NATIONAL ACADEMIES Sciences Engineering Medicine

Consensus Study Report Issue Brief

A Vision and Roadmap for Education Statistics

Opportunities for State and Local Education Agencies

State education agencies (SEAs) and local education agencies (LEAs) may soon receive new types of assistance.

The National Center for Education Statistics (NCES) seeks to re-envision its role in the 21st-century education data ecosystem and prioritize its work and operations accordingly. To help develop this new vision, the Institute of Education Sciences (IES), within which NCES is located, commissioned the National Academies of Sciences, Engineering, and Medicine to convene an interdisciplinary panel of experts to develop consensus recommendations on how NCES should move into the future. This issue brief focuses on the panel's recommendations that create new opportunities for state and local education agencies (SEAs and LEAs).

WHAT SHOULD BE EXPECTED IN TERMS OF SUPPORT FOR EVIDENCE BUILDING?

The Evidence Act of 2018 gives NCES new authority and a mandate to acquire data from federal agencies and to facilitate access to data. To better fulfill that mission, the panel recommends that NCES support SEAs and LEAs in data access and linkage, and strengthen state and local capacity for evidence building (Recommendation 4–4). To do so, NCES could award Statewide Longitudinal Data Systems (SLDS) grants that:

- Invest in infrastructure for creating high-value data linkages across state agencies and between states;
- Help states assist LEAs by sharing data, facilitating secure data access, and providing technical and analytical assistance;
- Facilitate collaborations among regions or groups of LEAs;
- Generate products and tools useful to LEAs and SEAs; and
- Create standardized and shareable data and tools to benefit all states.

In addition to setting priority activities, goals, and outcomes for the SLDS awards, NCES can provide guidance on best practices for establishing and configuring data infrastructure as well as act as a catalyst for creating standards.

The panel also suggests establishing state liaisons for data and statistics, modeled on the existing assessment program coordinators. Through the liaisons, NCES could help states conduct high-value activities, such as executing standards and data access security, building data linkages, supporting LEAs, and supporting NCES data collections.

WHAT KINDS OF PRODUCTS CAN BE ANTICIPATED?

Noting that LEAs and SEAs often lack resources such as data analysts and managers, the panel recommends NCES deliver actionable and timely products that they can use, particularly with regard to improving school and student outcomes. NCES could extend products to include analytic features, tools, and templates that provide localized summary statistics and statistical testing for comparing similar schools. Such products could be made even more useful and actionable by connecting LEAs to curated resources on educational interventions, such as IES's What Works Clearinghouse (Recommendation 4–6).

HOW CAN STATE AND LOCAL EDUCATION AGENCIES COORDINATE WITH NCES?

The panel recommends NCES deepen and broaden its engagement with current and potential data users to gather continuing feedback about their needs (Recommendation 4–1) and to establish an ongoing consulting body to help NCES innovate (Recommendation 4–3).

- For SEAs and LEAs in particular, partnering could occur through the SLDS, with the suggestion that state liaisons be created (Recommendation 4–4).
- More broadly, NCES should establish a joint statistical research program that would expand access to restricted data and match internal NCES staff with highly qualified external researchers, statisticians, and data scientists, including those in SEAs and LEAs (Recommendation 4–5).
- The panel recommends NCES collaborate with data holders, including state and local agencies, to develop useful products and processes to provide timely, policy-relevant insights (Recommendation 4–2).
- NCES is also encouraged to develop a community of users, providing another tool for communication and coordination, both in research and in educational practices.

HOW CAN NCES DATA COLLECTIONS ADAPT TO CHANGES IN THE EDUCATION ENVIRONMENT?

The education environment has been changing in ways that create new needs for data and for support.

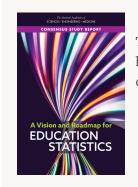
- NCES should proactively embed diversity, equity, inclusion, and accessibility in its work to adapt and serve contemporary communities (Recommendation 2-4).
- NCES is also encouraged to adapt by more systematically addressing changes that fall outside current data collection systems' boundaries (see Chapter 3). Vocational education and adult education have both expanded greatly in terms of the number of students and importance to the economy, and the panel suggests that NCES be active in designing data collections for measuring them and their outcomes.
- Additionally, the panel suggests paying more attention to the education process, and finding ways to measure education policies and programs.

There also has been a growth in new kinds of data, including the linking of administrative data and the growth of big data. This may lead to the use of new sources for NCES, including commercial data, social media and network data, and documents, webpages, and videos harvested from the internet. These new data and techniques can be valuable resources for states and localities. NCES is encouraged to better enable data sharing through privacy-protected linkages with other data sources (Recommendation 2–6).

CONCLUSION

As NCES expands its role based on the Evidence Act, states and localities may experience increased assistance from NCES in data sharing and evidence building, along with products geared toward SEAs and LEAs. NCES may be making changes to its own data collections, both in data sources and in the types of data collected, offering new types of data and encouraging states and localities to make similar changes. The panel suggests that NCES increase its use of feedback mechanisms to better

understand the needs of researchers and policymakers, which may lead to increased coordination with states and localities.



To read the full report, please visit https://nap.nationalacademies.org/ catalog/26392.

FOR MORE INFORMATION

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