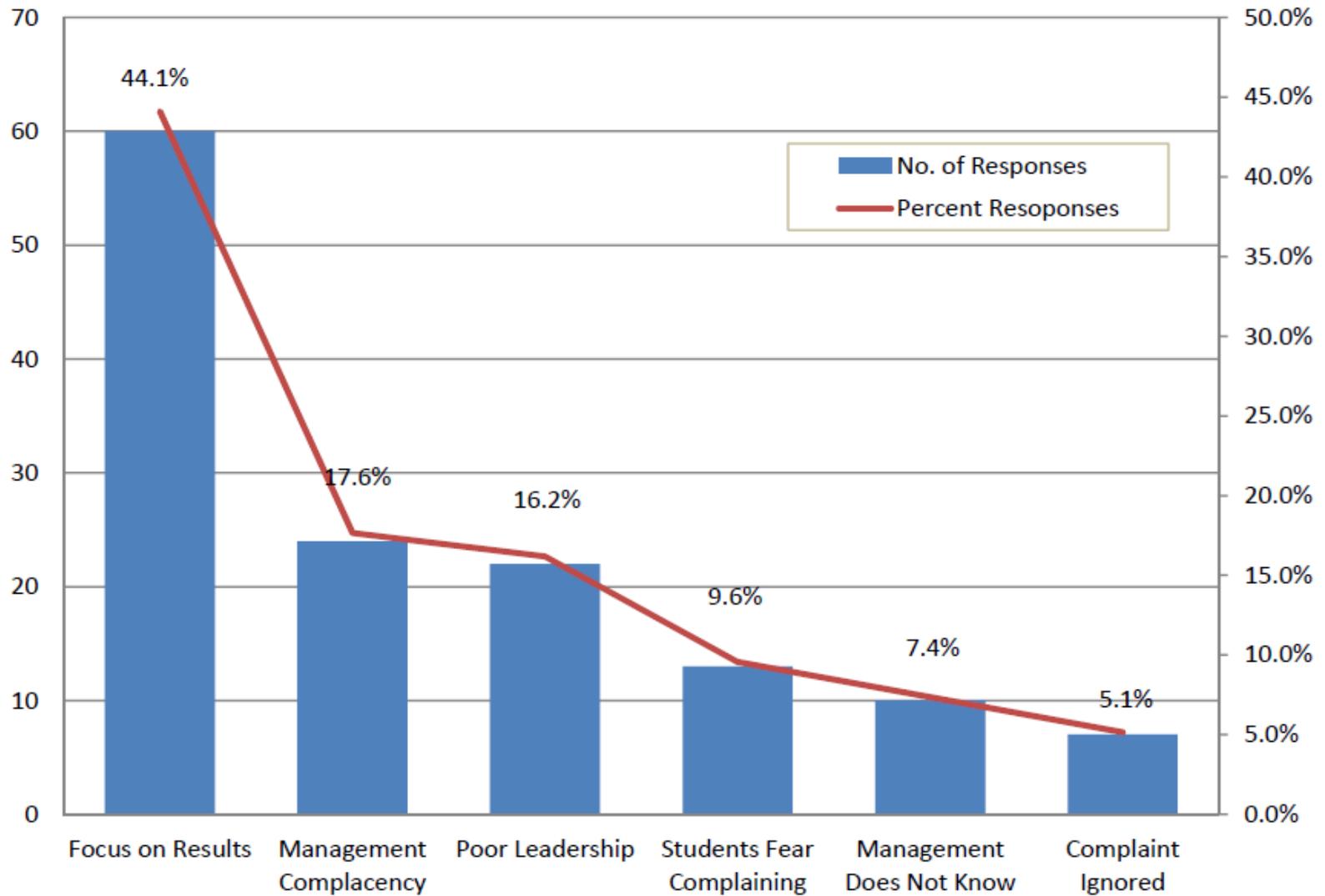
Is the response personality-driven?

Or an accurate reflection of the quality of instruction?

Or were there only 3 or 4 courses that the student was really interested in?



Environment



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

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Chart by Kamna Tiwari

The 10 Percent Problem

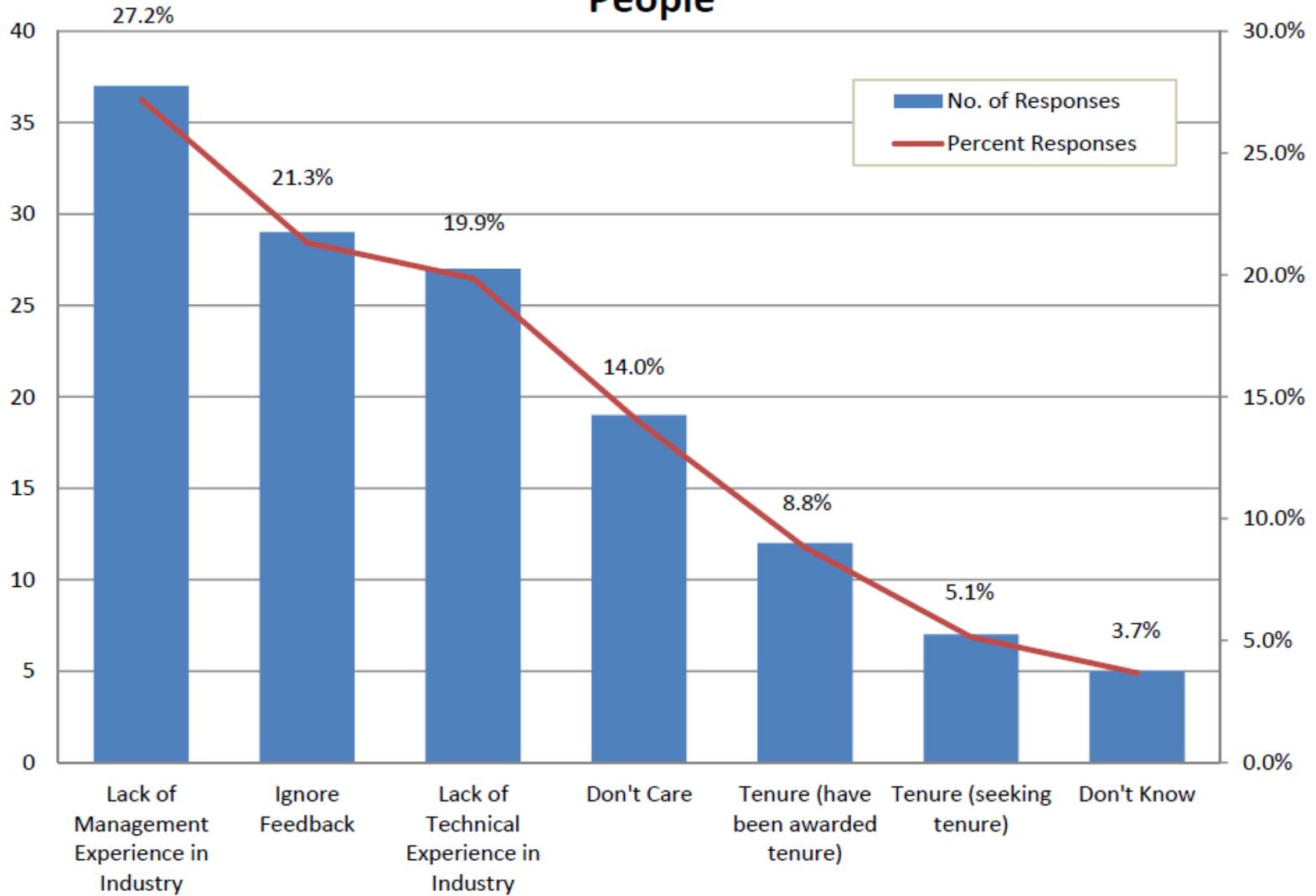
The category “Environment” means the overall university environment with respect to its priorities. On the survey form, “Focus on Results” was presented as: “Focus on Results (enrollments and graduation rate) vs. Process (learning).”

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



The 10 Percent Problem

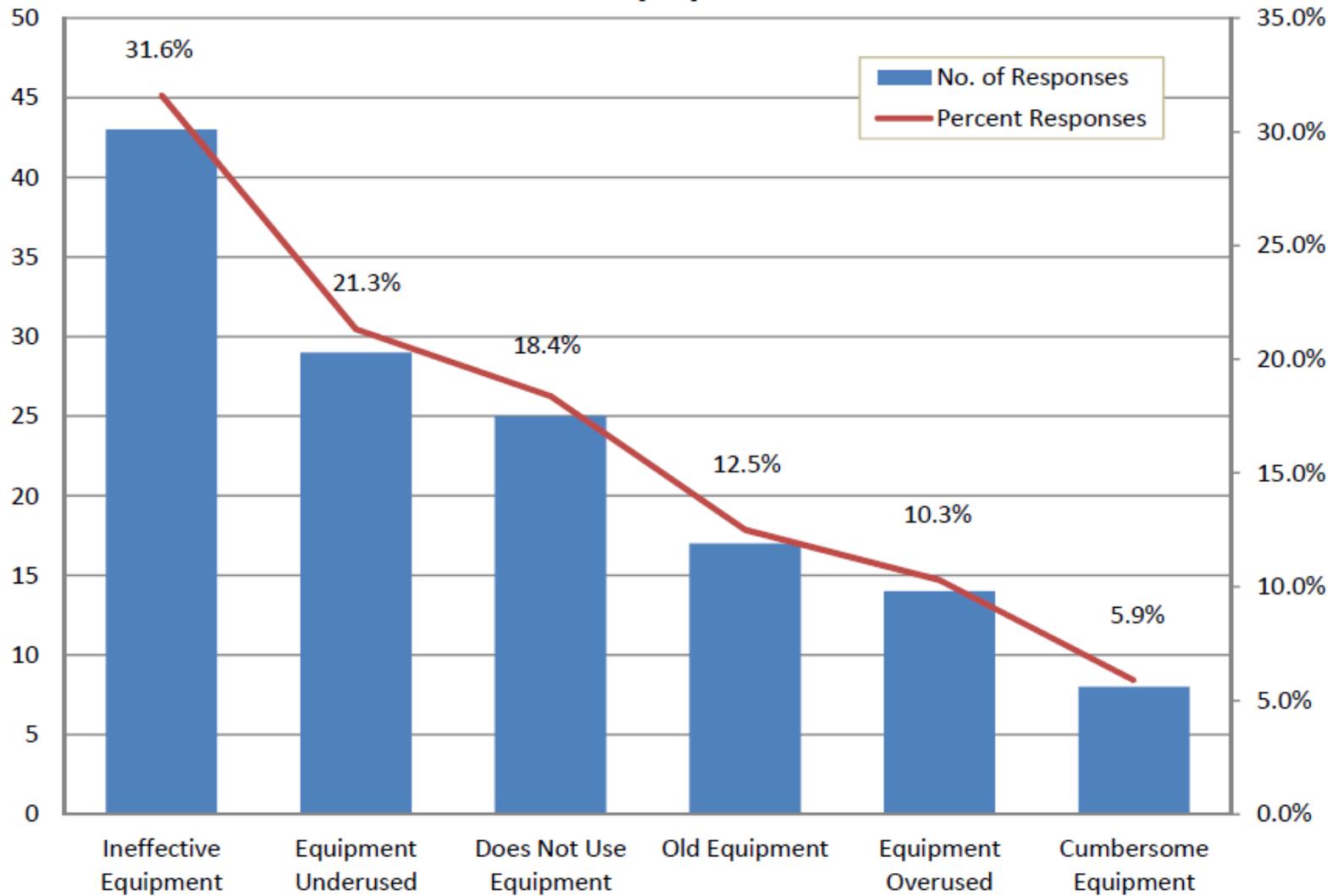
On the survey form, “People” was presented as: “People (professors -- no-blame).”

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



The 10 Percent Problem

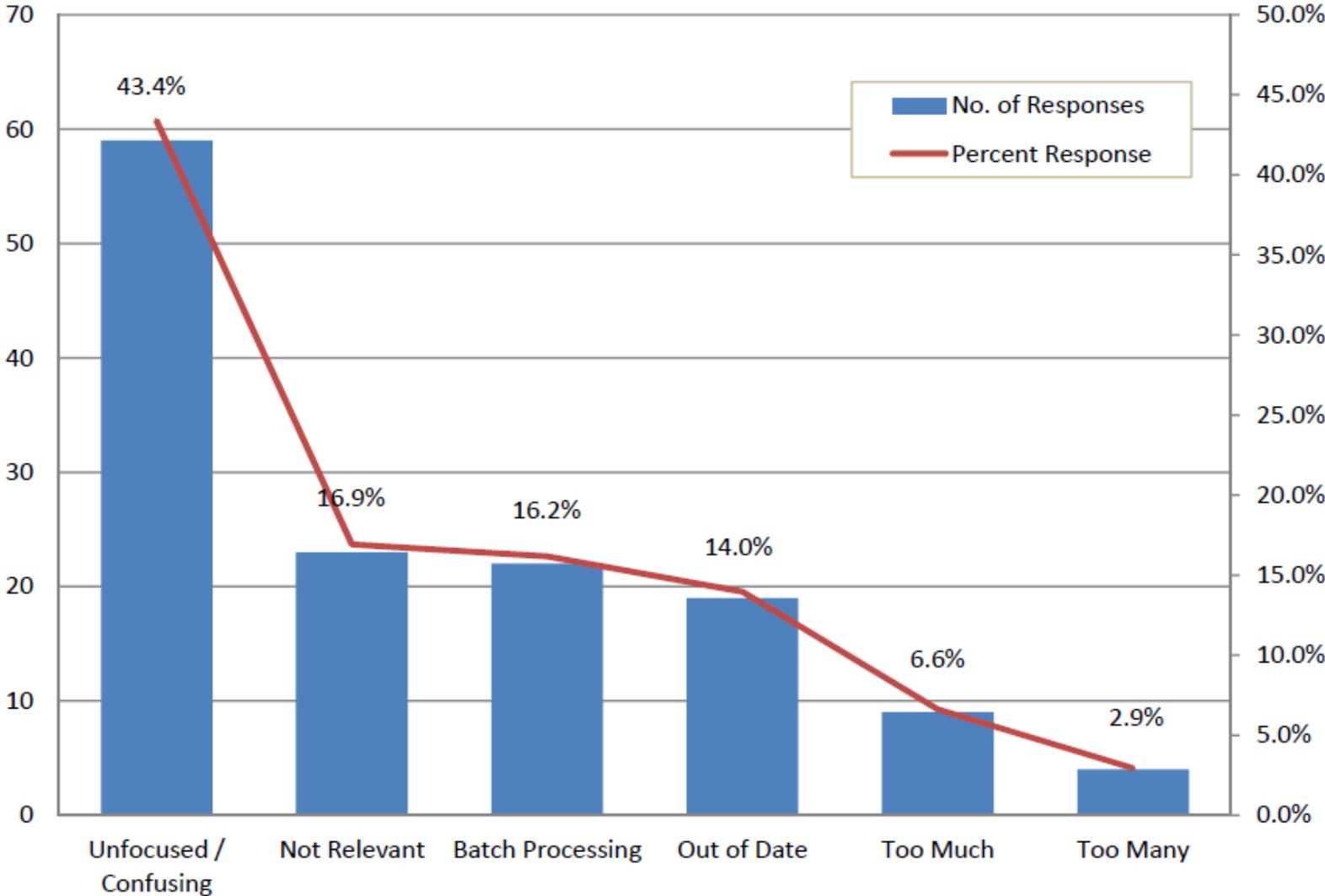
On the survey form, “Equipment” was presented as: “Equipment (includes software, learning management systems, and related technologies).”

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



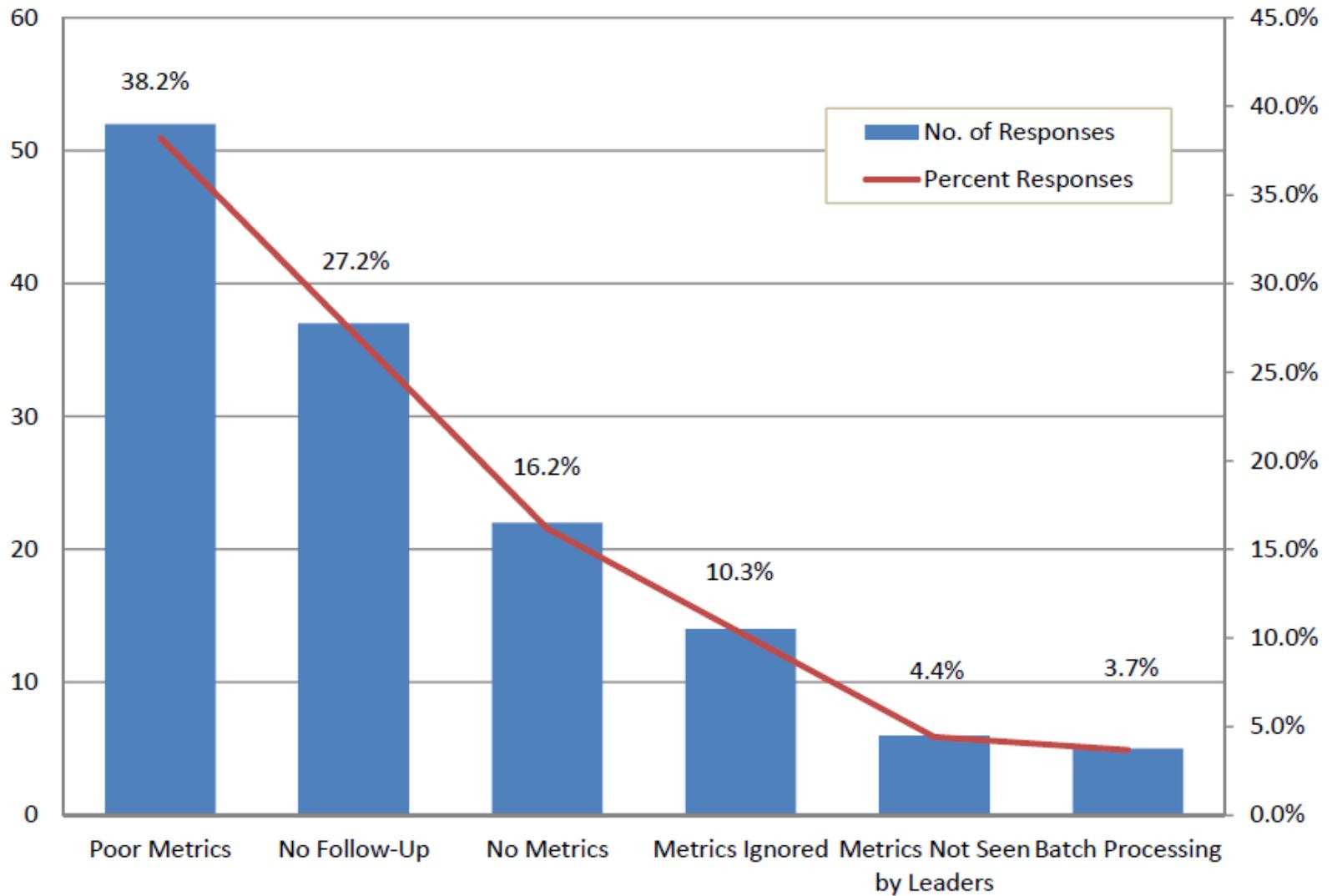
The 10 Percent Problem

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



The 10 Percent Problem

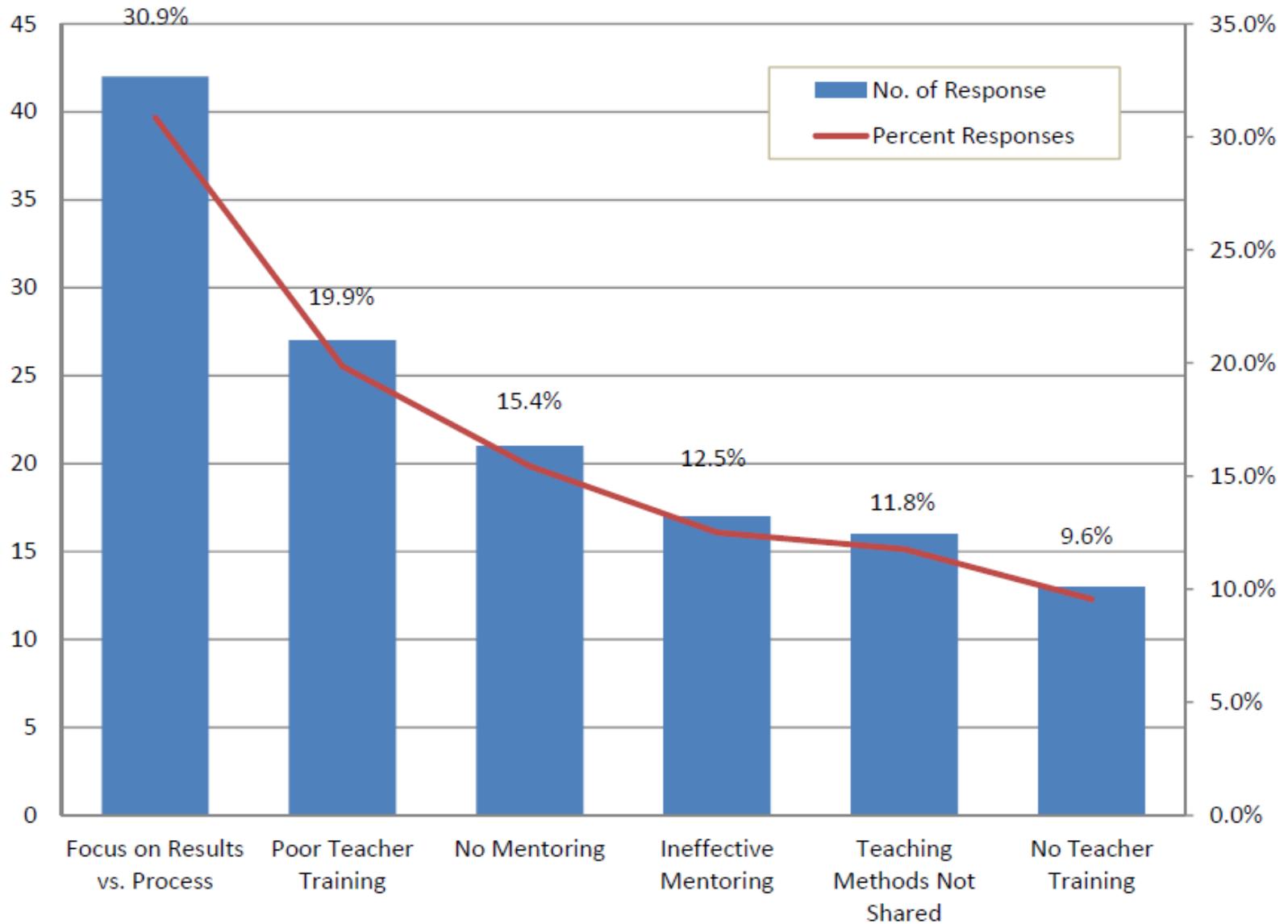
On the survey form, “Measures” was presented as: “Measures (pertaining to teaching).”

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



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:

- Administration Focus on Results (enrollments and graduation rate)
- Lack of Management Experience in Industry
- Ineffective Equipment
- Unfocused/Confusing (teaching materials)
- Poor (teaching) Metrics
- Teachers 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.

What Is Good Quality Teaching?

Identify one to three things your best teachers did that resulted in “good quality teaching.”

A survey of current and former students conducted in-person and online between 4 February and 12 February 2014.

Number of responses = 107

What Is Good Quality Teaching?

Attitude	Teaching	Delivery	Assessment	Follow-Up
Connects with each student (vs. names on a class roster).	Teaches in ways the every student can learn from (understand vs. memorization).	Does not read what's on the PowerPoint slides.	Uses different methods used to evaluate student learning.	Available to help answer questions, help with homework, etc.
Motivates students to want to learn.	Balances theory and practice (weighted towards practical).	Remains on-topic.	Gives lots of small assignments so one bad result does not result in low final grade.	Easy to reach.
Treats college students as adults.	Uses hands-on activities related to the subject matter (to make theory come alive).	More hands-on, less lecturing, followed by discussion of the learning.	Verifies that students understand the material before testing.	Responds promptly to students.
Passionate about the subject (competent).	Makes boring subject matter interesting or exciting.	Articulates complex / technical information clearly and understandably.	Less emphasis on number of assessments and grades; more emphasis on learning.	Gives timely feedback.
Makes students feel comfortable in asking and answering questions.	Provides real-word examples related to the material (vs. just lecture).	Speaks clearly, with appropriate tone and volume.	Gives right amount of work (vs. over or under work) and no games.	Gives specific feedback.
Makes expectations clear for course at start: every assignment and assessment	Engages class by asking probing questions and facilitate in-class discussions.	Makes class more interactive.	Gives practical assignments that reinforce the learning.	Available for one-on-one discussion.
Holds student's attention.	Has clear learning goals.	Makes the learning relevant to me & my future.	Gives reasonable (not mean) assignments.	Verifies that students actually learned.
Empathizes with students (e.g. workload, cost of books, schedule, etc.).	Makes new or complex material easy to understand. Simplifies the material.	Speaks with energy and enthusiasm.	Gives sensible tests (not high pressure exams).	Researches answers to student's questions (vs. make it up)
Recognizes that real-world examples have value to students and helps them learn.	Understands questions or issues that students have about the material.	Uses picture and diagrams to illustrate concepts.	Gives assignments that integrate learning.	
Does not talk down to students.	Does not teach out of the book.	Generates class discussions (vs. PowerPoint presentations).	Gives opportunities to work independently.	
Easy to deal with, talk to, and a good listener.	Course follows logical progression (one step of learning builds on the next).	Gives real examples, tells stories, or from own experience relevant to subject (help retention).	Project focus requiring interdisciplinary work.	
Encourages students and believes in them.	Shows "what's in it for me" (to motivate students want to apply what they learned).	Uses appropriate humor.	Challenges students to think beyond the obvious idea or solution.	
Well organized, thorough.	Goes with the flow of students when it helps learning.	Moves at a fast pace to keep students interested and paying attention.	Creative in assignments given to students.	
Makes students want to come to class.	Organized: information and materials easy to find and use.	Willing to discuss counter-arguments.	Returns assignments quickly.	
Takes constructive criticism and uses it to improve.	Gives many (though-provoking) examples and analogies.	Sticks to the syllabus / schedule.	Quality feedback on work (not just a check with no comments).	
Learns along with the students and continuously educates self.	Challenges students to think critically.	Effectively uses Socratic method.		
Understands students have other classes.	Challenges students to step outside comfort zone / go beyond what students think is possible.	Uses flip chart / white board to illustrate points (vs. all PowerPoint).		
Respects students and identifies with students.	Communicates well at different levels.	Conversational (vs. authoritative) style.		
Teacher is a practitioner on the subject.	Knows latest trends in subject.	Uses simple terms and concepts to explain complicated things.		
Serves as a role model.	Brings in material from multiple sources (material complimentary to book).	Challenges students, but with purpose.		
Patient and fair.	Rigorous.	Requires adherence to instructions.		
Makes learning a pleasant experience.	Gives good answers to questions.	Is concise and to the point.		
Has high expectations of students.	Teaches things their way, rather than by the book.			
Focused on learning, not grades.	Gives lots of practical examples.			
See teaching as a cooperative learning (vs. autocratic) process.	Course is current and refers to things happening at the present time.			
Makes education valuable from student's point of view.	Focuses on things that students are most likely to use.			
Enjoys teaching.	Leaves a positive impression on students.			

What Is Good Quality Teaching?

Key Finding: Survey Results Reveal Teacher Profile for Good Quality Teaching in Higher Education

- Teacher attitude, teaching itself, and delivery have the greatest influence on student's perception of quality.
- Students want teachers to be more engaging and interactive, with less lecture and more hands-on work.
- Students want teachers to balance theory and practice. Teachers' real-world work experience helps students understand the material.
- Students want teachers to abandon traditions that make learning complex, boring, unpleasant, and less effective.

What Is Good Quality Teaching?

Findings Have Implications For:

- Lean Principles and Practices Applied to Teaching
- Teachers Sharing Teaching Methods
- Faculty Qualifications and Hiring
 - Real-World Work Experience
- Training in Lean Teaching

What Is Good Quality Teaching?

- Examine Correlation to The 10 Percent Problem and 45 Teaching Errors
- Good Quality Teaching Helps Correct "The 10 Percent Problem"
 - Give Undergrads More Than 3 or 4 Good Teachers
- Eliminating "45 Teaching Errors" Will Greatly Improve the Quality of Teaching

Routes To Improvement

Individual Effort

Faculty Team Effort (with a department or school)

Institutional Leadership Leads Cross-Functional Teams