## LEA use of evidence in budget decisions

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SREE 2020 Abstract October 2019

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## **Background**

Each year schools and districts spend a considerable amount of time and effort allocating their annual budgets (AASA, n.d., Peterson, 1991). While the use of evidence by education agencies has been widely studied (e.g., Penuel et al, 2016), its use to inform budget decisions specifically does not appear to have been investigated formally. One obstacle may be that although 80% of school district funds are spent on personnel (McFarland et al., 2017), few research studies attempt to estimate the impact of people *per se* on student achievement. Even when they do (e.g., Dobbie, 2011; Rockoff, Jacob, Kane & Staiger, 2011; Jackson, Rockoff & Staiger, 2014), there is little specification of the pedagogical skills and practices needed to produce observed improvements in student outcomes. Additionally, it is time-consuming to evaluate research evidence and requires capacity and infrastructure beyond that available in many education agencies (Honig & Coburn, 2008).

## **Research Question**

We explored the question of whether evidence is used by school and district decision-makers to support budget decisions by reviewing 55 requests for discretionary funds submitted by school principals and district administrators in a large school district. We report on the quantity and type of evidence cited in the requests.

## Setting, Subjects and Practice

"Southern" school district serves approximately 100,000 students in 169 mostly urban schools; 104 qualify for Title I funding. Each school and district office division is allocated a budget amount each year, but principals, district office division chiefs, and program directors ("cost center heads") are often able to apply for extra funds from the district's discretionary budget which is subject to cycle-based budgeting (Yan, 2018). Cost center heads must complete an online application form ("budget request proposal") in the district's investment tracking system. District office senior leaders use this information to help inform decisions about whether to approve each request. Data entry fields include a description of the item; evidence base; itemized budget amounts; target student population, demographics and needs; baseline and target student outcomes; and implementation plans.

#### Research Design, Data Collection and Analysis

District office personnel provided the research team with 55 budget request proposals submitted by 42 unique cost center heads between 2015 and 2018. We conducted a document analysis (Bowen, 2009; Gitomer & Crouse, 2019) of PDF downloads of these budget request proposals, specifically seeking evidence to support the effectiveness of the proposed investment at improving educational outcomes. Forty-seven requests were for personnel, including assistant principals, mental health counselors, interventionists, and coaches.

For each of the 55 budget request proposals, 3 researchers independently reviewed the application form and recorded references to evidence supporting the effectiveness of the proposed strategy at improving educational outcomes. Following Hollands and Escueta's (2019) definition of internal vs. external research, we assigned an initial rating to each item to indicate the type of evidence provided: 0 for no evidence, 1 for internal evidence, and 2 for external evidence. Discrepancies among raters were discussed and all were resolved. Subsequently, we reviewed each item cited as external evidence and categorized it by study design and type of publication using categories similar to those used by Davidson, Farrell and Penuel (2018) and by Farley-Ripple and Jones (2015). We also indicated whether the evidence cited appeared to support the theory of change (TOC) implied in the budget request.

# **Findings**

Most budget requests were submitted by school principals, with only eight from district office personnel. Thirty-four (62%) of the 55 requests cited external and/or internal evidence to support the effectiveness of the proposed strategy for which funding was being sought. In 24 of these cases, only external evidence was cited, in five case only internal evidence was cited, and in the remaining 5, both external and internal evidence were cited (see Figure 1). We found that even when several cost center heads requested funds for the same proposed strategy, some cited supporting evidence while others did not.

For the 29 requests citing external evidence to support the effectiveness of the proposed strategy, the median number of pieces of evidence provided was 2.5; the range was one to 24. Among the 105 unique external resources cited as evidence across these 29 budget items, 40 were journal articles, 19 were published reports/non-journal articles/white papers or briefs, 11 were books/book chapters, and 11 were practitioner-oriented publications. "Other" items included conferences, websites and information brochures.

Study designs among the 105 items included 26 syntheses/reviews, 11 quasi-experiments, 7 mixed methods, 6 experiments, and 4 meta-analyses. For 35 items, no study was involved, or the design could not be determined.

Forty (38%) of the 105 items appeared to support the budget proposal's TOC, 12 did so partially and 39 did not, (in one case providing evidence against the proposed strategy). For 14 cases, we could not make this assessment because the TOC was not well specified, or the resource was not specific enough (e.g., a website), or we could not access the full text of the item.

Local evidence was generally in the form of descriptive data, for example, a principal noted that "In 2012-13, our school had 15 suspension events...This year we have only had 4 ..... It is through the work of our [type of personnel] that we are able to provide alternative consequences to suspension."

#### **Conclusions**

Even if school and district administrators are asked to provide an evidence base when submitting budget requests, they only refer to evidence supporting the effectiveness of the proposed strategy

for 62% of their requests, regardless of whether or not such evidence is available. Less than 40% of the external resources cited appeared to support the budget request's TOC.

Clarifying the type of evidence expected by the district's cabinet members to justify budget allocations and refusing to consider a request that is not supported by such evidence could incentivize cost center heads to comply. Tseng and Coburn observe that encouraging the use of research requires "building an infrastructure to support meaningful and routine use..." (2019, p. 363). Accordingly, it may help to build a database of the items in which schools and districts most commonly invest, along with a repository of research evidence on the effectiveness of each item, summary ratings, and implementation details to help cost center heads and the district office approvers make better decisions about where to invest funds. Longer term, it would be valuable to investigate whether budget requests to fund strategies supported by stronger evidence were ultimately more likely to meet the target outcomes than those supported by weak or no evidence.

#### References

- AASA. (n.d.). School budgets 101. American Association of School Administrators. Retrieved from <a href="https://www.aasa.org/uploadedFiles/Policy\_and\_Advocacy/files/SchoolBudgetBriefFINAL.pdf">https://www.aasa.org/uploadedFiles/Policy\_and\_Advocacy/files/SchoolBudgetBriefFINAL.pdf</a>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Davidson, K. L., Penuel, W. R., & Farrell, C. C. (2018). What counts as research evidence? How educational leaders' reports of the research they use compare to ESSA guidelines. Abstract from 2018 *Society for Research on Educational Effectiveness Conference*, Washington DC.
- Dobbie, W. (2011). *Teacher characteristics and student achievement: evidence from Teach For America*. Working paper. Harvard University, Cambridge, MA.
- Farley-Ripple, E., & Jones, A. R. (2015). Educational contracting and the translation of research into practice: The case of data coach vendors in Delaware. *International Journal of Education Policy and Leadership*, 10(2), 1-18.
- Gitomer, D. H., & Crouse, K. (2019). Studying the use of research evidence: A review of methods. A William T. Grant Foundation Monograph. Retrieved from <a href="http://wtgrantfoundation.org/library/uploads/2019/02/A-Review-of-Methods-FINAL003.pdf">http://wtgrantfoundation.org/library/uploads/2019/02/A-Review-of-Methods-FINAL003.pdf</a>
- Hollands, F.M., & Escueta, M. (2019). How research informs educational technology decision-making in higher education: the role of external research versus internal research. *Educational Technology Research & Development.* DOI: 10.1007/s11423-019-09678-z

- Honig, M. I., & Coburn, C. (2008). Evidence-based decision making in school district central offices: Toward a policy and research agenda. *Educational Policy*, 22(4), 578-608.
- Jackson, C. K., Rockoff, J. E., & Staiger, D. O. (2014). Teacher effects and teacher-related policies. *Annual Review of Economics*, 6,(1) 801–25.
- McFarland, J., Hussar, B., de Brey, C., Snyder, T., Wang, X., Wilkinson-Flicker, S., Gebrekristos, S., Zhang, J., Rathbun, A., Barmer, A., Bullock Mann, F., & Hinz, S. (2017). *The condition of education 2017* (NCES 2017-144). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved from <a href="https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017144">https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017144</a>.
- Penuel, W.R., Briggs, D.C., Davidson, K.L, Herlihy, C., Sherer, D., Hill, H.C., Farrell, C.C., & Allen, A-R. (2016). *Findings from a national survey of research use among school and district leaders* (Technical Report No. 1). Boulder, CO: National Center for Research in Policy and Practice.
- Peterson, D. (1991). School-based budgeting. *ERIC Digest*, 64, 1-7. Retrieved from <a href="https://files.eric.ed.gov/fulltext/ED336865.pdf">https://files.eric.ed.gov/fulltext/ED336865.pdf</a>
- Rockoff, J. E., Jacob, B. A., Kane, T. J., & Staiger, D. O. (2011). Can you recognize an effective teacher when you recruit one? *Education Finance and Policy*, 6(1), 43-74.
- Tseng, V. and Coburn, C. (2019). Using evidence in the US. In A. Boaz, & H. Davies, (Eds.). *What works now? Evidence-informed policy and practice*. pp. 351-368. Policy Press. Bristol, UK.
- Yan, B. (January 2018). Improve system deficiencies to make stronger budget decisions. *School Business Affairs*, 84(1),14-17. Retrieved from <a href="https://www.schoolbusinessaffairs.org/books/2018/2018-01-SBA/files/assets/common/downloads/School%20Business%20Affairs%20January%202018.pdf">https://www.schoolbusinessaffairs.org/books/2018/2018-01-SBA/files/assets/common/downloads/School%20Business%20Affairs%20January%202018.pdf</a>

Figure 1. Evidence provided to support effectiveness of proposed strategies in budget requests

