

**Learning through coteaching in early childhood clinical field experiences:
A cross-case study of learning affordances**

Jennifer Gallo-Fox
gallofox@udel.edu

Lauren Stegeman
stegeman@udel.edu

Department of Human Development and Family Studies
University of Delaware
Newark, DE 19350

WORK-IN-PROGRESS: PLEASE DO NOT CITE WITHOUT PERMISSION

Paper presented at American Education Research Association (AERA) Annual
Meeting, San Antonio TX, April 2017

Abstract

Coteaching, a model for learning to teach, places teacher candidates alongside clinical educators in classrooms. Learning occurs through shared practice and on-going explication of thinking and reflection. This cross-case study of six dyads from an undergraduate early childhood inclusive education program examines ways that coteaching afforded opportunities for collaborative and adaptive expertise. It was found that opportunities for learning these skills were afforded through coteaching student teaching experiences although in different ways. Implications for further development of the early childhood coteaching teacher education model, and for professional development are discussed.

Conclusion

Across the data, coteaching practices afforded opportunities to develop life-long learning practices albeit in different ways and to different degrees by dyad. While 57% of dyad exchanges reflected weak interactions, evidence shows all dyads participated in coteaching opportunities to develop collaborative practice and adaptive expertise. Findings show variability across the dyads, particularly in regard to the following factors: the amount of time spent in coplanning and debriefing meetings and the depth of their conversations, the nature of their discourse patterns, the degree to which they explicated their thinking, the nature and extent to which dyads engaged in coteaching practices, the structure of programs (children's needs, contact time with children), and the developmental needs of the teacher candidates and other classroom educators.

This research study examines coteacher practice during the first formal semester of coteaching implementation. Dyad implementation of the coteaching model varied, seemingly according to the ways that participants interpreted the nature of mentoring and the nature of the coteaching model. There was evidence of traditional student teaching practices mixed with collaborative learning opportunities. Despite this, coteachers engaged in most of the coteaching practices we have identified as supporting the development of adaptive expertise and collaborative expertise, and 43% of these exchanges reflected strong learning affordances.

While there was variability regarding the depth of teacher talk and explication of rationales and teacher thinking, all dyads evidenced strong examples. Research on the development of teacher educators across the professional continuum (Feiman-Nemser, 1998), the Professional Learning Standards (Killion & Crow, 2011) and CAEP standards (2013) highlight the ongoing importance of the development of teacher educators who can mentor and support other teachers across the career ladder. We strongly believe that in order to strengthen situated learning within coteaching models, we must foster the continued development of clinical educators who can model and support teacher candidates' deep reflective thinking and the enhanced articulation of teacher decision-making.

While all coteachers received professional development about coteaching, implementation varied and additional support is needed to strengthen situated coteaching learning opportunities. Supervisors work with dyads weekly and can help facilitate enhanced coteaching interactions. We are developing instruments to support dyad and

triad reflection about their shared practice and coteaching meetings. Because we have limited resources to support coteaching professional development, a constant rotation of clinical educators in many schools throughout the region, and budget restrictions decreasing supervisor support in the field, we need to develop low-cost, easy-to-use instruments that can support enhanced coteaching practices and metacognitive discussions focused on student learning. These instruments will build on the continuum of quality, as evidenced in this study, to provide benchmarks and exemplars for practice. We believe that on-going benchmarking of practice across a continuum of development will help leverage teacher discussion and strengthen learning.

There is also warrant for follow-up study of the coteaching program now that we are in the fourth year of implementation. Work is needed to examine coteaching practice now that clinical educators and supervisors have had multiple opportunities to engage in coteaching with student teachers and learn about the model. Additionally, the ECE program has been revised; we have lengthened the student teaching experience and also strengthened emphasis on use of child data particularly during an advanced curriculum course that teacher candidates take while student teaching. This new course emphasizes the reflexive cycle of data collection, a focus on student learning, and curriculum planning.

References

- Bacharach, N., Heck, T. W., & Dahlberg, K. (2010). Changing the face of student teaching through co-teaching. *Action in Teacher Education*, 32(1), 3-14. doi: 10.1080/01626620.2010.10463538.
- Baeten, M. & Simons, S. (2016) Student teachers' team teaching: How do learners in the classroom experience team-taught lessons by student teachers? *Journal of Education for Teaching*, 42:1, 93-105, doi: 10.1080/02607476.2015.1135226
- Berke, K., Heroman, C, Tabors, P.O., Bickart, T., & Burts, I. (2010). *Teaching Strategies GOLD® Assessment System*. Bethesda, MD: Teaching Strategies, LLC.
- Bransford, J. D., & Schwartz, D. (1999). Rethinking transfer: a simple proposal with multiple implications. *Review of Research in Education*, 3(24), 61-100.
- Cobb, P., Confrey, J., diSessa, A., Lehrer, R. & Schauble, L. (2003). Design experiments in educational research. *Educational Researcher*, 3(1), 9-13.
- Cook, L., & Friend, M. (1995). Co-Teaching: Guidelines for creating effective practices. *Focus on Exceptional Children*, 28(3), 1-17.
- Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. Washington, D.C.: National Association for the Education of Young Children.
- Council for the Accreditation of Educator Preparation (CAEP). (2013). 2013 CAEP Standards.
- Feiman-Nemser, S. (1998). Teachers as teacher educators. *European Journal of Teacher Education*, 21(1), 63-74. doi: 10.1080/0261976980210107.
- Hatano, G., & Oura, Y. (2003). Commentary: Reconceptualizing school learning using insight from expertise research. *Educational Researcher*, 32(8), 26-29. doi.org/10.3102/0013189X032008026

- Hayden, E.H., Rundell, T.D. & Smyntek-Gworek, S. (2013). Adaptive expertise: a view from the top and the ascent, *Teaching Education*, 24(4), 395-414, doi: 10.1080/10476210.2012.724054
- Hutchins, E. (1995). *Cognition in the wild*. Cambridge, MA: MIT Press.
- Im, S. & Martin, S. N. (2015): Using cogenerative dialogues to improve coteaching for language learner (LL) students in an inclusion science classroom, *Asia-Pacific Journal of Teacher Education*, doi: 10.1080/1359866X.2015.1060295
- Jordan, M.E. (2016). Teaching as Designing: Preparing pre-service teachers for adaptive teaching, *Theory Into Practice*, 55:3, 197-206, doi: 10.1080/00405841.2016.1176812
- Killion, J. & Crow, T.L. (2011). *Standards for professional learning*. Oxford, OH: Learning Forward.
- Kinne, L. J., Ryan, C., & Faulkner, S. A. (2016). Perceptions of co-teaching in the clinical experience: How well is it working?, *The New Educator*. doi: 10.1080/1547688X.2016.1196802
- Lave, J., & Wenger. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
doi.org/10.1017/CBO9780511815355
- Lin, X., Schwartz, D., & Hatano, G. (2005). Towards teachers adaptive metacognition. *Educational Psychologist*, 40(4), 245-255.
- Martin, S. (2008). What is necessary, may not be sufficient: An analysis of collaborative models for learning to teach science. *World of science education: North America. The Netherlands: Sense Publishers*.
- McCullagh, J. & Doherty, A. (2014). Coteaching as a methodology for developing reflective practice. Paper presentation for the British Educational Research Association Annual Conference in London, UK.
- Miles, M. B., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.) Thousand Oaks, CA: SAGE.
- Murphy, C. & Beggs, J. (2010). A five-year systematic study of coteaching science in 120 primary schools. In C. Murphy & K. Scantlebury (Eds.), *Coteaching in international contexts: Moving forward and broadening perspectives*. (pp. 11-34). New York: Springer Publishing. doi: 10.1007/978-90-481-3707-7_2.
- Murphy, C., Beggs, J., Carlisle, K., & Greenwood, J. (2004). Students as 'catalysts' in the classroom: the impact of co-teaching between science student teachers and primary classroom teachers on children's enjoyment and learning of science. *International Journal of Science Education*, 26(8), 1023-1035.
- National Council for Accreditation of Teacher Education (NCATE). (2010). *Blue ribbon panel on clinical preparation and partnerships for improved student learning: Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Washington, D.C.: National Council for Accreditation of Teacher Education.
- Nilsson, P. & van Driel, J. (2010). Teaching together and learning together – Primary science student teachers' and their mentors' joint teaching and learning in the primary classroom. *Teaching and Teacher Education*, 26, 1309-1318. doi: 10.1016/j.tate.2010.03.009.

- Nilsson (2015). Catching the moments – coteaching to stimulate science in the preschool context. *Asian Pacific Journal of Teacher Education*, doi: 10.1080/1359866X.2015.1060292
- Nokes, J. D., Bullough, R. V. J., Egan, M. W., Birrell, J. R., & Hansen, J. M. (2008). The paired-placement of student teachers: An alternative to traditional placements in secondary schools. *Teaching and Teacher Education*, 24, 2168-2177.
- Orlikowski, W. J. (2002). Knowing in practice: Enacting a collective capability in distributed organizing. *Organization Science*, 13(3), 249-273.
- Parsons, S.A. & Vaughn, M. (2016). Toward adaptability: Where to from here? *Theory Into Practice*, 55(3), 267-274, doi: 10.1080/00405841.2016.1173998
- Rogoff, B., Baker-Sennett, J., Lacasa, P., & Goldsmith, D. (1995). Development through participation in sociocultural activity. *New Directions for Child Development* (67), 45-65.
- Roth, W.-M., Masciotra, D., & Boyd, N. (1999). Becoming-in-the-classroom: A case study of teacher development through coteaching. *Teaching and teacher education*, 15, 771-784.
- Roth, W.-M., & Tobin, K. (Eds.). (2002). At the elbow of another: Learning to teach by coteaching (Vol. 204). New York, NY: Peter Lang.
- Roth, W. M., Tobin, K., Carambo, C., & Dalland, C. (2005). Coordination in coteaching: Producing alignment in real time. *Science Education*, 89(4), 675-702.
- Russ, R.S., Sherin, B.L & Sherin, M.G. (2016). What constitutes teacher learning? In D.H. Gitomer & C.A. Bell (Eds.), *Handbook of Research on Teaching*. (5th ed.). Washington, D.C.: American Educational Research Association. 391-438.
- Scantlebury, K., Chismar, K., Gleason, S., Craig, K., & Juck, M. (2015). *Huddle up: enactment of coteaching in science classes*. Poster presented at the National Association of Research in Science Teaching (NARST) Annual Meeting, Chicago, IL.
- Soslau, E. (2012). Opportunities to develop adaptive teaching expertise during supervisory conferences. *Teaching and Teacher Education*, 28, 768-779. doi:10.1016/j.tate.2012.02.009
- Tobin, K. (2006). Learning to teach through coteaching and cogenerative dialogue. *Teaching Education*, 17(2), 133–142. doi:10.1080/10476210600680358
- Tobin, K., & Roth, W.-M. (2005). Coteaching/cogenerative dialoguing in an urban science teacher preparation program. In W.-M. Roth & K. Tobin (Eds.), *Teaching together, learning together* (pp. 59-77). New York, NY: Peter Lang.
- Vangrieken, K., Dochy, F., Raes, E., & Kyndt, E. (2015). Teacher collaboration: A systematic review. *Educational Research Review* 15, 17–40.
- Wassell, B. & LaVan, S.K. (2009). Tough transitions? Mediating beginning urban teachers' practices through coteaching. *Cultural Studies of Science Education*, 4(2), 477-484.
- Wassell, B. & Stith, I. (2007). *Becoming an urban physics and math teacher: Infinite potential*. Dordrecht, The Netherlands: Springer Academic Publishers.
- Willis, L. & Ritchie, S. (2010). Parents as coteachers of science and technology in a middle-school classroom. In C. Murphy & K. Scantlebury (Eds.) *Coteaching in international contexts: Research and practice* (pp. 281-304). London: Springer Publishing.