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Teaching Methods Associated with Teacher Clarity

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Teacher clarity is widely considered an essential element of effective teaching (e.g., BrckaLorenz, Cole, Kinzie, & Ribera, 2011; Hativa, Barak, & Simhi, 2001) and student success (Titsworth & Mazer, 2010). The same holds true in the IDEA Student Ratings of Instruction system (SRI). On Diagnostic Feedback (DF), the item "Explained course material clearly and concisely," which IDEA considers a measure of teacher clarity, has consistently been the teaching method most highly correlated with student ratings of "Overall, I rate this instructor an excellent teacher" (Benton & Li, 2015; Benton, Li, Brown, Guo, & Sullivan, 2015; Benton, Webster, Gross, & Pallett, 2010a; Benton, Webster, Gross, & Pallett, 2010b; Hoyt & Lee, 2002). Moreover, teacher clarity is significantly related to how much progress students report on 11 of the 13 IDEA learning objectives (Li & Benton, 2019).

Nonetheless, in spite of decades of research in the fields of instructional communication and educational psychology, lack of consensus remains about which teaching behaviors most exemplify teacher clarity (Titsworth, Mazer, Goodboy, Bolkan, & Myers, 2015). For that reason, we decided to examine which of the other 18 DF teaching methods are most strongly related to the single-item teacher clarity measure.

Method

Data Source
Analyses were performed on IDEA SRI data collected in 86,174 classes from 2016 to 2019. To increase reliability, we restricted the sample to classes with a minimum of 10 responses. To reduce bias introduced by low response rates, we included only classes with a response rate of at least 75%.

Measures
The variables of interest were class-level mean scores on the 19 teaching methods from the DF. The criterion variable was "Explained course material clearly and concisely," and the explanatory variables were the remaining 18 teaching methods. For each item, students rated how frequently the instructor used each method, using the scale 1 = *Hardly ever*, 2 = *Occasionally*, 3 = *Sometimes*, 4 = *Frequently*, and 5 = *Almost always*.

We applied Bayesian Model Averaging, using the *R* package BMS. We used .9 as a cut-off for the posterior effect probability, and posterior mean was set at > .05 to determine which explanatory variables should be included in the model. Table 1 shows the output from the model. The following five teaching methods had coefficients > .05:

- Found ways to help students answer their own questions

- Helped students to interpret subject matter from diverse perspectives (e.g., different cultures, religions, genders, political views)

- Made it clear how each topic fit into the course

- Provided meaningful feedback on students' academic performance

- Introduced stimulating ideas about the subject

Instructors who use the preceding methods frequently tend to receive higher ratings on teacher clarity. Although these relationships are not cause-effect, they provide insight into teacher behaviors that are associated with explaining subject matter in clear and concise ways. To learn more about each of these teaching methods and how they may be implemented in the college classroom, see IDEA *Notes on Instruction* (https://www.ideaedu.org/Resources-Events/Teaching-Learning-Resources/Notes-on-Instruction).

Table 1

Bayesian Model Averaging (BMA) Results for Teaching Methods Associated with Teacher Clarity "10. Explained course material clearly and concisely"

IDEA Teaching Method	Posterior effect probability	Posterior mean
1. Found ways to help students answer their own questions	1	0.312
2. Helped students to interpret subject matter from diverse perspectives (e.g., different cultures, religions, genders, political views)	1	0.067
3. Encouraged students to reflect on and evaluate what they have learned	1	-0.016
4. Demonstrated the importance and significance of the subject matter	0.003	0
5. Formed teams or groups to facilitate learning	1	-0.042
6. Made it clear how each topic fit into the course	1	0.430
7. Provided meaningful feedback on students' academic performance	1	0.220
8. Stimulated students to intellectual effort beyond that required by most courses	1	-0.112
9. Encouraged students to use multiple resources (e.g., Internet, library holdings, outside experts) to improve understanding	1	0.044
11. Related course material to real life situations	1	-0.036
12. Created opportunities for students to apply course content outside the classroom	0	0
13. Introduced stimulating ideas about the subject	1	0.235
14. Involved students in hands-on projects such as research, case studies, or real-life activities	1	-0.067
15. Inspired students to set and achieve goals which really challenged them	1	0.032
16. Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own	1	-0.033
17. Asked students to help each other understand ideas or concepts	1	-0.032
18. Gave projects, tests, or assignments that required original or creative thinking	1	-0.045
19. Encouraged student-faculty interaction outside of class (e.g., office visits, phone calls, email)	1	-0.029

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