

# What California Educators Are Saying about Data Use and Continuous Improvement

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*For several years, WestEd’s Measure to Learn and Improve (MLI) project team has kept California state policy leaders informed about the statewide implementation of the California Academic Standards in English language arts and mathematics, by summarizing and disseminating results from the RAND Corporation’s annual American Educator Panel (AEP) surveys of teachers and principals.<sup>1</sup> This brief summarizes recent results related to peer collaboration, data use, and continuous improvement.*

## Peer collaborations for continuous improvement

Educators work with their peers in various ways. The most frequent activities that California teachers and principals reported engaging in when working in collaborative teams (as shown in tables 1 and 2) were using data to make links between instruction and student outcomes; approaching an issue by looking at data; drawing conclusions based on data; and identifying actionable solutions based on those conclusions. Less commonly reported as team activities were discussing preconceived beliefs about an issue; revisiting predictions made in previous meetings; and identifying additional data to offer a clearer

picture of an issue. Notably, these latter (less frequent) activities are traditionally thought of as important aspects of continuous improvement (Hough et al., 2017). Moreover, as also shown in the tables, California educators in different contexts varied in the frequency of their reported engagement in these practices. For example, teachers and principals in elementary schools, and in schools with higher proportions of English learner students, reported engaging in these types of activities more frequently than their other peers, as did less-experienced educators.

## Principals’ data use practices and supports

Compared to principals across the survey’s national sample, in the May 2018 survey, California principals reported slightly less frequent review of data to help inform their decisions about programming and resource allocation, or their feedback to staff about instruction. The survey results also showed that California principals were slightly less likely than principals nationwide to report that the support they received in using student and school data was “totally sufficient” (table 3).<sup>2</sup>

The May 2018 survey asked principals to select the top two supports that would be most helpful in facilitating their use of student and school data to guide their decisions and/or their feedback to staff. The most common selections for California principals (see table 4) were resources for paid time to set aside for the principal/team to examine

**Table 1. Percentage of California teachers reporting having engaged in various team activities at least monthly in 2017/18**

In our collaborative teams, we...	Total for all CA teacher respondents percentage (n = 492)	Elementary teachers percentage (n = 218)	Secondary teachers percentage (n = 251)	Teachers with fewer than 10 years' experience percentage (n = 106)	Teachers with 10-plus years' experience percentage (n = 365)	Teachers with 25% or fewer EL students percentage (n = 306)	Teachers with more than 25% EL students percentage (n = 167)
Identify actionable solutions based on our conclusions	<b>57</b>	<b>61</b>	<b>53</b>	<b>64</b>	<b>55</b>	<b>53</b>	<b>63</b>
Predict possible student outcomes when we consider changes in practice	<b>57</b>	<b>62</b>	<b>54</b>	<b>66</b>	<b>55</b>	<b>54</b>	<b>65</b>
Draw conclusions based on data	<b>55</b>	<b>65</b>	<b>46</b>	<b>59</b>	<b>54</b>	<b>50</b>	<b>65</b>
Use data to make links between instruction and student outcomes	<b>53</b>	<b>63</b>	<b>43</b>	<b>63</b>	<b>50</b>	<b>47</b>	<b>65</b>
Approach an issue by looking at data	<b>51</b>	<b>65</b>	<b>42</b>	<b>61</b>	<b>50</b>	<b>47</b>	<b>64</b>
Discuss our preconceived beliefs about an issue	<b>48</b>	<b>54</b>	<b>46</b>	<b>56</b>	<b>48</b>	<b>50</b>	<b>50</b>
Explore data by looking for patterns and trends	<b>47</b>	<b>57</b>	<b>42</b>	<b>58</b>	<b>46</b>	<b>46</b>	<b>54</b>
Identify questions that we will seek to answer using data	<b>44</b>	<b>52</b>	<b>38</b>	<b>56</b>	<b>42</b>	<b>41</b>	<b>53</b>
Revisit predictions made in previous meetings	<b>43</b>	<b>47</b>	<b>42</b>	<b>53</b>	<b>42</b>	<b>44</b>	<b>46</b>
Identify additional data to offer a clearer picture of the issue	<b>41</b>	<b>50</b>	<b>36</b>	<b>50</b>	<b>40</b>	<b>39</b>	<b>50</b>

Note: The subgroup *N* counts do not combine to match the total CA respondent count because, for a few individuals (i.e., 5-20) there was not sufficient information to group them for that particular classification.

student data and use the data to guide decisions about practice (55 percent); professional development on data-driven decision making at [my] school (44 percent); and support from a [school or district] data staffer, consultant, or mentor skilled in data analysis (44 percent). California principals' reported need for support from data staff was more than 10 percentage points higher than in the survey's national sample.

## Conclusion

Continuous improvement is a widespread priority in California today, with many school districts and county offices of education dedicating time and resources to strengthening local data review and inquiry practices. Such changes are likely to take time, however. Implementing effective continuous improvement at scale requires not only new

**Table 2. Percentage of California principals reporting having engaged in various team activities at least monthly in 2017/18**

In our collaborative teams, we...	Total for all CA principal respondents percentage (n = 300)	Elementary principals percentage (n = 200)	Secondary principals percentage (n = 86)	Principals with fewer than 5 years' experience percentage (n = 80)	Principals with 5-plus years' experience percentage (n = 205)	Principals of schools enrolling 25% or fewer EL students percentage (n = 177)	Principals of schools enrolling more than 25% EL students percentage (n = 108)
Use data to make links between instruction and student outcomes	<b>64</b>	<b>69</b>	<b>58</b>	<b>70</b>	<b>64</b>	<b>63</b>	<b>69</b>
Draw conclusions based on data	<b>63</b>	<b>67</b>	<b>55</b>	<b>70</b>	<b>61</b>	<b>61</b>	<b>68</b>
Approach an issue by looking at data	<b>62</b>	<b>64</b>	<b>53</b>	<b>63</b>	<b>60</b>	<b>60</b>	<b>63</b>
Identify actionable solutions based on our conclusions	<b>59</b>	<b>61</b>	<b>58</b>	<b>58</b>	<b>61</b>	<b>59</b>	<b>62</b>
Explore data by looking for patterns and trends	<b>58</b>	<b>57</b>	<b>60</b>	<b>58</b>	<b>58</b>	<b>59</b>	<b>57</b>
Predict possible student outcomes when we consider changes in practice	<b>55</b>	<b>56</b>	<b>57</b>	<b>55</b>	<b>57</b>	<b>56</b>	<b>56</b>
Identify questions that we will seek to answer using data	<b>54</b>	<b>52</b>	<b>56</b>	<b>60</b>	<b>51</b>	<b>52</b>	<b>56</b>
Identify additional data to offer a clearer picture of the issue	<b>53</b>	<b>52</b>	<b>51</b>	<b>59</b>	<b>49</b>	<b>51</b>	<b>54</b>
Discuss our preconceived beliefs about an issue	<b>47</b>	<b>45</b>	<b>55</b>	<b>46</b>	<b>48</b>	<b>46</b>	<b>50</b>
Revisit predictions made in previous meetings	<b>44</b>	<b>47</b>	<b>44</b>	<b>43</b>	<b>47</b>	<b>43</b>	<b>51</b>

Note: The subgroup N counts do not combine to match the total CA respondent count because, for a few individuals (i.e., 5-20), there was not sufficient information to group them for that particular classification.

mindsets, skills, and capacities among individuals, but also significant shifts in organizational norms, roles, and relationships at various levels of the education system (Hough & Myung, 2019). In this push for continuous improvement, context matters: Preexisting structures and processes, time for educator collaboration, and supportive leadership

all influence these efforts (Gallagher et al., 2019). Thus, there is a great need for education organizations across California to learn by doing and to share that learning, especially about continuous improvement's key enabling conditions.

**Table 3. Data use practices and supports reported by principals for 2017/18**

Table 3A. [In 2017/18] how often did you personally look at data to help inform your decisions and/or feedback to staff about instruction, programming, or resource allocation?

Frequency	California percentage (n = 287)	National sample percentage (n = 3287)
Never	0.3	0.4
A few times	18.1	13.3
About monthly	35.0	33.0
More than once a month	46.6	53.3

Table 3B. During [2017/18], how adequate was the support you received in using student and school data to inform your decisions and/or feedback to staff?

Frequency	California percentage (n = 287)	National sample percentage (n = 3287)
Totally insufficient	8.0	4.5
Somewhat insufficient	17.4	15.0
Somewhat sufficient	57.3	57.7
Totally sufficient	17.2	22.8

**Table 4. Types of data use supports sought by principals in May 2018**

Data use support	California percentage (n = 300)	National sample percentage (n = 3230)
Resources for paid time set aside for you and/or your distributed leadership team to examine student data and use the data to guide decisions about practice	55.3	48.1
Professional development on data-driven decision making at your school	44.4	41.8
Support from local data staff, consultant, or mentor skilled in data analysis	44.1	31.7
Professional development on data-driven decision making outside your school	21.0	16.6
Your district's encouragement for using data in decision making	7.8	10.3
Formal coursework covering data-driven decision making	5.1	4.5

## References

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## Endnotes

1 The RAND Corporation's American Educator Panel (AEP) surveys were originally launched in 2014 and are administered several times a year in more than 20 states. To create the panels, RAND first sampled 2,300 U.S. public schools, stratifying for balance by grade span (primary, middle, high, and combined), school size, poverty status, population density, and geographic region. Educators in California and several other states were over-sampled to afford state-level representativeness. Educators who change schools remain on the panel, and new members are added periodically so the panel remains representative over time. For the May 2018 administration of the AEP surveys, 492 of 879 California teachers (56 percent) and 300 of 1,056 California principals (28 percent) responded. The average margins of error for the results presented here thus generally range from  $\pm 5$ –8 percentage points. Subgroup analyses/cross-tabulations were carried out using the raw/unweighted counts of respondents, who were grouped by grade span (elementary/secondary), by years of experience (less than 10 years versus 10 years or more for teachers, and less than 5 years versus 5 years or more for principals), by subject area (English language arts/math teachers), and by the proportion of EL students they teach or oversee at their site. Only statistically significant subgroup differences are presented in this brief.

2 California principals of schools enrolling more than 25 percent English learner (EL) students more often reported that they “personally look at data to help inform decisions and/or feedback to staff about instruction, programming, or resource allocation” more often than once a month (55 percent versus 40 percent among principals of schools enrolling lower proportions of EL students).

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