

## Sample Publications Kimberly Tanner & Jeff Schinske Co-Facilitators

## San Francisco State University

**EPAL Scientific Teaching Summer Institute** 

\*Ovid, D, \*Rice, MM, Vargas Luna, J, Tabayoyong, K, Lajevardi, P, and Tanner, KD. *Investigating Student Perceptions of Instructor Talk: Alignment with Researchers' Categorizations and Analysis of Remembered Language, CBE Life Sciences Education*, DOI: 10.1187/cbe.21-06-0153, Winter 2021, 20:4. \*these authors contributed equally

Aranda, ML, Diaz, M, Mena, LG, Ortiz, JI, Rivera-Nolan, C, Sanchez, DC, Sanchez, MJ, Upchurch, AM, Williams, CS, Boorstin, SN, Cardoso, LM, Dominguez, M, Elias, S, Lopez, EE, Ramirez, RE, Romero, PJ, Tigress, FN, Wilson, JA, Winstead, R, Cantley, JT, Chen, JC, Fuse, M, Goldman, MA, Govindan, B, Ingmire, P, Knight, JD, Pasion, SG, Pennings, PS, Sehgal, RNM, de Vera, PT, Kelley, L, Schinske, JN, Riggs, B, Burrus, LW, and Tanner, KD. *Student-Authored Scientist Spotlights: Investigating the Impacts of Engaging Undergraduates as Developers of Inclusive Curriculum through a Service-Learning Course, CBE Life Sciences Education*, 20:4, Fall 2021.

Bush SD\*, Stevens MT\*, Tanner KD\*, Williams KS\*. *Disciplinary Bias, Money Matters, and Persistence: Deans' Perspectives on Science Faculty with Education Specialties (SFES). CBE Life Sciences Education* 19, DOI: 10.1187/cbe.19-10-0202, 2020. \*Note: All authors contributed equally and are listed in alphabetical order.

Betz, N., Leffers, J.S., Thor, E.E.D., Fux, M. de Nesnera, K., Tanner, K.D., & Coley, J.D. *Cognitive Construal-Consistent Instructor Language in the Undergraduate Biology Classroom, CBE Life Sciences Education*, DOI:10.1187/cbe.19-04-0076; 18:ar63, 1–16, Winter 2019.

\*Harrison, CD, \*Nguyen, TA, \*Seidel, SB, Escobedo, AM, Hartman, C, Lam, K, Liang, KS, Martens, M, Acker, GN, Akana, SF, Balukjian, B, Benton, HP, Blair, JR, Boaz, SM, Boyer, KE, Bram, JB, Burrus, LW, Byrd, DT, Caporale, N, Carpenter, EJ, Chan, YM, Chen, L, Chovnick, A, Chu, DS, Clarkson, BK, Cooper, SE, Creech, CJ, de la Torre, JR, Denetclaw, WF, Duncan, K, Edwards, AS, Erickson, K, Fuse, M, Gorga, JJ, Govindan, B, Green, LJ, Hankamp, PZ, Harris, HE, He, Z, Ingalls, SB, Ingmire, PD, Jacobs, JR, Kamakea, M, Kimpo, RR, Knight, JD, Krause, SK, Krueger, LE, Light, TL, Lund, L, Márquez-Magaña, LM, McCarthy, BK, McPheron, L, Miller-Sims, VC, Moffatt, CA, Muick, PC, Nagami, PH, Nusse, G, Okimura, KM, Pasion, SG, Patterson, R, Pennings, PS, Riggs, B, Romeo, JM, Roy, SW, Russo-Tait, T, Schultheis, LM, Sengupta, L, Spicer, GS, Swei, A, Wade, JM, Willsie, JK, Kelley, LA, Owens, MT, Trujillo, G, Domingo, C, Schinske, JN, Tanner, KD. *Investigating Instructor Talk in Novel Contexts: Widespread Use, Unexpected Categories, and an Emergent Sampling Strategy, CBE Life Sciences Education*, DOI: 10.1187/cbe.18-10-0215, Fall 2019. \*Note: These authors contributed equally and are listed in alphabetical order.

Bush, S.D.\*, Stevens, M.T.\*, Tanner, K.D.\*, and Williams, K.S.\*, *Evolving Roles of Scientists as Change Agents in Science Education over a Decade: SFES Roles Beyond Discipline-based Education Research*, *Science Advances*, June 2019, DOI: 10.1126/sciadv.aav6403. \*Note: All authors contributed equally and are listed in alphabetical order.

Owens, MT, Trujillo, G, Seidel, SB, Harrison, CD, Blair, JR, Boyer, KE, Breckler, J, Burrus, LW, Byrd, DT, Caporale, N, Carpenter, EJ, Chan, YHM, Chen, L, Chu, DS, Cochlan, WP, Crow, KD, de la Torre, JR, Denetclaw, WF, Dowdy, L, Fuse, M, Goldman, MA, Govindan, B, Green, M, Harris, HE, He, ZH, Ingalls, S, Ingmire, PD, Knight, JS, LeBuhn, G, Leasure, C, LE, Light, TL, Lowe, C, Lund, L, Márquez-Magaña, LM, Miller-Sims, VC, Moffatt, CA, Murdock, H, Nusse, GL, Parker, VT, Pasion, SG, Patterson, R, Pennings, PS, Ramirez, R, Ramirez, J, Riggs, BE, Rohlfs, R, Romeo, J, Rothman, B, Roy, SW, Russo-Tait, T, Sehgal, R, Simonin, K, Spicer, GS, Stillman, JH, Swei, A, L, Vredenberg, V, Weinstein, SL, Zink, A, Kelley, LA, Domingo, CD, Tanner, KD. *Collectively Improving Our Teaching: Attempting Biology Department-wide Professional Development in Scientific Teaching, CBE-Life Sciences Education*, Spring;17(1). pii: ar2. doi: 10.1187/cbe.17-06-0106, 2018. Note: Co-authors include biology faculty collaborators in the SFSU Biology FEST faculty development program.

Schinske, J. N., Balke, V. L., Bangera, M. G., Bonney, K. M., Brownell, S. E., Carter, R. S., ... & Fletcher, L. Broadening participation in biology education research: Engaging community college students and faculty. CBE—Life Sciences Education, 16(2), mr1, 2017.

Potter, LM, Bissonnette, SA, Knight, JD and Tanner, KD. 2017 *Investigating Novice and Expert Conceptions of Genetically Modified Organisms, CBE-Life Sciences Education,* 16:ar52; doi:10.1187/cbe.16-11-0333, 2017.

Richard M, Coley JD, and Tanner KD. 2017 *Investigating undergraduate students' use of intuitive* reasoning and evolutionary knowledge in explanations of antibiotic resistance. *CBE-Life Sciences Education*, Sep 21;16(3):ar55, 2017.

Owens, MT\*, Seidel, SB\*, Wong, M\*, Bejines, TE, Lietz, S, Perez, JR, Sit, S, Subedar, ZS, Acker, GN, Akana, SF, Balukjian, B, Benton, HP, Blair, JR, Boaz, SM, Boyer, KE, Bram, JB, Burrus, LW, Byrd, DT, Caporale, N, Carpenter, EJ, Chan, YHM, Chen, L, Chovnick, A, Chu, DS, Clarkson, BK, Cooper, SE, Creech, C, Crow, KD, de la Torre, JR, Denetclaw, WF, Duncan, KE, Edwards, AS, Erickson, KL, Fuse, M, Gorga, JJ, Govindan, B, Green, LJ, Hankamp, PZ, Harris, HE, He, ZH, Ingalls, S, Ingmire, PD, Jacobs, JR, Kamakea, M, Rhea R. Kimpo, Knight, JD, Krause, SK, Krueger, LE, Light, TL, Lund, L, Márquez-Magaña, LM, McCarthy, BK, McPheron, LJ, Miller-Sims, VC, Moffatt, CA, Muick, PC, Nagami, PH, Nusse, GL, Okimura, KM, Pasion, SG, Patterson, R, Pennings, PS, Riggs, BE, Romeo, J, Roy, SW, Russo-Tait, T, Schultheis, LM, Sengupta, L, Small, R, Spicer, GS, Stillman, JH, Swei, A, Wade, JM, Waters, SB, Weinstein, SL, Willsie, JK, Wright, DW, Harrison, CD, Kelley, LA, Trujillo, G, Domingo, CR, Schinske, JN, Tanner, KD. *Classroom Sound Can Be Used To Classify Teaching Practices in College Science Courses, Proceedings of the National Academy of Sciences,* 114 (12) 3085-3090, doi:10.1073/pnas.1618693114, 2017. \*these authors contributed equally Note: Co-authors are biology faculty collaborators in the community college CCB FEST and SFSU Biology FEST professional development programs.

Bush, S.D., Stevens, M.T., Tanner, K.D.\*, and Williams, K.S., *Origins of Science Faculty with Education Specialties: Hiring Motivations and Prior Connections Explain Institutional Differences in the SFES-Phenomenon, BioScience*, 67(5): 452–63, 2017. \*Note: All authors contributed equally and are listed in alphabetical order

Bissonnette, S. A., Combs, E. D., Nagami, P. H., Byers, V., Fernandez, J., Le, D., Realin, J., Woodham, S., Smith, J.I., and Tanner, K. D. *Using the Biology Card Sorting Task to Measure Changes in Conceptual Expertise during Postsecondary Biology Education. CBE-Life Sciences Education*, 16(1), ar14, 2017.

Coley, J.D., Arenson, M., Xu, Y., & Tanner, K.D. *Intuitive biological thought: Developmental changes and effects of biology education in late adolescence. Cognitive Psychology, 9*2, 1-21, 2017.

Schinske, J. N., Perkins, H., Snyder, A., & Wyer, M. *Scientist Spotlight homework assignments shift* students' stereotypes of scientists and enhance science identity in a diverse introductory science class. *CBE—Life Sciences Education*, 15(3), ar47, 2016

Krieter, F.E., Julius, W., Tanner, K.D., Bush, S.D., and Scott, G.E. *Thinking Like a Chemist: Development of a Chemistry Card-Sorting Task to Probe Conceptual Expertise, Journal of Chemical Education,* 93 (5), pp 811–20, 2016.

Bush, S.D., Rudd, J.A., Stevens, M.T., Tanner, K.D.\*, and Williams, K.S., *Fostering Change from Within: Influencing Teaching Practices of Departmental Colleagues by Science Faculty with Education Specialties, PLoS One,* 11(3): e0150914. \*Note: All authors contributed equally and are listed in alphabetical order

Seidel, S.B., Reggi, A.L., Schinske, J.N., Burrus, L.W., and Tanner, K.D. *Beyond the Biology: A Systematic Investigation of Non-Content Instructor Talk in an Introductory Biology Course, CBE: Life Sciences Education*, 1:1-14, 2015.

Schinske J, Cardenas M, Kaliangara J. *Uncovering scientist stereotypes and their relationships with student race and student success in a diverse, community college setting. CBE Life Sci Educ* 14, ar35, 2015.

Bush, S.D., Pelaez, N. J., Rudd, J.A., Stevens, M.T., Tanner, K.D.\*, and Williams, K.S. *Widespread Distribution and Unexpected Variation among Science Faculty with Education Specialties (SFES) across the United States, Proc. National Academy of Sciences,* 110 (18): 7170-7175, 2013.

Smith, J.I., Combs, E.D., Nagami, P.H., Alto, V.M., Goh, H.G., Gourdet, M.A.A., Hough, C.M., Nickell, A.E., Peer, A.G., Coley, J.D., and Tanner, K.D. *Development of the Biology Card Sorting Task to Measure Conceptual Expertise in Biology*, CBE: Journal of Life Sciences Education, 12:628-644 2013.

Bush, S.D., Pelaez, N. J., Rudd, J.A., Stevens, M.T., Tanner, K.D.\*, and Williams, K.S. *Science Faculty with Education Specialties: A Cross-Disciplinary Research Study, Science*, 322:1795-6, December 19, 2008.