

Do Dual-Certified Teachers Increase Access for Students With Disabilities?

Allison F. Gilmour and Tiffany Lam, American Institutes for Research[®]

Dual-certification, when a teacher is certified in special education and another area, is a potential way for states to ensure teachers have both general education content area knowledge and special education pedagogical skills and knowledge. We conducted a systematic review and meta-analysis of 27 studies to examine if dual-certification improved student or teacher outcomes. These studies examined four main themes: (1) dual-certified teachers' perceptions or beliefs about instruction, preparedness, and students; (2) student sorting; (3) effectiveness; and (4) workforce decisions and intentions (Figure 1).

Figure 1. Topics of Included Studies

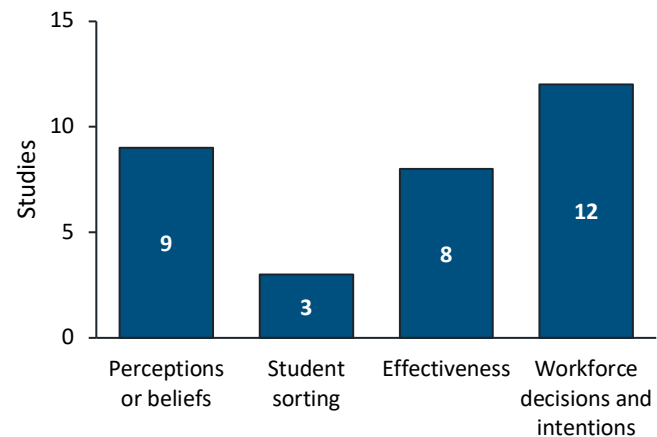
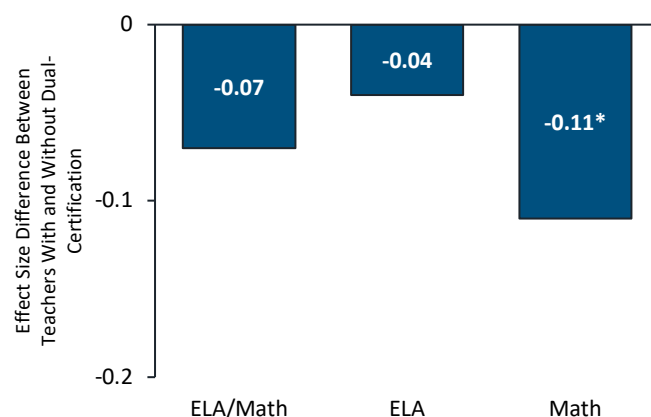


Figure 2. Results of Academic Outcomes Meta-Analysis



* $p < .05$

Students with disabilities performed similarly in English language arts (ELA) but worse in math when taught by dual-certified teachers compared to teachers without dual-certification. Across five studies that examined the association between dual-certification and students with disabilities' academic test scores, we calculated 71 effect sizes (Gilmour, 2020; Goldman & Gilmour, 2021; Kirksey & Lloydhauser, 2022; Montrosse, 2009; Myderrizi, 2023). Figure 2 shows the results of the meta-analyses. When we considered math and ELA together, the effect size for dual-certification was -0.07 , but the difference was not statistically significant. When we divided the effects by subject areas, the effect size in ELA was -0.04 and not statistically significant. In math, the effect size was -0.11 and statistically significant, suggesting that students with disabilities scored worse when they were taught by a dual-certified teacher.

Students with disabilities were more likely to be assigned to dual-certified teachers than students without disabilities.

A study using administrative data from North Carolina revealed that students with disabilities were more frequently assigned to dual-certified teachers than students without disabilities (Gilmour & Henry, 2018). Similarly, another study found that students who took modified assessments, indicative of greater learning needs, were more likely to be taught by dual-certified teachers (Gilmour, 2020; Goldman & Gilmour, 2021).

Teachers with dual-certification had higher turnover rates than teachers with special education certification or general education certification.

Despite typically reporting higher self-efficacy in teaching students with disabilities compared to teachers without dual-certification (Pappasergi, 2016; Swindlehurst et al., 2019), dual-certified teachers had higher turnover than general education certified teachers (Gilmour et al., 2022). Moreover, other studies found that dual-certified teachers had higher turnover rates compared to general education certified teachers when accounting for the percentage of students with disabilities in their classes (Gilmour & Wehby, 2020). Dual-certified teachers in special education positions also showed lower retention rates than those certified in special education (Theobald et al., 2021) and frequently switched to general education positions (Gilmour, 2024).

THE BOTTOM LINE

The existing research does not strongly support that dual-certified teachers can improve outcomes for students with disabilities. Most studies did not find significant improvements in test scores among students taught by dual-certified teachers, raising questions about whether dual-certification results in teachers with both general education content area knowledge and special education pedagogical skills and knowledge. Additionally, the increased turnover of dual-certified teachers could negatively affect students with disabilities and exacerbate special education staffing challenges. Policymakers should be cautious about requiring or incentivizing dual-certification for special education teachers.

The research reported in the brief was made possible by a grant from the Spencer Foundation (#202400040).

References and Reports Included in the Systematic Review

- Bhakri, S. (2017). Understanding the relationship and difference in teacher perception and level of implementation of positive behavioral interventions and supports [Doctoral dissertation, Fairleigh Dickinson University]. ProQuest Dissertations & Theses.
- Billingsley, B. S., & Cross, L. H. (1991a). Teachers' decisions to transfer from special to general education. *The Journal of Special Education*, 24(4), 496-511. <https://doi.org/fdgxni>
- Billingsley, B. S., & Cross, L. H. (1991b). General education teachers' interest in special education teaching: Deterrents, incentives, and training needs. *Teacher Education and Special Education*, 14(3), 162-168. <https://doi.org/10.1177/088840649101400302>
- Brady, A. L. (2019). A case study exploring best practice teaching methods in a high incidence classroom [Doctoral dissertation, Northern Arizona University]. ProQuest Dissertations & Theses.
- Cass, R. J., & Walther-Thomas, C. (2006). Secondary teachers' knowledge and beliefs about LD. Proceedings of the 14th World Congress on Learning Disabilities.
- Edgar, E., & Pair, A. (2005). Special education teacher attrition: It all depends on where you are standing. *Teacher Education and Special Education*, 28(3-4), 163-170. <https://doi.org/d6qm93>
- Gilmour, A. F. (2020). Teacher certification area and the academic outcomes of students with learning disabilities or emotional/behavioral disorders. *The Journal of Special Education*, 54(1), 40-50. <https://doi.org/10.1177/0022466919849905>
- Gilmour, A. F. (2024). Teaching quality: An unexamined element of special education teacher turnover. *Journal of Education Human Resources*. <https://doi.org/10.3138/jehr-2022-0018>
- Gilmour, A. F., & Henry, G. T. (2018). A comparison of teacher quality in math for late elementary and middle school students with and without disabilities. *The Elementary School Journal*, 118(3), 426-451. <https://doi.org/10.1086/696140>
- Gilmour, A. F., Neugebauer, S. R., & Sandilos, L. E. (2022). Moderators of the association between teaching students with disabilities and general education teacher turnover. *Exceptional Children*, 88(4), 401-420. <https://doi.org/10.1177/00144029221081239>
- Gilmour, A. F., & Wehby, J. H. (2020). The association between teaching students with disabilities and teacher turnover. *Journal of Educational Psychology*, 112(5), 1042-1060. <https://doi.org/10.1037/edu0000394>

- Goldhaber, D., & Theobald, R. (2013). Managing the teacher workforce in austere times: The determinants and implications of teacher layoffs. *Education Finance and Policy*, 8(4), 494–527.
- Goldman, S. E., & Gilmour, A. F. (2021). Educating students with autism spectrum disorders: Is teacher certification area associated with academic outcomes? *Journal of Autism and Developmental Disorders*, 51(2), 550–563. <https://doi.org/gg7w65>
- Grotjan, E. G. (1988). A study of selected teaching behaviors exhibited by elementary certified teachers as compared with special education certified teachers in elementary classrooms [Doctoral dissertation, University of South Dakota]. ProQuest Dissertations & Theses.
- Johnson, K. K. (2021). The effects of targeted professional development and teachers' attitudes in co-taught classrooms: A phenomenological study [Doctoral dissertation, Drexel University]. ProQuest Dissertations & Theses.
- Kerns, G. M. (1996). Preparation for role changes in general education and special education: Dual certification graduates' perspectives. *Education*, 117(2), 306–316.
- Kirksey, J. J., & Lloydhauser, M. (2022). Dual certification in special and elementary education and associated benefits for students with disabilities and their teachers. *AERA Open*, 8. <https://doi.org/10.1177/23328584211071096>
- Layden, S. J., Gansle, K. A., Scott, L. A., Dayton, M., & Noell, G. H. (2022). Career intent factors of special education teachers serving students with intellectual disability, developmental delay, and autism spectrum disorder. *Inclusion*, 10(4), 270–284. <https://doi.org/10.1352/2326-6988-10.4.270>
- Montrosse, B. E. (2009). Estimating the effects of teacher certification on the academic achievement of exceptional high school students in North Carolina [Doctoral dissertation, Claremont Graduate University]. ProQuest Dissertation & Theses.
- Myderrizi, A. (2023). Teacher preparation, classroom structure, and learning outcomes for students with disabilities. EdWorkingPaper No. 23-858. Annenberg Institute at Brown University. <https://doi.org/10.26300/yx96-2436>
- Pappasergi, J. R. (2016). Kindergarten through fourth grade teacher perception of self-efficacy in educating students diagnosed with emotional and/or behavioral disorders [Doctoral dissertation, Indiana University of Pennsylvania]. ProQuest Dissertations & Theses.
- Stratton, M. P. (2017). A mixed methods survey research study of novice special education teachers: Investigation of reading preparedness [Doctoral dissertation, Widener University]. ProQuest Dissertations & Theses.

- Swindlehurst, K. A., Kervick, C. T., & Shepherd, K. G. (2019). Examining the perspectives of elementary education teachers prepared through traditional and dual license programs. *The Journal of Special Education Apprenticeship*, 8(1). <https://doi.org/m8cp>
- Theobald, R. J., Goldhaber, D. D., Holden K. L., & Stein M. L. (2022). Special education teacher preparation, literacy instructional alignment, and reading achievement for students with high-incidence disabilities. *Exceptional Children*, 88(4), 381–400.
<https://doi.org/10.1177/00144029221081236>
- Theobald, R. J., Goldhaber, D. D., Naito, N., & Stein, M. L. (2021). The special education teacher pipeline: Teacher preparation, workforce entry, and retention. *Exceptional Children*, 88(1), 65–80. <https://doi.org/10.1177/00144029211010162>
- Wood, J. W., Lai, I., Filosa, N. R., Imberman, S. A., Jones, N. D., & Strunk, K. O. (2023). Are effective teachers for students with disabilities effective teachers for all? *Educational Evaluation and Policy Analysis*. <https://doi.org/10.3102/01623737231214555>
- Yeager, N., Marshall, P., & Madsen, K. (2003). Rural students becoming rural teachers: How long do they stay? Proceedings of the Annual Conference of the American Council on Rural Special Education.