**Supplementary Table 5: Codes for measurement of instructor satisfaction**

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| **Code name and individual code kappa** | **Description** | **Example quotes** |
| Comparison to other classes / times  (1.00) | Instructors report their satisfaction in relation to how other classes they’ve taught have performed or behaved | “Attendance in, at lectures is less, always less than what I would hope. And in this semester, this particular group of students, it seems worse than in previous years.”  “This semester is not as good as others, so I wish there was more out there to keep me in check, because sometimes when you are explaining, you zoom through things a little faster one semester than another. It just takes 1 or 2 students to keep you back in check.” |
| Students using clickers  (0.88) | When reporting satisfaction, instructors specifically mention student usage of a clicker system | “Well, I think that some things worked very well and other things didn’t work as well. So I think, for example, that the clicker questions that I picked were good ones because they weren’t easy and they gave me a bimodal distribution, which with discussion we’re able to, I think they learned a lot and then came up with the answer that the question was aimed towards.”  “I asked a clicker questions early this morning. And I saw that I asked, I asked it twice, the first time it came through, I could tell that about 65% of the class had gotten it correct and it was on the idea of penetration and orbital stabilization, relative to other orbitals. And you know, I was reasonably satisfied that they had gotten that right. But we talked about it again and 90% of the class got it right in the end, after we talked about it, because I let them discuss it a little bit. So that was good.” |
| Attendance  (1.00) | Instructors mention the level of student attendance as a factor contributing to their satisfaction | “Yes, I think so, although I’m looking at probably a class of 90 students out of the 137 that were actually there. So there are about 40 or so that didn’t bother to come. So I don’t know what to do about that. But that’s been true every year and it gets worse after spring break.”  “It’s always interesting to me that when I have a review day right before an exam, attendance in lecture is down. Yes, that drives me crazy in the sense of, as a teacher you would think they’d be there for every ounce of review they could get. But as a student, I guess they’ve decided that since it’s nothing new, I’ll just spend that hour studying on my own. And so they’re making that decision. I try not to get too upset about that kind of thing.” |
| Student physical reactions  (1.00) | Instructors use physical cues (such as eye contact, posture, sleepiness, etc.) to explain satisfaction levels | “You know, I’ve learned over the many years of teaching these big lecture courses that, you know, you kind of read, get they, you can look at the eyes, you know of 150 students kind of in a broad stroke or sweep, and if you just said something that doesn’t resonate or sink in, you get this kind of average glazed-over look of the whole class, and I don’t get that often… the students are engaged enough that I can tell from the way they are looking at me, just the eye contact that I’m making in this big lecture format, whether they are getting it or not, and the people seem to be quite engaged.”  “Even if they didn’t volunteer a solo answer, they were nodding along and they, you know, when the whole class would tell me the answer, they were expressing the answer as well, and they weren’t falling asleep either…” |
| Student participation  (0.87) | Instructors report their satisfaction level with an explanation of the level of student involvement and participation in classroom activities | “Students in the first couple of rows are answering questions and responding and interacting, but really, there is very little interaction past row 5 or 6, maybe even row 4…”  “You know, there’s a subset that will respond to questions, but I wish they were more engaged, I wish more of them would respond to the clicker questions. I can’t force them to do that. Yeah, so I wish it were higher, I wish that more people would ask questions.” |