

Characteristics of Alternative Grading



Types of Alternative Grading

Competency Based Grading

A method that requires students to demonstrate "competence" on specific objectives often at their own pace [1][4]

Specifications Grading

Final grades are determined based on which **bundle of assignments** a student completes [3][4]

Standards Based Grading

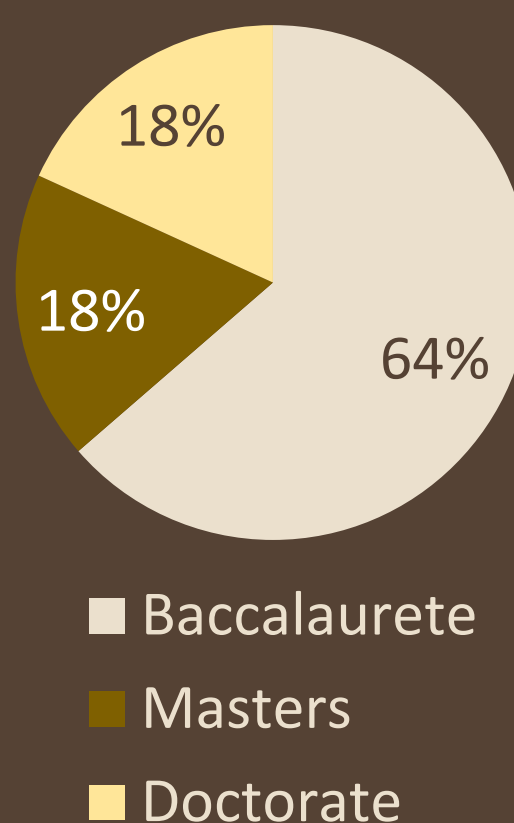
Each assignment or assessment corresponds to **one or more clear and specific standards** [2][4]

Goals of Overall Study

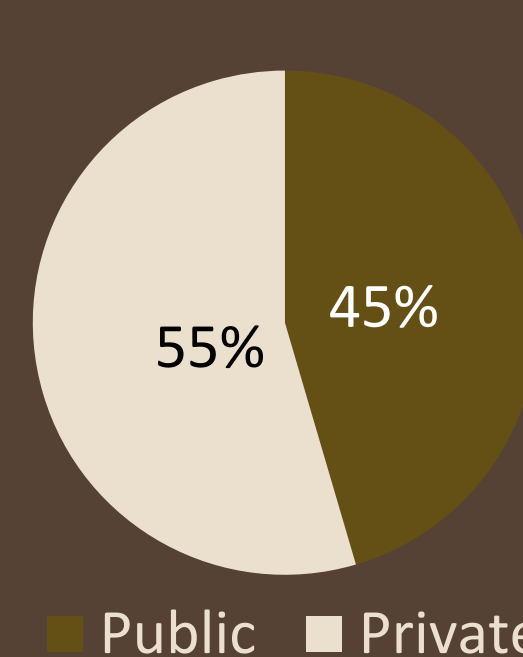
1. Determine what factors play a role in faculty's decision to implement alternative grading
2. Probe more about their implementation process
3. Learn more about others' reactions to their implementation

Settings and Participants

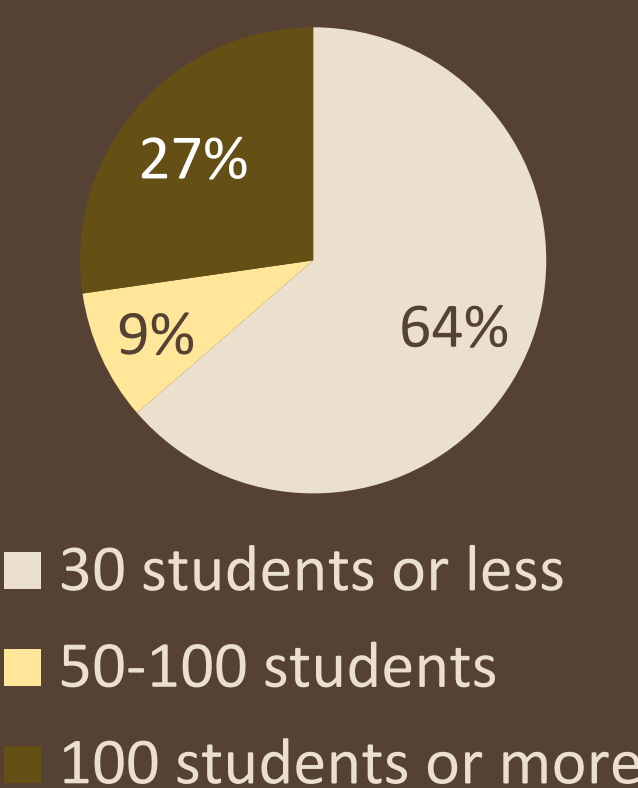
Highest Chemistry Degree Offered



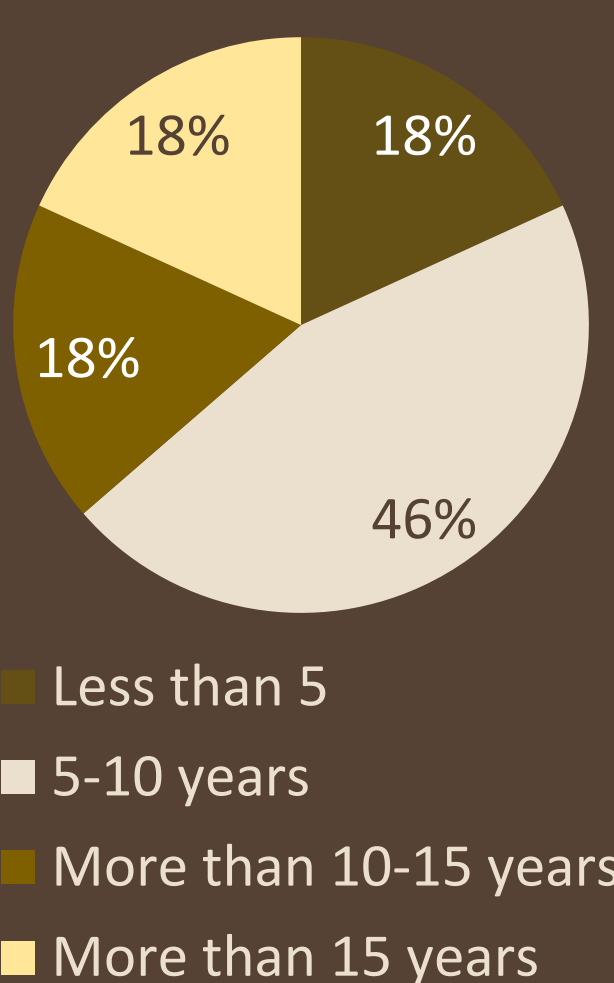
Public and Private Institutions



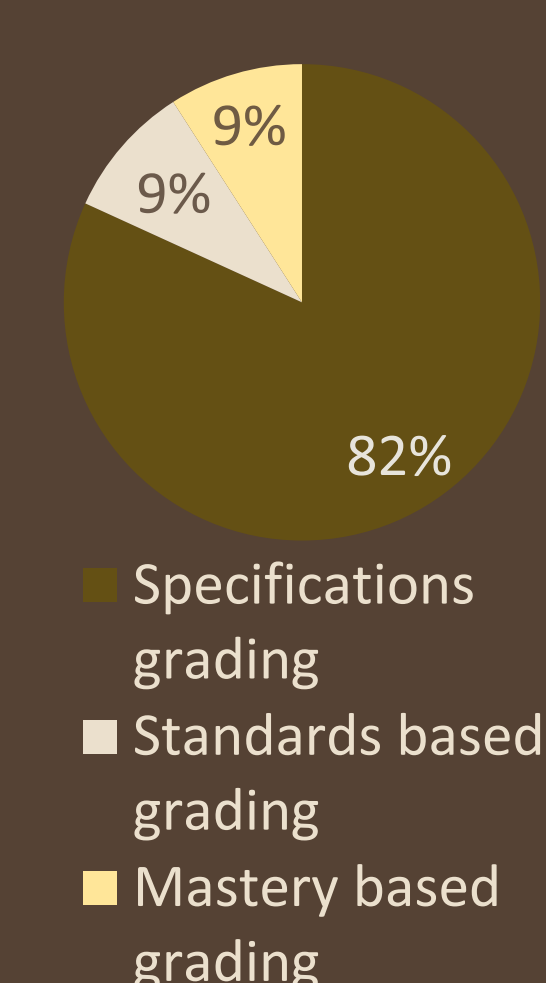
Class Size



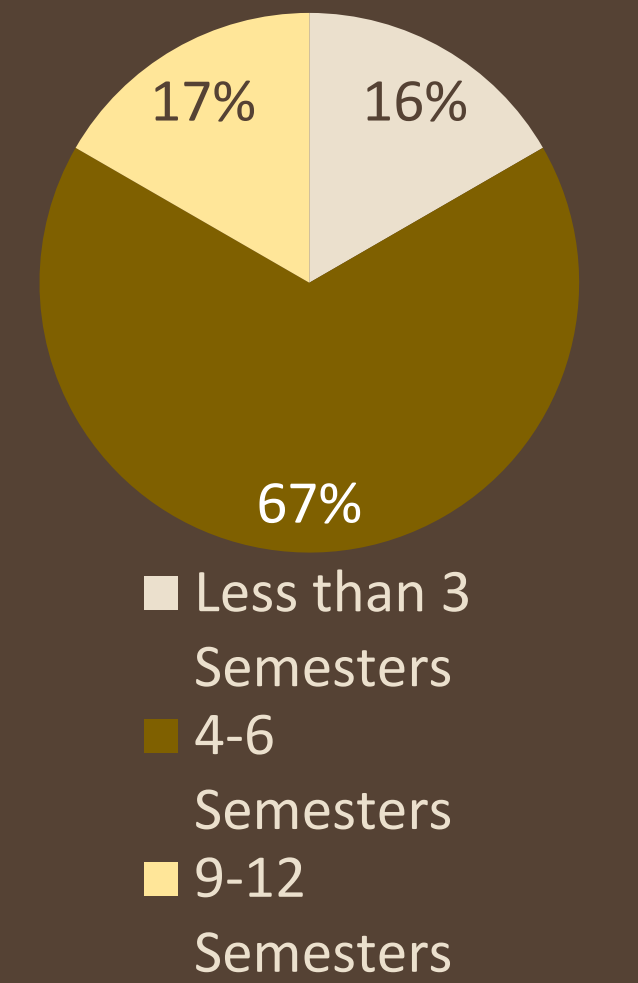
Year Teaching in Higher Education



Type of Alternative Grading



Iterations of Alternative Grading

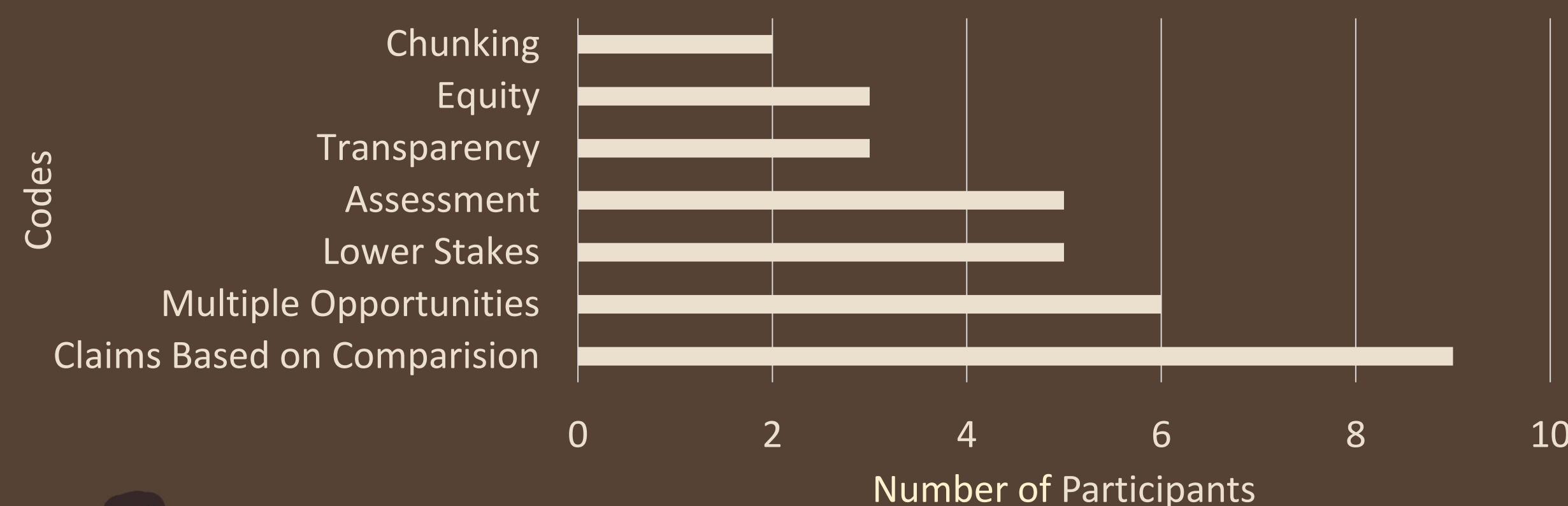


Methods



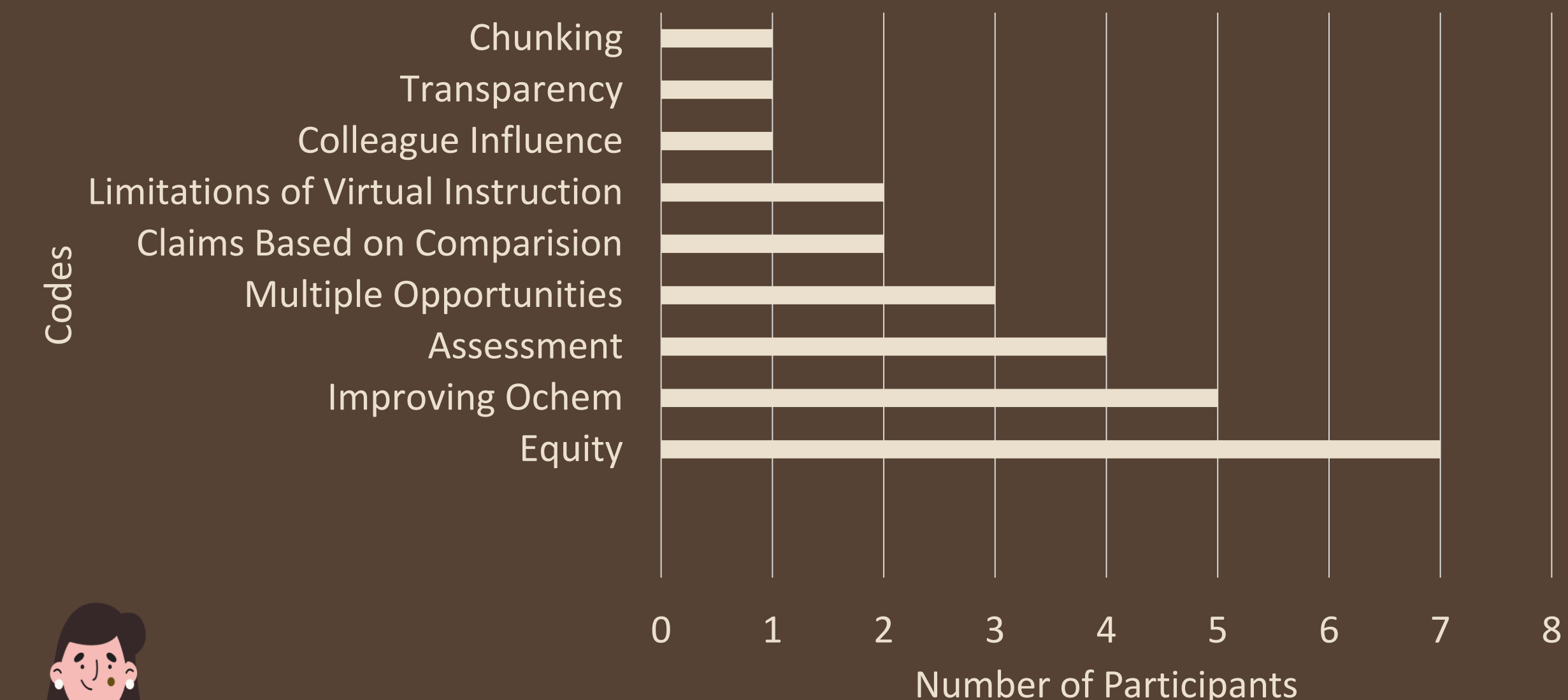
Preliminary Findings and Results

What do you see as the key characteristics of alternative grading or ungrading as a general concept?



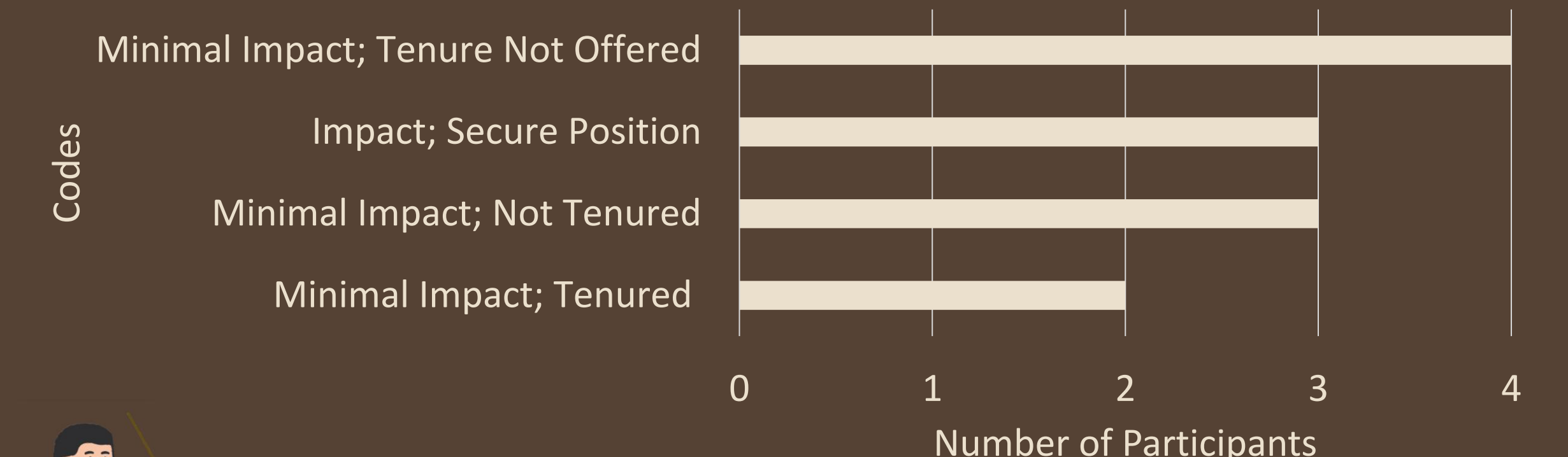
"But I would say, from my viewpoint, alternative grading is anything that shifts assessment from traditional high anxiety exams schedule, into a more holistic assessment of, of learning objectives" -John Doe

What factors were most important to you in deciding to implement alternative grading?



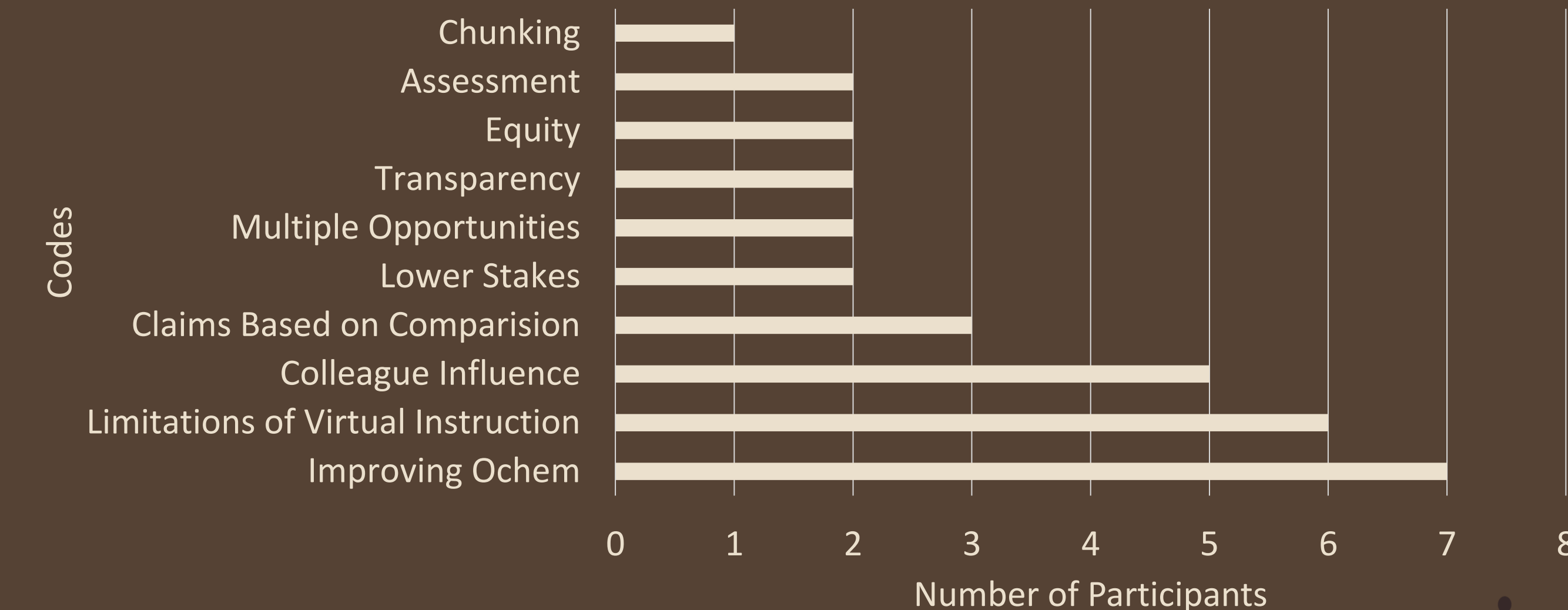
"I think it was, just figuring out ways that I can truly assess what my students knowledge is, and of making sure that they've gained that knowledge" -Jane Doe

How did your faculty appointment affect your decision to implement alternative grading?



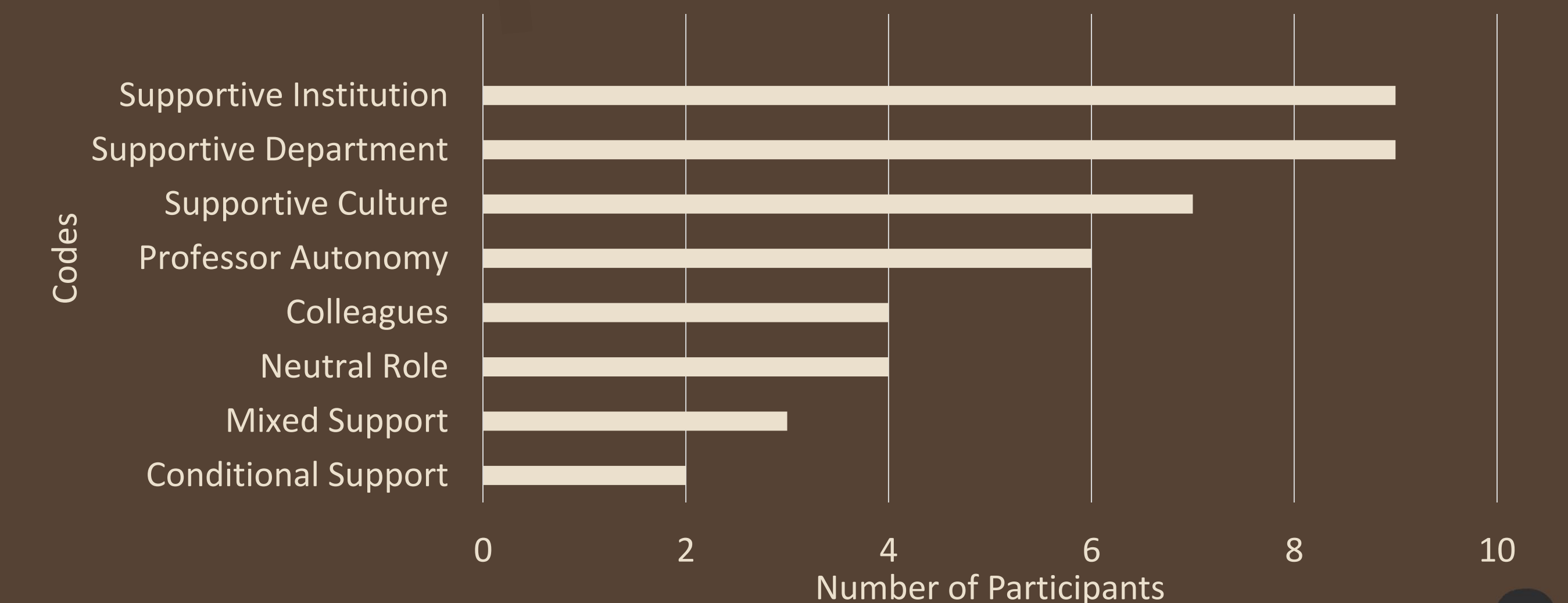
"...nobody in our position has ever been fired. So it's almost a guaranteed type of position as long as you're obviously doing the job, and you don't do anything egregiously wrong. So it's secure, even though on paper it doesn't sound very secure. So that very much helps me feel more confident trying certain things" -Bruce Wayne

What sparked you to implement alternative grading?



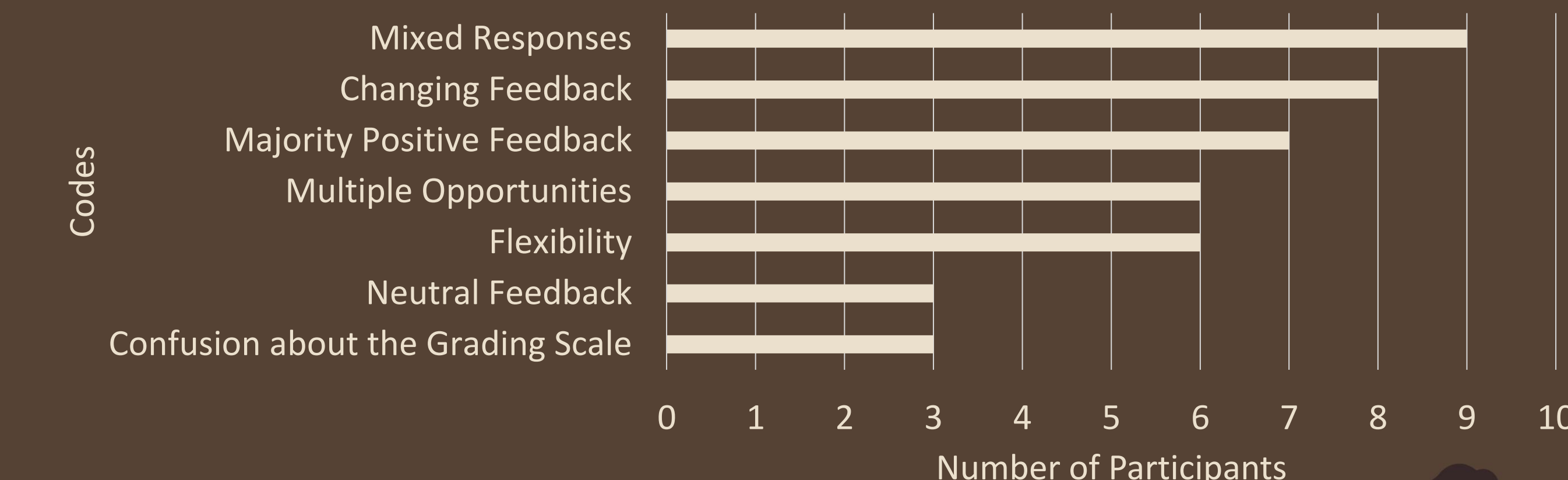
"I think overall it was just the, the fact that students really struggle in Organic I. It's kind of, I mean, it has a massive reputation for being a weed out course for being all sorts of stuff, and just incredibly difficult" -Mr. Clean

How did your departmental and/or institutional culture affect your process of implementing alternative grading? Support level?



"So one of the things that's nice is that I like to say I am the benign lab dictator. So there's a downside to me being the person that controls the labs and teaches lab and, and, and, right? Because that's a huge teaching load. The upside is, I do what I want, and, and nobody really bothers me, right? Because I'm not team teaching with anybody" -Catwoman

How did the students respond or react to your alternative grading practices?



"So, it was, a mixed bag of feelings I would say. So, about 40-45% or so were appreciative of it. They liked it, they thought it was an interesting way to be graded and kind of nice that it was either right or wrong...And then I would say about 40% or so did not like it at all, because they were of the kind of opposite mind" - Bruno Madrigal

Conclusions

- A majority of professors perceive key characteristics of alternative grading as **having multiple assessment opportunities, lower stakes assessments, reverse traditional grading, and having valid assessments.**
- The main factors that sparked alternative grading use were to **improve organic chemistry as a course, limitations due to virtual instruction, collegial influence.**
- The most important deciding factors to faculty in implementing alternative grading were to **increase equity, improve organic chemistry as a course, and valid assessments.**

References

- [1] Ahlberg, L. (2021). Organic Chemistry Core Competencies: Helping students engage using specifications. ACS Symposium Series, 25–36. <https://doi.org/10.1021/bk-2021-1378.ch003>
- [2] Boesdorfer, S. B., Baldwin, E., & Lieberum, K. A. (2018). Emphasizing learning: Using standards-based grading in a large nonmajors' general chemistry survey course. Journal of Chemical Education, 95(8), 1291–1300. <https://doi.org/10.1021/acs.jchemed.8b00251>
- [3] Howitz, W. J., McKinney, K. J., & Link, R. D. (2020). Developing and implementing a specifications grading system in an Organic Chemistry laboratory course. Journal of Chemical Education, 98(2), 385–394. <https://doi.org/10.1021/acs.jchemed.0c00450>
- [4] Talbert, R. (2021, August 30). Finding common ground with grading systems. <https://gradingforgrowth.com/p/finding-common-ground-with-grading>

Future Work

- Finish transcribing and coding the remainder of the interviews
- Survey data was collected after ALOC workshop, which may aid in our analysis

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