### GEORGIA STATEWIDE AFTERSCHOOL NETWORK

75 Marietta Street, NW • Suite 401 • Atlanta, Georgia 30303 404.521.0355 tel • 404.521.0287 fax • www.afterschoolga.org

### Summary of Research on Service-Learning in K-12 and Higher Education

#### Compiled by Andrew Furco, Ph.D.

Professor, Department of Organizational Leadership, Policy, and Development Director, International Center for Research on Community Engagement University of Minnesota July 2022

#### Overview

A review of leading journals in the fields of education, community engagement, experiential learning, and higher education reveals more than 1,000 studies that have examined impacts of service-learning in K-12 and higher education. The overwhelming majority of these studies (about 85%) are investigations that have examined the effects on student participants (a.k.a. service-learners or providers of service through service-learning).

Most the student impact-focused studies examined the impact of service-learning on students' academic achievement and educational success.

Studies have also investigated impacts of service-learning on teachers/faculty, educational institutions, and the communities being served. These studies have found service-learning improves teachers' relationships with students, teacher retention, improved school climate, and a broad range of positive effects on the communities served. (*See reference section*.)

The collection of published studies differs in sample sizes, scope (i.e., single site versus multiple sites), methodology (i.e., quantitative, qualitative, mixed), design (e.g., experimental, quasi-experimental, case study, pre-post, post-only, etc.), and focus (e.g., assessing different student outcomes from different types of service-learning experiences). Approximately one quarter of the studies employed an experimental or quasi-experimental design.

In addition to individual studies, several meta-analyses have been conducted that calculated the overall effect of a series of independent studies that investigated similar outcomes. See list below. This report focuses on the impacts of service-learning on students.

#### **Effects on Students**

Regarding the effects of service-learning on students, the overall conclusions from experimental and quasi-experimental research studies are the following:

## (1) The preponderance of evidence points to modest to strong positive effects for service-learners across five domains:

#### 1. Academic Achievement and Educational Success

- Increased subject matter content learning (Science, Mathematics, Social Studies, Communications, Psychology, Nursing, other areas)
- Greater engagement in academic learning,
- Increased school persistence and graduation among underrepresented students (i.e., first generation college students), students with disabilities, and first-year college students
- Greater satisfaction with school
- o Improved attitudes toward school and learning
- o Increased attendance in middle and high school
- Improved academic skills such as writing, time management, exam performance, and critical thinking

#### 2. Civic Knowledge and Skills

- o Increased interest and motivation to engagement in community service
- Increased civic efficacy
- o Greater civic commitment and competence
- o Increased students' knowledge about government
- o Increased sense of civic responsibility
- Increased civic leadership

#### 3. Personal Development

- o Increased perseverance with challenging tasks
- Increased self-esteem
- o Greater sense of belonging
- Increased transcultural self-efficacy
- Increased sense of personal agency
- o Increased social responsibility and character development
- Improved ethical decision-making

#### 4. Social and Interpersonal Development

- o Increased intercultural competence
- Communication adaptability and competence
- Improved relationships with peers
- Stronger conflict resolution skills
- o More positive relationships with teachers

#### 5. Career Development

Opportunities to explore career options

- Development of career-related skills (e.g., teamwork, project managementformulation of project plans, interview skills)
- Stronger conflict resolution skills

# (2) Not all service-learning experiences are equal. Effects for students are strongest when the service-learning experiences include the following:

- A strong linkage between the service activities student conduct and the academic curriculum in which students are studying;
- Systematic reflection activities in which students analyze the impact of their service, the academic, the social issue, etc.;
- Students' engagement in service activities that are meaningful to the students *and* the community;
- Student voice in organizing and implementing the service-learning experiences;
- Adequate student preparation to engage in community-based service activities; and
- Sufficient duration of service experiences.
- (3) Service-learning is one of several pedagogies considered to be "high impact" instructional practices that promote high student engagement in learning and educational tasks. (See Kuh, 2008)

#### **Selected References**

- Achterkamp, M. C., & Vos, F. J. (2007). Critically identifying stakeholders: Evaluating boundary critique as a vehicle for stakeholder identification. *Systems Research and Behavioral Science*, 24, 3-14. https://doi.org/10.1002/sres.760
- Alexander-Ruff, J.H. & Ruff, W.G. (2021). The impact of cultural immersion service learning on BSN graduates: A quasi-experimental evaluation. *Nurse Education in Practice*, *54*, 1-5. https://doi.org/10.1016/j.nepr.2021.103099
- Ammon, M. S., Furco, A., Chi, B., Middaugh, E. (2002). *Service-learning in California: A profile of the CalServe service-learning partnerships* (1997–2000). Berkeley: University of California-Berkeley Service-Learning Research and Development Center.
  - www.servicelearning.org/filemanager/download/5135 Service-Learing in CA.pdf.
- Astin, A. W., Vogelgesang, L. J., Misa, K., Anderson, J., Denson, N., Jayakumar, U., Saenz, V., Yamamura, E. (2006). *Understanding the effects of service-learning: A study of students and faculty*. University of California, Los Angeles, Higher Education Research Institute.
- Bartlett, S. P., Solomon, P., & Gellis, Z. (2021). Comparative effectiveness of intergenerational service-learning programs on student outcomes of knowledge, attitude, and ageism. *Educational Gerontology*, 47(12), 559-573.
- Bringle, R. G., Hatcher, J. A., & Muthiah, R. N. (2010). The role of service-learning on the retention of first-year students to second year. *Michigan Journal of Community Service Learning*, 16(2), 38-49.
- Celio, C.I., Durlak, J., & Dymnicki, A. (2011). A meta-analysis of the impact of service-learning on students. *Journal of Experiential Education*, 34(2), 164-181.
- Chen, H. C., McAdams-Jones, D., Tay, D. L., & Packer, J. M. (2012). The impact of service–learning on students' cultural competence. *Teaching and Learning in Nursing*, 7(2), 67-73.

- Conway, J. M., Amel, E. L., & Gerwien, D. P. (2009). Teaching and learning in the social context: A metaanalysis of service learning's effects on academic, personal, social, and citizenship outcomes. *Teaching of Psychology*, 36, 233-245.
- Eyler, J. S. & Giles, D. E. (1999). Where's the learning in service-learning? Hoboken, NJ: Jossey-Bass.
- Farber, K., & Bishop, P. (2017). Service learning in the middle grades: Learning by doing and caring. *RMLE Online*, 42(1), 1-15, doi: 10.1080/199404476.2017.1415600.
- Flanagan, C. A. (2004). Volunteerism, leadership, political socialization, and civic engagement. *Handbook of Adolescent Psychology*, *2*, 721-745.
- Furco, A. (2002). Is service-learning really better than community service? In A. Furco & S. H. Billig (Eds.) *Service-learning: The essence of the pedagogy.* Information Age.
- Garbarino, J. T., & Lewis, L. F. (2020). The impact of a gerontology nursing course with a service-learning component on student attitudes towards working with older adults: A mixed methods study. *Nurse Education in Practice*, 42, 102684.
- Goertzen, B. J., Greenleaf, J., & Dougherty, D. (2016). Exploring the community impact of service-learning project teams. *Partnerships: A Journal of Service-Learning and Civic Engagement*, 7(2), 37-50.
- Goodwin, A., Sonnert, G., & Sadler, P. M. (2015). The influence of out-of-school high school experiences on engineering identities and career choice. Paper presented at the Annual Conference and Exposition of the American Association of Engineering Educators.
- Gorvine, B., Karam, E., & Eovaldi, M. (2008). Strengthening individual identity in the group context. *Middle School Journal*, 40(2), 13–20. https://doi.org/10.1080/0094077 1.2008.11461667
- Hart, S. & Wandeler, C. (2018). The impact of action civics service-learning on eighth-grade students' civic outcomes. *International Journal of Research on Service-Learning and Community Engagement,* 6(1), Article 11. https://doi.org/10.37333/001c.6878
- Hoyt, B. R. (2008). A research study investigating the impact of service-learning on ethical decision making. *Scholarship for sustaining service-learning and civic engagement*, 185-205.
- Hutt, R. W. (2010). Identifying and mapping stakeholders: An industry case study. *Corporate Communications: An International Journal*, 15(2), 181–191. https://doi.org/10.1108/13563281011037946
- Kahne, J. E., & Sporte, S. E. (2008). Developing citizens: The impact of civic learning opportunities on students' commitment to civic participation. *American Educational Research Journal*, 45(3), 738-766.
- Kilgo, C. A., Pasquesi, K., Sheets, J. K. E., & Pascarella, E. T. (2014). The estimated effects of participation in service-learning on liberal arts outcomes. *International Journal for Research on Service-Learning and Community Engagement*, 2(1), Article 3.
- Kuh, G. D. (2008). High-impact educational practices. Peer Review, 10(4), 30-31.
- Lau, K. H., Chan, M. Y. L., Yeung, C. L. S., & Snell, R. S. (2021). An exploratory study of the community impacts of service-learning. *Metropolitan Universities*, 32(2), 106-128.
- Macías Gomez-Estern, B., Arias-Sánchez, S., Marco Macarro, M. J., Cabillas Romero, M. R., & Martínez Lozano, V. (2021). Does service learning make a difference? Comparing students' valuations in service learning and non-service learning teaching of psychology. *Studies in Higher Education*, 46(7), 1395-1405.
- Markus, G., Howard, J., and King, D. (1993). Integrating community service and classroom instruction enhances learning: Results from an experiment. *Educational Evaluation and Policy Analysis*, 15(4), 410-419.
- Martin, S., Neal, M., Kielsmeier, J., & Crossley, A. (2006). The impact of service-learning on transitions to adulthood. In M. Neal & J. Kielsmeier (Eds.). *Growing to greatness: The state of service-learning project* (pp. 4-24). St. Paul, MN: National Youth Leadership Council.
- Melchior, A, & Bailis, L. N. (2002). Impact of service-learning on civic attitudes and behaviors of middle and high school youth: Findings from three national evaluations. In A. Furco & S. H. Billig (Eds.)

- Service-learning: The essence of the pedagogy (pp. 201–222). Charlotte, NC: Information Age
- Moely, B. E., & Ilustre, V. (2014). The impact of service-learning course characteristics on university students' learning outcomes. *Michigan Journal of Community Service Learning*, 21(1), 5-16.
- Pelco, L. E., Ball, C. T., & Lockeman, K. (2014). Student growth from service-learning: A comparison of first-generation and non-first-generation college students. *Journal of Higher Education Outreach and Engagement*, 18(2), 49-66.
- Perry, J. L., & Katula, M. C. (2001). Does service affect citizenship? *Administration & Society*, 33(3), 330-365. Pribbenow, D. A. (2005). The impact of service-learning pedagogy on faculty teaching and learning. *Michigan Journal of Community Service Learning*, 11(2), 25-38.
- Reynolds, P. J. (2005). How service-learning experiences benefit physical therapist students' professional development: a grounded theory study. *Journal of Physical Therapy Education*, 19(1), 41-54.
- Richards, M. H., Sanderson, R. C., Celio, C. I., Grant, J. E., Choi, I., George, C., & Deane, K. (2013). Service-learning in early adolescence. Results of a school-based curriculum. *Journal of Experiential Education*, *36*(1), 5-21. doi: 10.1177/1053825913481580.
- Rimm-Kaufman, S. E., Merritt, E. G., Lapan, C., DeCoster, J., Hunt, A., & Bowers, N. (2021). Can service-learning boost science achievement, civic engagement, and social skills? A randomized controlled trial of Connect Science. *Journal of Applied Developmental Psychology*, 74, 1-15.
- Sanchez, A. A. (2021). A quasi-experimental study of the impact of virtual service-learning on college students' development of compassion and motivation for service. *McNair Research Journal SJSU*, 17(1), 4.
- Sass, M. S., & Coll, K. (2015). The effect of service learning on community college students. *Community College Journal of Research and Practice*, 39(3), 280-288.
- Saylor, J., Hertsenberg, L., McQuillan, M., O'Connell, A., Shoe, K., & Calamaro, C. J. (2018). Effects of a service learning experience on confidence and clinical skills in baccalaureate nursing students. *Nurse Education Today*, *61*, 43-48.
- Schanz, K., & Giles, K. (2021). Assessing the impact of service-learning in a criminal justice statistics class. International Journal for Research on Service-Learning and Community Engagement, 9(1), Article 4. https://doi.org/10.37333/001c.31328
- Song, W., Furco, A., Lopez, I., & Maruyama, G. (2017). Examining the relationship between service-learning participation and the educational success of underrepresented students. *Michigan Journal of Community Service Learning*, 24(1), 23-37.
- Southerland, J., Behringer, B. A., & Slawson, D. (2013). Using the Give-Get Grid to understand potential expectations of engagement in a community–academic partnership. *Health Promotion Practice*, 14(6), 909–917. https://doi.org/10.1177/1524839913477657
- Steuart, G. W. (1993). Social and cultural perspectives: Community intervention and mental health. *Health Education Quarterly*, 20 (Supplement 1), S99–S111. https://doi.org/10.1177/10901981930200S109
- Wang, L., & Calvano, L. (2018). Understanding how service learning pedagogy impacts student learning objectives. *Journal of Education for Business*, 93(5), 204-212.
- Warchal, J., & Ruiz, A. (2004). The long-term effects of undergraduate service-learning programs on post-graduate employment choices, community engagement, and civic leadership. *New Perspectives in Service Learning: Research to Advance the Field.*
- Yorio, P. L., & Ye, F. (2012). A meta-analysis on the effects of service-learning on the social, personal, and cognitive outcomes of learning. *Academy of Management Learning & Education*, 11(1), 9-27.

#### SERVICE-LEARNING RESEARCH SUMMARIES

- Billig, S. (2000b). Research on K-12 school-based service-learning: The evidence builds. *Phi Delta Kappan*, 658.
- Eyler, J., Giles, Jr., D. E., Stenson, C. M., & Gray, C. J. (2001). At a glance: What we know about the effects of service-learning on college students, faculty, institutions and communities, 1993-2000.
- Furco, A., & Root, S. (2010). Research demonstrates the value of service learning. *Phi Delta Kappan*, 91(5), 16–20. https://doi.org/10.1177/003172171009100504
- Hurd, C. A. (2008). Is service-learning effective? A look at current research. *Service Learning: Perspectives and Applications*, 1-11
- Marcus, V. B., Atan, N. A., Yusof, S. M., & Tahir, L. (2020). A systematic review of e-service learning in higher education.
- Shumer, R. (2005). Service-learning research: What have we learned from the past. In M. Neal & J. Kielsmeier (Eds.). *Growing to Greatness: The State of Service-Learning Project* (pp. 48-53). St Paul, MN: National Youth Leadership Council.
- Stewart, T., & Wubbena, Z. C. (2015). A systematic review of service-learning in medical education: 1998–2012. *Teaching and Learning in Medicine*, 27(2), 115-122.

#### META-ANALYSES OF SERVICE-LEARNING STUDIES

- Case, L., Schram, B., Jung, J., Leung, W., & Yun, J. (2021). A meta-analysis of the effect of adapted physical activity service-learning programs on college student attitudes toward people with disabilities. *Disability and Rehabilitation*, 43(21), 2990-3002.
- Celio, C. I., Durlak, J., & Dymnicki, A. (2011). A meta-analysis of the impact of service-learning on students. *Journal of Experiential Education*, 34(2), 164-181.
- Novak, J. M., Markey, V., & Allen, M. (2007). Evaluating cognitive outcomes of service learning in higher education: A meta-analysis. *Communication Research Reports*, 24(2), 149-157.
- Warren, J. L. (2012). Does service-learning increase student learning? A meta-analysis. *Michigan Journal of Community Service Learning*, 18(2), 56-61.
- White, A. E. (2001). *A meta-analysis of service learning research in middle and high schools*. Denton, TX: University of North Texas.
- Yorio, P. L., & Ye, F. (2012). A meta-analysis on the effects of service-learning on the social, personal, and cognitive outcomes of learning. *Academy of Management Learning & Education*, 11(1), 9-27.