CURRICULUM VITAE
MIDO CHANG

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EDUCATION

Degree	Institution	Field	Dates
Ph.D.	Teachers College, Columbia University New York, NY	Measurement, Evaluation, & Statistics	May 2004
M.S.	Teachers College, Columbia University New York, NY	Applied Statistics	May 2002
M.Ed.	Rutgers, NJ State University New Brunswick, NJ	Teaching English as a Second Language	May 2002

FULL-TIME ACADEMIC EXPERIENCE

Institution	Rank	Field	Dates
FIU	Professor	Educational Research Methodology	Aug. 2017-Present
FIU	Associate Professor	Educational Research Methodology	Jan. 2013-Jul. 2017
Virginia Tech	Associate Professor	Educational Research & Evaluation	Aug. 2010-Dec. 2012
Virginia Tech	Assistant Professor	Educational Research & Evaluation	Aug. 2004-Aug. 2010

NON-ACADEMIC EXPERIENCE

Place of Employment	Title	Dates
South Korea	Teacher	Feb. 1987-Jun. 1992

EMPLOYMENT RECORD AT FIU

	Rank		Dates
FIU	Professor	Educational Research Methodology	Aug. 2017-Present
FIU	Associate Professor	Educational Research Methodology	Jan. 2013-Jul, 2013

PUBLICATIONS IN DISCIPLINE

Peer-Reviewed Articles

51. Clovis, M., & **Chang, M.** (in press). Effects of academic momentum on degree attainment for students beginning college at 2-year institutions. *Journal of College Student Retention: Research, Theory & Practice.* [SCOPUS Impact Factor: 0.241]

50. Cohen, S. & **Chang, M.** (2018). Science achievement: A view thorough affective and demographic lenses. *Educational Studies.* doi.org/10.1080/03055698.2018.1555455. [SSCI Impact Factor: 0.5]

49. Bang, H., **Chang, M**., & Lee, C. (in press). Racial and linguistic status differences in the effect of interscholastic sport participation on school engagement and academic performance among high school students. *Psychological Reports.* [SSCI Impact Factor: 0.667]

48. Bang, H., **Chang, M.**, Lee, C., & Kim, S. (in press). Sport participation, locus of control, and academic performance among early adolescents: Racial and linguistic status differences. Manuscript submitted for publication of *Sociological Spectrum.* [SSCI Impact Factor: 0.72]

47. Nam, J. & **Chang, M.** (2018). Effectiveness of dropout prevention program using propensity score matching: Is trust in teachers a turning point in zero-tolerance policies? *International Review of Public Administration. Doi.org/*10.1080/12294659.2018.1473942. [SCOPUS Impact Factor: 0.7]

46. Kim, H., Lee, S., Cheon, J., Hong, S., & **Chang, M.**, (2018). A comparative study to identify factors of caregiver burden between baby boomers and post baby boomers: a secondary analysis of a US online caregiver survey. *BMC Public Health 18:*579. doi.org/10.1186/s12889-018-5488-4. [SSCI Impact Factor: 2.814]

45. Kim, S., **Chang, M**., & Park, J. (2018). Survival analysis for Hispanic ELL students' access to postsecondary schools: Discrete Model or Cox Regression? *International Journal of Research & Method in Education. 4*(5), doi 10.1080/1743727X.2017.1307956. [SCOPUS Impact Factor: 0.327]

44. Kim, S., **Chang, M.,** Deater-Deckard, K., Evans, M., Norton, A., & Samur, Y. (2017). Educational Games and Students' Game Engagement in Elementary

School Classrooms. *Journal of Computers in Education. 4*(4), 395-418. doi.org/10.1007/s40692-017-0095-4. [SCOPUS Impact Factor: 0.526]

43. Kim, S., **Chang, M**., Choi, N., Park, J., & Kim, H. (2017). Direct and indirect effects of computers on student success in mathematics. *International Journal of Cyber Behavior, Psychology and Learning. 6*(3), 48-64. doi: 10.4018/IJCBPL.2016070104. [SCOPUS Impact Factor: 0.294]

42. **Chang, M.,** Choi, N., & Kim, S. (2015). School involvement of parents of linguistic and racial minorities and their children's mathematics performance. *Educational Research and Evaluation: An International Journal on Theory and Practice, 21*(3), 209-231. doi: 10.1080/13803611.2015.1034283. [SCOPUS Impact Factor: 0.524]

41. **Chang, M.,** Evans, M., Kim, S., Norton, A., & Samur, Y. (2015). Differential effects of learning games on mathematics proficiency. *Educational Media International, 52*(1), 47-57. doi: 10.1080/09523987.2015.1005427. [SCOPUS Impact Factor: 0.448]

40. **Chang, M**., Evans, M., Kim, S., Norton, A., Deater-Deckard, K., & Samur, Y. (2015). The effects of an educational video game on mathematical engagement. *Education and Information Technologies. 21*(5), 1283-1297. doi: 10.1007/s10639-015-9382-8**.** [SCOPUS Impact Factor: 0.409]

39. Kim, S., **Chang, M.**, Singh, K. & Allen, K. (2015). Patterns and factors of high school dropout risks of racial and linguistic groups. *The Journal of Education for Students Placed at Risk, 20(4)*, 336-351. doi: 10.1080/10824669.2015.1047019. [SCOPUS Impact Factor: 0.247]

38. Choi, N., **Chang, M.,** Kim, S., & Reio, T. (2015). A structural model of parent involvement with demographic and academic variables, *Psychology in the Schools, 52*(2), 154-167. doi: 10.1002/pits.21813. [SSCI Impact Factor: 0.761]

37. Evans, M., Nino, M., Deater-Deckard, K., & **Chang, M.** (2015). School-wide adoption of a mathematics learning game in a middle grades setting: Using the TPACK framework to analyze effects on practice, *The Asia Pacific Education Journal*. doi: 10.1007/s40299-014-0225-y. [SCOPUS Impact Factor: 0.362]

36. Deater-Deckard, K., El Mallah, S., **Chang, M**., Evans, M. A., & Norton, A. (2014). Student behavioral engagement during mathematics educational video game instruction with 11-14 year olds. *International Journal of Child-Computer Interaction, 2*, 101-108. [SCOPUS Impact Factor: 0.382]

35. Evans, M., Pruett, J., **Chang, M.,** & Nino, M. (2014). Designing personalized learning products for middle school mathematics: The case for networked learning games. *Journal of Educational Technology System, 42*(3), 235-254.

34. Evans, M., Norton, A., **Chang, M.**, Deater-Deckard, K., & Balci, O. (2014). Youth and video games: Exploring effects on learning and engagement. *Zeitschrift für Psychologie, 221*(2), 98-106. doi: 10.1027/2151-2604/a000135. [SCOPUS Impact Factor: 0.305]

33. Norton, A., Wilkins, J. L. M., Evans, M. A., Deater-Deckard, K., Balci, O., & **Chang,**

M. (2014). Technology helps students transcend part-whole concepts. *Mathematics Teaching in the Middle School*, *19*(6), 352-358.

32. Deater-Deckard, K., **Chang, M.**, & Evans, M. (2013). Engagement states and learning from educational computer games. *New Directions in Child and Adolescent Development, 139, 21-30.*

31. Mo, Y., Singh, K., & **Chang, M.** (2013). Opportunity to learn and student engagement: A HLM study on eighth grade science achievement. *Educational Research for Policy and Practice*, *12*, 3-19. [SCOPUS Impact Factor: 0.224]

30. **Chang, M.** (2011). Academic performance of language minority students and all-day kindergarten: A longitudinal study. *School Effectiveness and School Improvement*. *23*(1), 1-28. [SSCI Impact Factor: 1.237]

29. Kim, H., **Chang, M.,** Rose, K.M., & Kim, S. (2011). Predictors of caregiver burden in caregivers of individuals with dementia: Findings from National Survey of National Alliance for Caregiving. *Journal of Advanced Nursing, 68*(4), 846-855. [SSCI Impact Factor: 1.741]

28. Kniola, D., & **Chang, M.** (2011). Transformative graduate education programs: an analysis of impact on STEM and non-STEM Ph.D. completion. *Higher Education, 63*(4), 473-495. [SSCI Impact Factor: 1.151]

27. Choi, N., & **Chang, M.**, (2011). Interplay among school climate, gender, mathematics attitude, and mathematics performance of middle school students. *Middle Grade Research Journal, 6*(1), 15-28.

26. Kim, S., & **Chang, M.**, & Kim, H. (2011). Does teacher educational training help the early math skills of immigrant children? *Children and Youth Services Review, 33,* 732-740. [SSCI Impact Factor: 1.431]

25. Tickle, B., **Chang, M**., & Kim, S. (2011). Administrative support and its mediating effect on US public school teachers. *Teaching and Teacher Education, 27,* 341-349. [SSCI Impact Factor: 1.684]

24. **Chang, M**., Singh, K., Sung, Y., & Kim, S. (2010). How do schools and teachers affect immigrant students' science performance? *International Journal of Arts & Science* (ACIJAS*), 3*(17). 38-46.

23. Kim, S., & **Chang, M.** (2010). Computer games for the math achievement of diverse students. *Educational Technology and Society, 13*(3), 224-232. [SSCI Impact Factor: 1.376]

22. Kim, S., & **Chang, M.** (2010). Does computer use promote the mathematical proficiency of ELL students? *Journal of Educational Computing Research, 42*(3), 285-305. [SSCI Impact Factor: 0.670]

21. Singh, K., **Chang, M.**, & Dika, S. (2010). Ethnicity, self-concept, and school belonging: Effects on school engagement. *Educational Research for Policy and Practice. 9*(3), 159-175. [SCOPUS Impact Factor: 0.224]

20. Sung, Y., **Chang, M.** (2010). Which social skills predict academic performance of elementary school students? *Journal of Educational Psychology, 3*(3), 23-34.

19. Wages, J.G., Jackson, S. F., Bradshaw, M. H., **Chang, M.**, & Estabrooks, P.A., (2010). Different strategies contribute to community physical activity program participation in rural versus metropolitan settings. *American Journal of Health Promotion. 25*(1), 36-39. [SSCI Impact Factor: 1.547]

18. **Chang, M.**, & Kim, S. (2009). Computer access and computer use for science performance of ethnic and linguistic minority student. *Journal of Educational Computing Research, 40*(4), 457-489. [SSCI Impact Factor: 0.670]

17. **Chang, M.**, Park, B., & Kim, S. (2009). Parenting classes, parenting behavior and child cognitive development in Early Head Start: A longitudinal model. *School Community Journal, 19*(1), 157-176.

16. **Chang, M.**, Park, B., Singh, K., & Sung, Y. (2009). Parental involvement, parenting behaviors, and children's cognitive development in low-income and minority families. *Journal of Research in Childhood Education, 23*(3), 309-324. [SCOPUS Impact Factor: 0.318]

15. **Chang, M.**, Singh, K., & Filer, K. (2009). Language factors associated with achievement grouping in math classrooms: A cross-sectional and longitudinal study. *School Effectiveness and School Improvement, 20*(1), 27-45. [SSCI Impact Factor: 1.237]

14. **Chang, M.,** Singh, K. *Filer, K.*, & *Sung, Y.* (2009). All day kindergarten and academic performance of racial minority students in the USA. *Journal of Educational Psychology, 3*(2), 33-43.

13. Filer, K., & **Chang, M.** (2009). The encouragement of early algebra by parents and peers: A critical examination of the differential effects on mathematics achievement. *Journal of Research in Education, 19,* 1-20. [SCOPUS Impact Factor: 0.238]

12. Kwon, H., & **Chang, M.** (2009). Technology teachers' belief about biotechnology and its instruction in South Korea. *Journal of Technology Studies, 35*(1), 67-75.

11. **Chang, M.** (2008). Teacher instructional practices and language minority students: A longitudinal model. *Journal of Educational Research, 102*(2), 83-98. [SSCI Impact Factor: 1.307]

10. **Chang, M.**, Driscoll, L. G., & Sung, Y. (2008). Does attending an all-day kindergarten have an effect on mathematics achievement? *International Journal of Interdisciplinary Social Sciences. 3*(4), 219 -230.

9. **Chang, M.**, Kim, S., & Singh, K. (2008). The computer use of ethnic and linguistic minority students and academic performance. *International Journal of Learning, 15*(1), 245-254.

8. **Chang, M**., & Singh, K. (2008). Is all-day kindergarten better for children's academic performance? Evidence from the early childhood longitudinal study. *The Australian Journal of Early Childhood, 33*(4), 35-42. [SCOPUS Impact Factor: 0.247]

7. Filer, K., & **Chang, M.** (2008). Peer and parent encouragement of early algebra

enrollment and mathematics achievement. *Middle Grade Research Journal, 3*(1), 23-34.

6. Kim, S., & **Chang, M.** (2008). Computer use in diverse learning contexts in ELS 2002: Gender, race and learner-centeredness effects and implications. *Journal on School Educational Technology, 3*(4), 55-65.

5. Singh, K., **Chang, M.**, & Dika, S. (2008). School engagement and school learning: Ethnicity, self-concept, and school belonging. *The International Journal of Learning, 15*(2), 205-214.

4. Sung, Y., & **Chang, M.** (2008). Center-based care for language minority students. *Educational Research and Evaluation, 14*(5), 445-463.

3. **Chang, M**., Singh, K, & Mo, Y. (2007). Science engagement and science achievement: Longitudinal models using NELS data. *Educational Research and Evaluation, 13*(4), 351-373. [SCOPUS Impact Factor: 0.524]

2. Singh, K., **Chang, M.**, & Dika, S. (2007). The effect of part-time work on school achievement during high school. *Journal of Educational Research, 101*(1), 12-22. [SSCI Impact Factor: 1.307]

1. Singh, K., **Chang, M**., & Dika, S. (2006). Affective and motivational factors in engagement and achievement in science. *International Journal of Learning, 12*(6), 207-218.

Peer-Reviewed Proceedings

14. **Chang, M.** & Choi, N. (2015). Parental Involvement in Children's Gaming and Students' School Outcomes. *Proceedings of the Asian Conference on Technology in the Classroom 2015*, Kobe, Japan.

13. **Chang, M.**, Kim, S., & Choi, N. (2015). The Relationship of Learner Characteristics of Gaming with Math Engagement. *Proceedings of Teaching & Education Conference*, Amsterdam, Netherlands.

12. **Chang, M.,** Evans, M., Kim, S., Deater-Deckard, K., & Norton, A. (2014). Educational video game and students' game engagement. *Proceedings of the International Conference on Information Science and Application*, Seoul, Korea. [Google Scholar Citation: 1]

11. Singh, K., & **Chang, M.** (2010). Role of parental involvement in science achievement of minority students. *Proceedings of the Asia-Pacific Educational Research Association (APERA) International Conference*, Kuala Lumpur, Malaysia.

10. Singh, K., & **Chang, M.** (2010). Academic engagement in college: Measures, models and implications for teaching. *Proceedings of the APERA International Conference*, Kuala Lumpur, Malaysia.

9. **Chang, M**., Kim, S., & Singh, K. (2008). Parental involvement in Early Head Start: Parenting classes and parental behavior. *Proceedings of the APERA International Conference*, Singapore.

8. **Chang, M.,** Singh, K., & Filer, K. (2008). Academic performance between all-day and

half-day kindergarten students and schools: Piecewise growth models. *Proceedings of the APERA International Conference*, Singapore.

7. **Chang, M**., Singh, K., & Kim, S. (2008). A longitudinal study of the effects of all-day programs for schools with high population of minority students. *Proceedings of the 10th International Conference on Education (ICE)*, Athens, Greece.

6. Filer, K., & **Chang, M**. (2008). Is math really an international language*?* The effects of ability grouping on language minority students in the US and Great Britain. *Proceedings of the APERA International Conference*, Singapore.

5. Kim, S., & **Chang, M**. (2008). The effects of home computer access on math performance of immigrant students. *Proceedings of the APERA International Conference*, Singapore.

4. Singh, K., & **Chang, M**. (2008). Mathematics achievement in high school: Role of school factors. *Proceedings of the APERA International Conference*, Singapore.

3. Kim, S., & Chang, M. (2007). The differential effects of computer use on academic performance of students from immigrant and gender groups: Implications on multimedia enabled education. *Proceedings of the Institute of Electrical and Electronics Engineers (IEEE) International Symposium on Multimedia (ISM2007),* Taiwan. [Google Scholar Citation: 11]

2. **Chang, M.**, Singh, K., & Sung, Y. (2006). The differential effects of grouping practices for immigrant students' mathematical achievement. *Proceedings of the APERA International Conference*, Hong Kong, China.

1. Singh, K., **Chang, M**., & Mo, Y. (2006). Science achievement: Effect of self and engagement variables. *Proceedings of the APERA International Conference*, Hong Kong, China.

Book Reviews

Chang, M., (2018). [Review of the book, *Propensity Score Methods and Applications*] Bai, H. & Clark, M.H. Sage Publishing Inc.

Chang, M. (2011). [Review of the book, *Quantitative Research in Education: A Primer*]. Sage.

Chang, M. (2005). [Review of the book, *Statistical methods for psychology*]. Thompson Learning, Inc.

Chang, M. (2005). [Review of the book chapter, *Multilevel modeling of educational data: Chapter 14*]. Information Age Publishing Co.

PRESENTED PAPERS, AND LECTURES

Invited International Lecture

Chang, M. (2018, May). Invited by KEIIN International Institute, Kyrgyzstan for Faculty Training on effective and innovative teaching methodology in higher education and

improvement of international competencies of scientific research. The seminar sessions were held at Bishkek, Kyrgyzstan.

Chang, M. (2017, June). Invited by the Kyrgyz Ministry of Education and Science to lead the Annual Faculty Training Seminar for Kyrgyzstan university faculties on effective and innovative teaching methodology in higher education and improvement of international competencies of scientific research. The seminar sessions were held at Bishkek and Talas, Kyrgyzstan.

Peer-Reviewed International Conferences

5. **Chang, M.**, & Kim, S. (2015). Mathematics Engagement of 6th Grade Students. *Proceedings of the International Journal of Arts & Sciences (IJAS): International Conference for Teaching and Education,* Boston, MA.

4. Evans, M.A., Deater-Deckard, K., Norton, A., & **Chang, M**. (2012, July). *The Candy Factory: A serious video game for algebra-readiness.* Poster to be presented at the International Conference of the Learning Sciences, Sydney, Australia.

3. **Chang, M.,** Choi, N., & Kim, S. (2011, November). *Immigrant Parents' School Involvement and Immigrant Children's Language Acquisition and School Performance*. Paper Presentation at the third Annual Edition of International Conference of Education, Research and Innovation (ICERI), Madrid, Spain.

2. **Chang, M**., Singh, K., Sung, Y., & *Kim, S.* (2010). *How do schools and teachers affect immigrant students' science performance?* Paper Presentation at the Austria Conference, Bad Hofgastein's Kungress Zentrum, Austria.

1. **Chang, M.** (2006, November). Shaping the Educational Future for Immigrant Students: New Perspectives. In N. Bodenhorn, M. Chang, D. Olsen, K. Singh, M. Evans, B. Wiswell, & J. Jones, *Lessons Learned in U.S. Educational Reforms: Educating for a Global Economic Society*. Symposium at the APERA International Conference. Hong Kong, China.

Peer-Reviewed National Conferences

47. Nam, J., & **Chang, M**., (March, 2018). *Evidence-based research approach for the "Reality" of a policy impact analysis: The case of high school graduation initiative of the U.S. Department of Education.* Paper Presentation of the 2018 American Society for Public Administration (ASPA) Annual Conference, Washington DC.

46. **Chang, M**., Park, J. & Kim, S. (April, 2017). *Advanced mathematics course-taking for racial/linguistic minority students' post-secondary enrollment.* Round Table Session of the AERA Annual Conference, San Antonio, TX.

45. Kim, S., **Chang, M.**, & Park, J. (April, 2017). *The direct, indirect, and total effects of computer use on mathematics performance of immigrant youths.* Paper Presentation of the AERA Annual Conference, San Antonio, TX.

44. Park, J., Reid, M., **Chang, M**., Park, J. & Kim, S. (April, 2017). *Using hierarchical generalized linear modeling to study teacher attrition: A focus on part time*

employment. Poster Presentation of the AERA Annual Conference, San Antonio, TX.

43. Schantz, A. D., & **Chang, M.** (January, 2017). *Parental Occupation Effects: Academic Outcomes for Children of Emergency Responders*, USF Health Research Day 2017.

42. **Chang, M.**, Kim, S., & Park, J. (2016, April). *How Parents' Monitoring Behavior for Students' Gaming Affect Students' School Outcomes.* Poster Presentation at the AERA Annual Conference, Washington DC.

41. Kim, S., & **Chang, M.** (2015, April). *Invited Talk at the Computer and Internet Applications in Education [CIAE] SIG Business Meeting.* Invited Talk at the AERA Annual Conference, Chicago, IL.

40. Kim, S. & **Chang, M**. (Apr. 2015). *The Validation of Computer Game Engagement Instrument (CGEI) Using Rasch Model,* Round Table Session at the AERA Annual Conference, Chicago, IL.

39. Kim, S. & **Chang, M.** (Apr. 2015). *Teachers' Influence on the Dropout Risks of Racial and Linguistic Minority High School Students*. Paper Presentation at the AERA Annual Conference, Chicago, IL.

38. Choi, N**, Chang, M., &** Kim, S. (Apr. 2013). *A Structural Model of Parent Involvement with Demographic and Academic Variables.* Poster Presentation at the AERA Annual Conference, San Francisco, CA.

37. **Chang, M**., Singh, K., Kim, S., Kim, H., & Choi, N. (2011, April). *School involvement of parents for English language learners' school performance.* Paper Discussion at the AERA Annual Conference, New Orleans, LA.

36. Kim, S., **Chang, M.**, Singh, K., & Kim, H. (2011, April). *The effects of computer games for language-minority students with family rules for computer games.* Paper Presentation at the AERA Annual Conference, New Orleans, LA.

35. Kim, S., & **Chang, M.** (2011, February). *The transitional progress of ELL students from high school to higher education*. Paper Presentation at the Eastern Educational Research Association (EERA) Annual Conference, Sarasota, FL.

34. Kim, S., **Chang, M.,** Kim, H., & Singh, K. (2010, April). *How does computer use for schoolwork differ from computer use for game and Internet?* Paper Presentation at the AERA Annual Conference, Denver, CO.

33. Kim, H., Kim, S., & **Chang, M.** (2010, April). *The effects of home environment, activities, and cognitive stimulation on social skills on children from different language groups.* Paper Presentation at the AERA Annual Conference, Denver, CO.

32. Kim, H., **Chang, M.,** & Kim, S. (2010, April). *Is parental depression a predictor of externalizing and internalizing problems of immigrant children?* Paper Presentation at the AERA Annual Conference, Denver, CO.

31. Mo, Y., Singh, K., & **Chang, M.** (2010, April). *Teacher and school effects on student achievement: An HLM study on middle school science.* Paper Discussion at the

AERA Annual Conference, Denver, CO.

30. Murphy, P., & **Chang, M.** (2010, April). *A Structural Equation Modeling Approach to relationships of parenting practices, independent learning, and achievement.* Paper Presentation at the AERA Annual Conference, Denver, CO.

29. Sung, Y., & **Chang, M.** (2010, April). *Social skills and academic performance, with a focus on language minority students*. Paper Presentation at the AERA Annual Conference, Denver, CO.

28. Murphy, P., & **Chang,** M. (2010, February). *Independent learning and family structure.* Paper Presentation at the EERA Annual Conference, Savannah, GA.

27. **Chang, M.**, Filer, K., & Byrd, W. C. (2009, April). *Teacher evaluation methods and language minority mathematics.* Paper Discussion at the AERA Annual Conference, San Diego, CA.

26. **Chang, M.**, Kim, S., & Kim, H. (2009, April). *Depressed mothers and social ability of language minority children.* Paper Discussion at the AERA Annual Conference, San Diego, CA.

25. **Chang, M.**, Sung, Y., Singh, K., & Kim, S. (2009, April). *Parenting classes and activities of language minority mothers.* Paper Discussion at the AERA Annual Conference, San Diego, CA.

24. Kim, S., & **Chang, M.** (2009, April). *Computer games for students from different language and gender groups.* Paper Presentation at the AERA Annual Conference, San Diego, CA.

23. Kim, S., & **Chang, M.**, & Singh, K. (2009, April). *The effects of purposeful computer uses on students from different language groups.* Paper Discussion at the AERA Annual Conference, San Diego, CA.

22. Kniola, D., Olsen, D., & **Chang, M.** (2009, April). *Using national data sources to study the impact of transformative graduate education programs on doctoral degrees awarded.* Paper Presentation at the AERA Annual Conference, San Diego, CA.

21. Mo, Y., Singh, K., & **Chang, M.** (2009, February). *Opportunity to learn, student engagement and science learning*. Paper Presentation at the EERA Annual Conference, Sarasota, FL.

20. Singh, K., Mo, Y., & **Chang, M.** (2009, April). *Classroom activities in eighth grade science classes and student achievement: Evidence from TIMSS 2003.* Paper Presentation at the AERA Annual Conference, San Diego, CA.

19. Sung, Y., & **Chang, M.** (2009, February). *Longitudinal effect of social skills on academic performance of elementary students.* Paper Presentation at the EERA Annual Conference, Sarasota, FL.

18. **Chang, M.,** Singh, K., & Filer, K. (2008, March). *How classroom tracking in math class works for language minority students? A cross-sectional and longitudinal study.* Paper Discussion at the AERA Annual Conference, New York, NY.

17. **Chang, M.,** Singh, K., Kim, S., & Sung, Y. (2008, March). *Computer access and proficiency for immigrant students.* Paper Discussion at the AERA Annual Conference, New York, NY.

16. Kim, S., & **Chang, M.** (2008, March). *Effective computer use: A focus on the linkage of formal and informal learning, ethnicity and gender*. Paper Presentation at the AERA Annual Conference, New York, NY.

15. Singh, K., & **Chang, M**. (2008, March). *Effects of ethnicity, teacher support and school environment on mathematics achievement: Analyses of Education Longitudinal Study: 2002*. Paper Presentation at the AERA Annual Conference, New York, NY.

14. Altstaedter, L., & **Chang, M.** (2008, February). *The Effect of peer feedback on intermediate Spanish college students' writing proficiency: A pilot study*. Paper Presentation at the EERA Annual Conference, Hilton Head, SC.

13. Sung, Y., & **Chang, M.** (2008, February). *Differential achievement levels with social skills: Discriminant and longitudinal analysis.* Paper Presentation at the EERA Annual Conference, Hilton Head, SC.

12. Olsen, D., **Chang, M**., & Kniola, D. (2007, November). *Using national database sources to study the impact of transformative graduate education programs on doctoral degrees awarded.* Paper Presentation at the Association for the Study of Higher Education (ASHE), Louisville, KY.

11. **Chang, M**., & Singh, K. (2007, April). *A longitudinal analysis of immigrants' math performance and class arrangement.* Paper Discussion at the AERA Annual Conference, Chicago, IL.

10. **Chang, M**., Singh, K., & Murphy, P. (2007, April). *Does all-day kindergarten improve the achievement of minority schools?* Poster Presentation at the AERA Annual Conference, Chicago, IL.

9. Filer, K., & **Chang, M.** (2007, April). *Difference in peer and parent encouragement and mathematics achievement.* Paper Presentation at the AERA Annual Conference, Chicago, IL.

8. Singh, K., & **Chang, M**. (2007, April). *Ethnic differences in mathematics achievement: Effects of self-efficacy, attitude and engagement in learning.* Paper Presentation at the AERA Annual Conference, Chicago, IL.

7. Singh, K., Dika, S., & **Chang, M**. (2007, April). *Sources of social capital and school engagement of adolescents.* Paper Presentation at the AERA Annual Conference, Chicago, IL.

6. Sung, Y., & **Chang, M.** (2007, April). *Center-based care programs and reading performance of immigrant students.* Paper Discussion at the AERA Annual Conference, Chicago, IL.

5. Sung, Y., & **Chang, M.** (2007, February). *Academic performance of immigrant students and center-based care.* Paper Presentation at the EERA Annual Conference, Clear Water, FL.

4. **Chang, M**., & Singh, K. (2006, April). *Differential effects of all-day versus half-day kindergarten: Longitudinal model.* Paper Presentation at the AERA Annual Conference, San Francisco, CA.

3. Singh, K., & **Chang, M**. (2006, April). *Science engagement and achievement: Longitudinal models using NELS: 88 data*. Paper Presentation at the AERA Annual Conference, San Francisco, CA.

2. **Chang, M.** (2005, April). *A study of the efficacy of all-day kindergartens: A longitudinal multilevel data analysis.* Paper Presentation at the AERA Annual Conference, Montreal, Canada.

1. **Chang, M**., & DeCarlo, L. T. (2005, April). *A longitudinal multilevel analysis: Parametric versus nonparametric approaches.* Paper Presentation at the AERA Annual Conference, Montreal, Canada.

Peer-Reviewed Regional Conferences

Byrd, W.C., & **Chang, M.** (2009, April). *The Influence of College Student Peer Network Composition on Color-Blind Views of Society.* Paper Presentation at the 2009 Annual Meeting of the Southern Sociological Society, New Orleans, LA.

Chang, M., & Singh, K. (2005, March). *Differential Effects of Kindergarten Attendance: Social Class and Ethnicity.* Poster Presentation at the Mid Atlantic Conference on the Scholarship of Diversity, Roanoke, VA.

FUNDED RESEARCH

Evans, M., Norton, A. **Chang, M.**, Deater-Deckard, K., & Balci, O. (2013, August- 2015, June). *Supplement to Gateways to Algebraic Motivation, Engagement and Success (GAMES).* Recipient of $ 199,903 from the Discovery Research K-12 (DRK-12) Program, National Science Foundation (NSF) # 1118571. Chang, M. as Co-PI.

Evans, M., Deater-Deckard, K., Norton, A. **Chang, M.**, & Balci, O. (2011, August- 2014, August). *Gateways to Algebraic Motivation, Engagement and Success (GAMES): Supporting and Assessing Fraction Proficiency with Game-Based, Mobile Applications and Devices*. Recipient of $ 2,002,270 from the Discovery Research K-12 (DRK-12) Program, NSF # 1118571. Chang, M. as Co-PI.

Schroeder, A., Bradburn, I., & **Chang, M.** (2008, September – 2012, September). *Building Child and Family Policy Research Data Capacity for the Commonwealth of Virginia: An Integrated Model.* Recipient of $645,000 from the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services (DHHS). Chang, M. as Co-PI.

PATENT DISCLOSURES, APPLICATIONS, AND AWARDS

Software Skills

Data Management and Simulation
SPSS, SAS, STATA, R, JMP, AM

Statistical Applications
HLM, MLwiN, MPLUS, LISREL

Measurement Applications
Winsteps, jMetrik, NOHARM

PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS

School/College Awards	**Dates**
CASE Award for Teaching College of Arts, Science & Education, Florida International University (FIU)	2018
CASE Award for Research College of Arts, Science & Education, Florida International University (FIU)	2017
CASE Award for Teaching College of Arts, Science & Education FIU	2016
Certificate of Teaching Excellence 2011-2012 College of Liberal Arts and Human Sciences (CLAHS) Virginia Tech	2011
Excellence in Research and Creative Scholarship Award CLAHS, Virginia Tech	2010
Promising Scholar Award 2010 School of Education, Virginia Tech	2010

University Awards	**Dates**
XCaliber Award Center for Innovation in Learning, Virginia Tech	2012
Scholar of the Week, January 2011 Office of the Vice President for Research, Virginia Tech	2011

University Fellowships

6. Evans, M. & **Chang, M.** (2011, July -2012, June). *A Pilot Study for Gateways to Algebraic Motivation, Engagement and Success* (GAMES): *Supporting and Assessing Fraction Proficiency with Game-Based, Mobile Applications and Devices*. Recipient of $14,000 of the Special Funds, the Office of the Vice President for Research, Virginia Tech, Chang, M. as PI.

5. **Chang, M.** & Allen, K. (2010, July - 2011, January). *A Pilot Study of Teacher Practices to Promote Immigrant Students' Science Competency.* 2010-2011 Jerome Niles Dean's Faculty Research Award. Recipient of $3,000 in research funding from the CLAHS, Virginia Tech. Chang, M. as PI.

4. Tilley-Lubbs, G., **Chang, M.,** & Asselin, S. (2010, August - 2011, May). *Transforming Curriculum to Serve English Language Learners in P-12 Education.* 2010-2011 CLAHS Departmental Diversity Award. Recipient of $8,000 from the CLAHS, Virginia Tech. Chang, M. as Co-PI.

3. **Chang, M.** (2009, August – 2009, December). *Math and Science Competence of Immigrant Students Using Nationally Representative Data.* Recipient of $ 4,000 of the CLAHS Special Research Funding 2009, Virginia Tech. Chang, M. as PI.

2. Bodenhorn, N., & **Chang, M.** (2006, January – 2006, December). *Impact Study of School Counselor Self-Efficacy and Multicultural Counseling Competencies*. Recipient of $ 2,468 of Special Research Fund from the CLAHS, Virginia Tech. Chang, M. as Co-PI.

1. Hirt, J., **Chang, M**., Olsen, D., & Janosik, S. (2005, December – 2006, November). *Institutional Factors That Influence Success among Graduate Students.* Recipient of $7,500 in Faculty Research Funding, the School of Education, Virginia Tech. Chang, M. as Co-PI.

OTHER PROFESSIONAL ACTIVITIES

Consultation for National Grant Activities

Consultation for Project, *Understanding Virginia's Disciplinary Pipeline Data*, by Regional Laboratories: Appalachia - Institute of Education Sciences (2016, May & June). Conducting data analysis of the disciplinary behavior of the Virginia high school students.

International Grant Proposal Review Panel

8. **Chang, M.** (2018, September). *Advisory Board Committee of the Associative Research Program (PIA) of the Chilean National Commission for Scientific and Technological Research (CONICYT).* Recommend final grant projects for funding among 40 proposals submitted to the Research Team Projects in Social Sciences and Humanities 2018. **M. Chang** served as Coordinator who assigned proposals to reviewers and led a week panel sessions.

7. **Chang, M.** (2016, April). *Evaluator of the National Commission for Scientific and Technological Research of Chile*. Evaluate the outcomes of statistics research project of the International Collaboration Enhancement Grant for Research Team Projects.

6. **Chang, M.** (2016, March). *Evaluator of the National Commission for Scientific and Technological Research of Chile*. Evaluate research grant project outcomes in Social Sciences and Humanities.

5. **Chang, M.** (2014, October). *Advisory Board Committee Member of the National Commission for Scientific and Technological Research of Chile (CONICYT)*. Recommend final grant projects for funding among the proposals submitted to Research Team Projects in Social Sciences and Humanities 2014, National Commission for Scientific and Technological Research (CONICYT) of Chile.

4. **Chang, M.** (2014, October). *Reviewer of the National Commission for Scientific and Technological Research of Chile*. Review research grant projects (statistics) for the International Collaboration Enhancement Grant for Research Team Projects in 2014.

3. **Chang, M.** (2014, September). *Reviewer of the National Commission for Scientific and Technological Research of Chile*. Review research grant projects (statistics) for Social Sciences and Humanities 2014.

2. **Chang, M.** (2013, October). *Reviewer of the National Commission for Scientific and Technological Research of Chile*. Review research grant projects for the International Collaboration Enhancement Grant for Research Team Projects in Social Sciences and Humanities 2013, National Commission for Scientific and Technological Research (CONICYT) of Chile.

1. **Chang, M.** (2012, March-April). *Reviewer of the National Commission for Scientific and Technological Research of Chile*. Review research grant projects for the Associative Research Program, National Commission for Scientific and Technological Research (CONICYT) of Chile.

National Grant Proposal Review Panel

12. *Department of Education Review Panel* (2017, July). Review grant proposals for the Education Innovation and Research (EIR) program: Early-phase competition, the US Department of Education.

11. *Department of Education Review Panel* (2017, May). Review grant proposals for the Office of English Language Acquisition, the National Professional Development Program, the US Department of Education.

10. *Department of Education Review Panel* (2016, April). Review grant proposals for the Office of English Language Acquisition, the National Professional Development Program, The US Department of Education.

9. *Department of Education Review Panel* (2014, May-June). Review grant proposals for the Office of Innovation and Improvement (OII), Arts in Education-Model Development and Dissemination, The US Department of Education.

8. *Department of Education Review Panel* (2013, August-September). Review grant proposals for Investing in Innovation, Validation Grant Competition, The US Department of Education.

7. *Department of Education Review Panel* (2013, June). Review grant proposals for Minority Science & Engineering Improvement Program (MSEIP) Competition, The US Department of Education.

6. *Department of Education Review Panel* (2012, July). Review grant proposals for

Investing in Innovation, Validation Grant Competition, The US Department of Education.

5. *Department of Education Review Panel*, (September-October, 2011). Review grant proposals for Investing in Innovation, Development Competition Tier II, Office of Innovation and Improvement (OII), The US Department of Education.

4. *NSF TSL Review Panel* (2011, May). Review grant proposals for the Transforming STEM Learning (TSL) Program, NSF, Arlington, VA.

3. *NSF ISE Review Panel* (2010, February). Review grant proposals for the Informal Science Education (ISE) Program, NSF, Arlington, VA.

2. *NSF ITEST Review Panel* (2009, April). Review grant proposals for the Innovative Technology Experience for Students and Teachers (ITEST) Program, NSF, Arlington, VA.

1. *NSF REESE Review Panel (*2009, January). Review grant proposal for the Research and Evaluation on Education in Science & Engineering (REESE) Program, NSF, Arlington, VA.

National Fellowship Review Panelist

National Defense Science and Engineering Graduate (NDSEG) Panel (2015, January). Evaluate applicants for fellowships and research opportunities.

National Defense Science and Engineering Graduate (NDSEG) Panel (2014, January). Evaluate applicants for fellowships and research opportunities.

Ad Hoc Journal Article Reviews

Journal of Educational Research

Journal of Research in Childhood Education

Teaching and Teacher Education

Middle Grade Research Journal

School Effectiveness and School Improvement

Science Education

Computer & Education

Funded National Statistical Training	**Dates & Location**
11. Quasi-Experimental Design and Analysis in Education 5-day funded training program by Institute of Education Science	2011, August Evanston, IL
10. The High School Longitudinal Study of 2009 for Research and Policy Analysis 3-day funded training program by Institute of Education Science	2011, July Washington, DC

9. The 2011 Summer Research Training Institute Single-Case Design 7-day funded training program By the National Center for Special Education Research, Institute of Education Sciences, U.S. Department of Education	2011, June Madison, WI
8. The AERA Grants Program's Faculty Institute for Teaching of Statistics with Large-Scale Data Sets 3-day funded training program by AERA & Stanford University	2011, June Palo Alto, CA
7. The 2009 National Summer Data Policy Institute 7-day funded training program by NSF, IES, & American Institute for Research (AIR)	2009, June Potomac, MD
6. IES Summer Research Training Institute: Cluster Randomized Trials 14-day funded training program for IES Grant Proposals by National Center for Education Statistics (NCES) & IES	2008, July Evanston, IL
5. NAEP Database Training Seminar 3-day funded training program for the use of National Assessment of Educational Progress (NAEP) Funded by NCES	2007, June Washington, DC
4. Longitudinal Modeling of Student Achievement 2-day statistical workshop for Longitudinal Data Organized by Maryland Assessment Research Center	2005, November College Park, MD
3. Longitudinal Data Analysis 2-day training program for the analysis of longitudinal data Organized by American Statistical Association & University of Florida	2005, January Gainesville, FL
2. AERA Statistical Analysis Training 2002 Institute on Statistical Analysis for Education Policy 3-day funded training program for the use of Hierarchical Linear Modeling (HLM) Analysis to the Early Childhood Longitudinal Study (ECLS-K) Funded by AERA & NCES	2002, April New Orleans, LA
1. ECLS-K Data Training Seminar 3-day funded training program Data training for the use of the ECLS-K Funded by NCES and U. S. Department of Education	2001, July Potomac, MD

COURSES TAUGHT

Multivariate Statistics for Applications to Educational Problems (EDF 7403C)

Hierarchical Linear Modeling for Educational Research (EDF 7489)

Structural Equation Modeling (EDF 7412C)

Applied Regression for Educational Research (EDF 7419C)

Advanced Analysis in Educational Research (EDF 6486)

Research Methods in Education: Introduction to Data Analysis (EDF 6472)

Foundations of Educational Research: Online (EDF 5481)

Field Research in Education: Action Research (EDF 6487)

Measurement and Evaluation in the Classroom (EDF 3430/EDF 5443)

ADVISING ACTIVITIES

Chair

1 complete doctoral dissertation committee (FIU)

1 current doctoral dissertation committees (FIU)

4 completed doctoral dissertation committees (VT)

Co-Chair

4 current doctoral dissertation committee (FIU)

2 completed doctoral dissertation committees (VT)

Member

15 current doctoral committees (FIU)

18 completed doctoral committees (FIU)

18 completed doctoral dissertation committees (VT)

Post-Doctoral Associate

1 complete post-doctoral associate

1 current post-doctoral associate

FIU SERVICE ACTIVITIES

Department

Promotion & Tenure Committee

For Instructor & Clinical Faculty	2013-17
For Tenure Track Faculty	2016-17

Educational Research Methodology Faculty Search Chair	2015-16

College

Promotion & Tenure Committee	2018
Promotion & Tenure Committee of Third Year Review	2015
Strategic Planning Committee	2015
Graduate Policy Committee	2013
Promotion Committee for Instructor	2013

University

Dissertation Advisor Application Committee Member	2015-2017
UFF-FIU Tenure & Promotion Workshop Mentor	2019