

How Nebraska Teachers Use and Perceive Summative, Interim, and Formative Data

Teachers have access to more data than ever before, but comparative research on how often and why teachers use different types of data is scarce. The Nebraska Department of Education identifies summative (state-level), interim (benchmark-level), and formative (classroom-level) assessment data as key measures of student learning. The department values professional learning to support teachers in using these data to adjust instruction in order to help students meet state content standards, and it needs research to inform a state-level professional learning plan. In March 2019 the department administered the Teacher Data Use Survey¹ and received responses from 3,572 teachers and 171 principals across 353 schools. The survey measured teachers' use of summative, interim, and formative data to inform instruction; their perceived competence in using data; their attitudes toward data; and their perceptions of organizational supports for using data. The study also examined whether data use varied by teacher characteristic such as highest degree earned and years of experience in education.

Key findings

- **About 29 percent of teachers reported that they did not use summative data, 21 percent reported that they did not use interim data, and 6 percent reported that they did not use formative data.** Among teachers who reported using data, teachers used formative data almost weekly and interim data about monthly to make various instructional decisions.
- **Principals had more positive perceptions of and attitudes toward data than teachers did.** Principals' ratings of their own attitudes toward data were more positive than were teachers' ratings on statements about finding data useful, important to education practice, and helpful in planning instruction. Principals' ratings were also more positive than were teachers' ratings on items about principals discussing data with teachers, principals creating protected time for using data, and teachers having the proper technology for using data.
- **Teachers' self-reported use of data was positively associated with their perceived competence in using data, their attitudes toward data, and their perceptions of organizational supports for using data.** Teachers who reported greater perceived competence in using data and more organizational supports for using data tended to take more frequent instructional actions with summative, interim, and formative data. When teachers reported having more positive attitudes toward data, they indicated that they more often used formative data to inform instruction.
- **Teachers' highest degree earned was positively associated with their perceived competence in using data and their attitudes toward data.** Teachers with a more-advanced degree (an education specialist or doctoral degree) reported greater perceived competence in using data than did teachers with a bachelor's degree. Teachers with a more-advanced degree reported statistically significantly more positive attitudes toward data.
- **Teachers with 12 or fewer years of experience in education reported using formative data more often than did teachers with 22 or more years of experience.** Teachers' responses for frequency of summative and interim data use were more similar across the years of experience categories.

1. The Teacher Data Use Survey is available at <https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=2461>.