![REL Southwest logo] Regional Educational Laboratory Southwest

Coaching Session 2

Louisiana Department of Education (LDOE)
Coaching: *Believe and Prepare* Survey Data Analysis and Use
March 17, 2020
Baton Rouge, LA

Session 2: Data Quality Review and Psychometrics Analyses

Introduction

During spring 2019, REL Southwest worked with LDOE to develop surveys to collect information from teacher residents, mentor teachers, and principals about their experiences in and perceptions of the *Believe and Prepare* teacher residency program. At the end of the training series, the three surveys were ready for the pilot administration. The teacher resident survey has six sections focusing on initial screening information, responsibilities, support, challenges, perceptions, and background data. The mentor teacher survey has eight sections focusing on initial screening information, mentor teacher responsibilities, support received from principals or district-based staff, challenges, perceptions, mentor training, mentor assessments, and background data. The principal survey has seven sections focusing on initial screening information to identify whether principals had mentor teachers or teacher residents in their schools during the prior year, principal support for mentor teachers, use of the mentor teacher rubric during observations, mentor teacher responsibilities, challenges, perceptions of mentor teachers, and background information. The principal survey also has a section about content leaders, which is ancillary to this project.[1] Copies of the surveys are included in Appendix A.

As part of the Coaching: *Believe and Prepare* Survey Data Analysis and Use series, REL Southwest conducted survey data analyses consisting of a data quality review and psychometric analyses of the 2019 pilot data. This memo describes the procedures used by REL Southwest to conduct these analyses. The memo also contains the output from the data quality review and psychometric analyses to be used in the second coaching session.

Survey Data Analysis

REL Southwest conducted a data quality review and psychometric analyses. The proposed survey data analyses are designed to answer the following research questions:

1. How did the items on the teacher mentor, principal, and teacher resident surveys "perform"? "Perform," refers to variation in responses, degree of item missingness, and frequently used "other" response options. Which items, if any, should be revised due to a lack of variation in the responses, frequently used "other" responses, and/or high missing value rates?

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[1] Content leaders may or may not also be mentor teachers. Content leaders provide assistance to other teachers in the school with regard to curriculum content. The content leaders are not part of the *Believe and Prepare* program. However, LDOE wanted to ask principals about their interactions with content leaders, so these items were included in the survey.

2. What are the psychometric characteristics of the survey scales (for example, reliability estimates, scale properties)? Are there survey scales that should be revised based on the results of the psychometric analyses?

Data Quality Review

Survey response rates

A survey response rate (also called a unit response rate) is the number of eligible sample members who respond to a survey. The survey response rate is important because it is an indicator for how well responses to a survey are likely to represent the target population. Higher survey response rates increase the chance that the results are representative of the target population; lower response rates increase the chance of bias. Survey response rates are calculated by dividing the number of sample members who responded to the survey by the total number of sample members to whom the survey was distributed and multiplying by 100. This is shown in equation 1.

(Survey responses) / (Surveys distributed) * 100 = Survey response rate　　　　　　　　(1)

Table 1 shows the response rates for the Believe and Prepare Mentor Teacher and Principals surveys. It was not possible to calculate a survey response rate for the Teacher Resident survey due to the way the survey was administered.[2]

Table 1. Survey response rates for Believe and Prepare Surveys

Survey	Number of surveys distributed	Number of survey responses	Survey response rate
Mentor Teacher Survey	1,371	559	41%
Principal Survey	672	205	31%
Teacher Resident Survey	NA	45	NA

Nonresponse bias analysis and nonresponse weights

The Institute of Education Sciences requires a nonresponse bias analysis when survey response rates are less than 85%. In order to conduct a nonresponse bias analysis, background variables must be available, and the values of these variables must be known for all sample members to which the survey was distributed. By comparing the observed frequency distribution of a background variable with its population distribution, it is possible to establish whether the sample of survey respondents is representative of the target population on each background variable.

Nonresponse weights are a statistical way to correct for lack of representativeness in the data. The nonresponse weight is the inverse of the survey response rate for a particular group (for example, teachers in rural schools). This is shown in equation 2. When computing statistics using survey data, the nonresponse weight is multiplied by the results to compensate for nonresponse bias. That is, when computing means, totals and percentages using the survey data, the values of the variables and weights are used.

Population number / Sample number = Weight　　　　　　　　　　　　　　　　　　(2)

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[2] This survey was administered using a combination of survey contact email addresses and email forwarding. Survey contact email addresses were used if the teacher resident's teacher preparation program provided email addresses to LDOE. Otherwise, mentor teachers were asked to forward a general link to the survey to their teacher residents.

For the Believe and Prepare surveys it was not possible to link background information to the survey sample members, so a nonresponse bias analysis was not be conducted and nonresponse weights were not computed. REL Southwest researchers will work with LDOE to link background variables to the survey sample email addresses for the next survey administration.

Item-level response rates

To investigate item responses, REL Southwest calculated item response rates and ran descriptive statistics for all the variables in the three surveys. Specifically, REL Southwest produced item frequencies and percentages for dichotomous- (i.e., data that can take on only two possible values), nominal- (i.e., data that is used to label variables that do not have a quantitative value), and ordinal-level (i.e., data in which the ordering indicates a hierarchy but there is no standardized value for the difference from one score to the next) items. REL Southwest reviewed the data, which involved examining item missingness and item response distributions to evaluate how well the survey items "performed." High item-missingness or little response variation (items with one response category getting a large majority of the responses) may indicate a problem with the item. REL Southwest also reviewed answers to open-ended "other specify" items to see if any of them include several answers that are the same or similar. REL Southwest flagged the problematic items for discussion with LDOE in the coaching session.

Table 2. Summary of survey and item response rates for the 2019 Believe and Prepare Surveys

Survey respondent	Survey response rates (%)	Range of item response rates (percent)	Percentage of items with a response rate of		
			>= 85 %	70.0-84.9%	< 70%
Teacher resident	NA[3]	69.6 - 100.0	7.3%	90.2%	2.4%
Principal	31	70.1 - 100.0	29.3%	70.7%	0.0%
Mentor teacher	41	72.3 - 100.0	73.3%	26.7%	0.0%

NOTE: All submissions are included in the calculations. Of the 672 principals to whom the survey was e-mailed, 205 principals (31 percent) responded. Of the 1,371 mentor teachers to whom the survey was e-mailed, 559 mentor teachers (41 percent) responded. 79 teacher residents responded to the survey (the number of teacher residents who received the anonymous link to the survey is unknown).

Item-level missingness

Mentor Teacher survey. Results of the data quality review showed that on the Mentor Teacher survey, item-level missingness was relatively low. 559 mentor teachers answered at least some of the survey items. The highest levels of missing data were for item 9 (27.7 percent), 13a (19.5 percent), 14 (19-20 percent) and items 15, 16, and 19 (15 percent). Below are our thoughts about reasons for why respondents did not answer these items and proposed solutions:

- **Item 9**: Respondents who did not face challenges fulfilling their roles as mentors may have skipped this item because it did not include a response option that respondents could select if they did not face challenges. The item will be revised to include such a response option. REL Southwest will also add to this item additional closed-ended response options from frequently mentioned answers in the "Other specify" response option.
- **Item 13a-14**: In conversations with LDOE, REL Southwest has learned that LDOE plans to delete this item, as well as items 13b, 13c, and 14.

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[3] Teacher mentors were asked to forward a link to their mentees because LODE didn't have email addresses for teacher residents. Since it's not known how many forwarded the anonymous link, a response rate for the teacher resident survey cannot be calculated.

- **Items 15 through 19**: At this point in the survey, about 15 percent of respondents had stopped responding to the survey. As such, the percent of missing data for these items is high. To address this, REL Southwest will work with LDOE to ensure that the items are relevant for the sample to which the survey is administered and possibly reduce the number of items and skip patterns to make the survey less complicated.

Principal survey. On the Principal survey, which was answered at least partially by 205 respondents, item-level missingness was over 20 percent for item 9 (22 percent), item 10 (29.8 percent) and items 11-19 (23 – 25 percent). Below are our thoughts about reasons for why respondents did not answer these items and proposed solutions:

- **Item 9**: It is possible that mentor teachers in the principals' schools did not have teacher residents. If that was the case, it would be difficult to respond to these items. REL Southwest will work with LDOE to develop a well-designed skip pattern to filter out principals' who do not have a teacher resident on campus.

- **Item 10**: Respondents who did not face challenges may have skipped this item because it did not include a response option that respondents could select if they did not face challenges. The item will be revised to include such a response option.
- **Items 11-14**: It is possible that mentor teachers in the principals' schools did not supervise a teacher resident this year. If that was the case, it would be difficult to respond to these items. REL Southwest will work with LDOE to develop a well-designed skip pattern to filter out principals' who do not have a teacher resident on campus.
- **Items 15-19**: At this point in the survey, about 20 percent of respondents had stopped responding to the survey. As such, the percent of missing data for these items is high. To address this, REL Southwest will work with LDOE to ensure that the items are relevant for the sample to which the survey is administered and possibly reduce the number of items and skip patterns to make the survey shorter and less complicated.

Teacher Resident survey. The Teacher Resident survey was answered at least partially by 79 respondents. The first two items had three or fewer missing answers, but the item missingness ranges from 18-20 percent for items 3-9 and 11. Item 10 had the highest missingness; 24 percent. Below are our thoughts about reasons for why respondents did not answer these items and proposed solutions:

- **Items 3 through 9 and 11**: After item 2, about 18% of respondents stopped answering questions. It isn't clear why respondents opted not to respond. Some teacher residents received the link to the survey through an email from their mentor teacher. It is possible, teacher residents were concerned that their mentor teacher would have access to responses. For this reason, REL Southwest has been working with LDOE to problem solve how to get more TPP program to provide them with teacher residents' email addresses.

- **Item 10**: It is likely that the skip pattern for this item did not work. For the next administration, REL Southwest will verify that all the skip patterns work in the online instrument.

Open-ended questions
REL Southwest also reviewed answers to open-ended "other specify" items to see if any of them include several answers that are the same or similar. The review suggested that LDOE may want to add additional close-ended response options for items 2a, 8b, 9, 12, and 18 on the Mentor Teacher survey and item 10 on the Principal survey. Frequency distributions, open-ended answers, and questionnaires for the three surveys are included in Appendix B.

Skip patterns

The data review discovered that LDOE had changed some of the survey content when they programmed the surveys. LDOE also administered the surveys without REL Southwest's review of them. The response patterns suggest that the one of the screener questions may not have worked as intended (Q3 on the Mentor Teacher Survey) and one programmed skip pattern on the Teacher Resident survey (Q10 on the Teacher Resident survey) did not work as indicated in the skip pattern instructions. REL Southwest will also review the items with LDOE and verify appropriate respondents for each item to ensure that respondents only answer items that apply to them. REL Southwest will also test the skip programming before the 2020 data collection.

Psychometric Analyses

REL Southwest performed psychometric analyses using data from the Mentor Teacher, Principal, and Teacher Resident surveys. The scales included in these analyses are shown in table 3.

Table 3. Survey Scales

Scale	Scale description	Survey item set
Mentor Teacher Survey		
Teacher Mentoring	Frequency with which a mentor teacher performs specific tasks with teacher residents	Q6
Usefulness of Training	Usefulness of topics covered in the mentor teacher training	Q14
Principal Survey		
Principal Interaction	Frequency with which principals have observed mentor teachers perform specific tasks	Q9
Teacher Resident Survey		
Mentor Teacher Interaction	Frequency of interactions with mentor teachers	Q3
Mentor Teacher Support	Perceptions of the support they received from mentor teachers	Q6
Understanding of Instruction Content and Skills	Perceptions of the impact of their mentor teachers on their understanding of instructional content and skills	Q8
Preparedness for Teaching	Perceptions of their preparedness to implement classroom techniques	Q9

For the sets of survey items described above, Rasch modeling techniques were employed to assess whether the items hold together as a scale, to estimate scale reliability, examine item and person distributions, assess

item category performance, and to create individual summary scores for each scale.[45] The Rasch analyses were conducted using a rating scale model, as the items on the survey use Likert response scales.

Assessing Item Fit

REL Southwest used an iterative process to examine item fit to ensure that the scales produce the best measurements possible. To examine item fit, REL Southwest reviewed the infit and outfit mean squares, which provide information about the extent to which the items appear to be measuring the same underlying trait. Infit mean square refers to the inlier-pattern-sensitive fit statistic. Infit mean squares are influenced by response patterns. They are used to identify items on which people with similar overall response patterns respond in unexpected way to specific items (for example, a respondent selected "strongly disagree" to most items on a scale selects "agree" to the next item, while others who had selected "strongly disagree to the same items selected "disagree" to the next item). It is recommended that items with large infit mean squares be dealt with first, as these constitute a higher threat to accurate measurement than items with high outfit mean squares. Outfit mean square refers to the outlier-sensitive fit statistic. Outfit mean squares are influenced by outliers. They are used to identify items on which people respond in unexpected ways to items that should be very hard or very easy for them to endorse (for example, a respondent who selected "strongly agree" to most items selects "disagree" for an item to which most other respondents selected "agree" or "strongly agree").

Mean squares are expected to have values close to 1.0. Values greater than 1.0 indicate unmodeled noise or other sources of variance in the data. Items with mean square values considerably above 1.0 tend to degrade measurement because the items may be measuring more than one underlying trait. Mean square values less than 1.0 indicate that the model predicts the data too well—there is less variation than expected. As a result, summary statistics, such as reliability statistics, tend to be artificially high. Table 4 shows how to interpret mean square fit statistics.

Table 4. Interpretation of Mean Square Fit Statistics

Mean square value	Interpretation
Greater than 2.0	Distorts or degrades measurement
1.5–2.0	Not useful for construction of measurement but not degrading
0.5–1.5	Useful for measurement
Less than 0.5	Less useful for measurement but not degrading.

Source: Adapted from Winsteps. Fit Diagnosis: infit outfit mean square diagnosis.
https://www.winsteps.com/winman/misfitdiagnosis.htm

REL Southwest examined the infit and outfit mean squares for all the items included on the scales on the Mentor Teacher, Principal, and Teacher Resident surveys. All items included in these scales had outfit and infit mean squares less than 2 or greater than 0.5 (see appendix C). Therefore, REL Southwest did not consider dropping items in order to improve measurement.

Estimating Reliability

REL Southwest also examined Rasch-based reliability estimates. Reliability estimates are measures of the consistency of items within a scale. While infit and outfit statistics are characteristics of individual items,

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[4] Psychometric analyses are based on Bond and Fox's *Applying the Rasch Model* (3rd ed.) (2015). and Winsteps https://www.winsteps.com/

[5] We have opted to use Rasch modeling due to its ability to handle missing data, ease of interpretation for practitioners and policymakers in comparison to a 2-parameter IRT model or categorical factor analysis, and the lower sample size required for Rasch modeling in comparison to a 2-parameter IRT model or categorical factor analysis.

reliability estimates are properties of the overall scale. The traditionally acceptable reliability estimate standard is 0.70.[6] REL Southwest compared results from the analyses using Cronbach's alpha to those analyses using Rasch modeling. Smith, Linacre, and Smith (2003) note that the person reliability estimate provided by Rasch is a more valid estimate than a Cronbach's alpha because Rasch models provide standard errors of measurement.[7] Reliability estimates presented are based on analyses of the full sample. The reliability estimates for each scale are shown in table 5.

Table 5. Scale Reliability Estimates

Scale	Rasch Person Reliability	Cronbach's Alpha
Mentor Teacher Survey		
Teacher Resident Mentoring	0.83	0.92
Usefulness of Training	0.82	0.92
Principal Survey		
Principal Interaction	0.91	0.95
Teacher Resident Survey		
Mentor Teacher Interaction (original)	0.46	0.75
Mentor Teacher Interaction (collapsed response categories)	0.50	0.71
Mentor Teacher Support (original)	0.55	0.95
Mentor Teacher Support (collapsed response categories)	0.63	0.93
Understanding of Instruction Content and Skills	0.69	0.90
Preparedness for Teaching	0.77	0.88

Only one of the scales on the Teacher Resident survey, Preparedness for Teaching, had a Rasch person reliability estimate greater than or equal to 0.70. It appears that the small sample size is primarily influencing the Rasch person reliability estimates for the scales on the Teacher Resident survey. The reliabilities of these scales will be revisited after the next fall survey data collection, when we expect larger numbers of teacher residents responding.

Examine Item and Person Distributions

Additionally, REL Southwest examined the item/person maps (see appendix C). Item/person maps provide visual descriptions of item-person relationships on the same scale. These can be used to see how well the items are targeted at the respondents (i.e., the degree of overlap between item difficulty values and person scores). For all the scales, the person score distributions are well above the item distributions. That is, most of the respondents have higher person scores than the item difficulty values. This means, that the items are too easy for the respondents. For scales in which the items cover the full range of

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[6] Bernstein, I. & Nunnally, J. (1994). *Psychometric Theory*, New York, NY: McGraw-Hill; Kaplan, R. & Saccuzzo, D. (1997). *Psychological Testing*. Pacific Grove, CA: Brooks/Cole Pub. Co.; Mertler, C. & Vannatta, R. (2005). *Advanced and Multivariate Statistical Methods*. Glendale, CA: Pyrczak

[7] Smith, R. M., Linacre, J. M., & Smith, Jr., E. V. (2003). Guidelines for manuscripts. *Journal of Applied Measurement, 4*, 198–204.

possible topics, such as the Usefulness of Training scale on the Mentor Teacher survey, this is not an issue. For scales in which the items are representative of the overall construct, such as the Understanding of Instruction Content and Skill scale on the Teacher Resident survey, this suggests that the scales could be improved by adding items that are more difficult (i.e., less "agreeable") for respondents to endorse.

Assess Item Category Performance

Finally, REL Southwest examined the scale probability curves for each of the scales. This was done to assess whether respondents made full use of the item response options. Ideally, each category should have a peak on the curve, indicating that it is the most probable response category for some portion of the scale. On the teacher resident survey, there were issues with the individual category probabilities for two scales—Mentor Teacher Interaction and Mentor Teacher Support. The individual category probability curves for these scales showed that not all response options were the most likely response at any point on the person score distribution. For example, in figure C16 in appendix C, the probability curve associated with category 2 is always lower than and overlapped by the probability curves for categories 1 and 3. This means that respondents are not making full use of the available response options, and it suggests that the response options should be collapsed to improve measurement. This was done for both scales. The updated tables and graphs for each of these scales were produced and examined. After collapsing categories 2 and 3 for items on the Mentor Teacher Interaction scale and categories 2 and 3 for items on the Mentor Teacher Support scales, the individual probability curves were improved. Collapsing these categories also resulted in improved reliability estimates. Output for the Rasch modeling analyses is included in Appendix C.

Respondents may not make use of all response options due to issues with the response options themselves. For example, respondents may not be able to make clear distinctions between the response options, the response options may be poorly written, or the response options could overlap. In addition, respondents may not make use of all response options because the sample size is not large enough to do so. REL Southwest examined the response options for these scales. REL Southwest did not notice any clear issues with the response options. REL Southwest noted that the response options were identical to those for the Teacher Resident Mentoring scale on the Mentor Teacher survey, which did not demonstrate the same issue. Given this, REL Southwest does not suggest changing the response options for the upcoming fall 2020 survey administration. Instead, REL Southwest recommends revisiting these analyses using data from the fall 2020 survey administration.

Summary and Recommendations

Based on the data quality analysis and the Rasch modeling analyses, REL Southwest arrived at the following conclusions and recommendations.

Data Quality Analysis

Regarding the data quality analysis, REL Southwest found that item-level missingness was low for the Mentor Teacher survey and somewhat higher for the Principal and Teacher Resident surveys. Each of the surveys had items for which the percentage of missing data was above 15%. In addition, the data quality analysis identified five items on the Mentor Teacher Survey and one item on the Principal survey that may need additional close-ended options. For each of these items, several respondents wrote in the same or similar responses in the "Other, please describe" category. Finally, REL Southwest noticed that some of the skip patterns embedded in the survey may not have been programmed correctly, as well as the potential need for additional screener questions.

REL Southwest will review the questionnaires with LDOE and go over issues that the data quality review revealed. As noted above, REL Southwest will review each survey with LDOE to determine if any additional screener questions are needed. In addition, LDOE and REL Southwest will review answers to the open-ended questions. REL Southwest and LDOE will work together to determine if additional

response options should be added to these items. Similarly, REL Southwest and LDOE will continue to discuss the items with high levels of missingness. Finally, REL Southwest and LDOE will continue to review all survey skip patterns to ensure responses are directed to the proper follow-up question. The skip patterns will be thoroughly tested prior to administration of the fall 2020 survey.

Rasch Modeling

Overall, the item statistics and scale reliabilities for the Mentor Teacher and Principal surveys were within acceptable ranges. That is, all infit and outfit mean squares were less than 2, and all person reliability estimates were 0.70 or greater. In addition, the individual category probability curves for these scales did not suggest the need for changes to the number of response categories. The Rasch modeling analyses do not demonstrate that changes need to be made to the scales on these surveys. Regarding the Teacher Resident survey, only one of the scales, Preparedness for Teaching, had a Rasch person reliability estimate greater than or equal to 0.70. The lower reliability estimates for the Teacher Resident survey appear to be the result of the small sample size. In addition, the individual category probability curves for the Mentor Teacher Interaction and Mentor Teacher Support scales suggested that respondents were not making use of all the available response options. Collapsing response option categories on these scales resulted in improved individual category curves and higher person reliability estimates.

Results from the analyses of the Teacher Resident survey scales suggest that the response rate to the Teacher Resident survey needs to be increased to improve scaling. An increased sample size should result in improved Rasch person reliability estimates, and it may eliminate the need to reduce the number of response option categories for the Teacher Interaction and the Teacher Mentor Support scales. At this point, REL Southwest does not suggest reducing the number of response option categories for the Teacher Interaction and the Teacher Mentor Support scales for upcoming fall 2020 survey administrations. Rather data from the next survey administration should be examined to assess whether data from a larger sample can fix these issues.

Appendix A. Surveys

Mentor Teacher Survey

Initial Screening Information

1. Please select your mentor cohort year: ○ Year 1 (2017-18) ○ Year 2 (2018-19)

2. Were you the teacher of record for any K-12 classes during the 2018-19 ○ Yes ○ No
school year? (SKIP PATTERN. IF NO, GO TO 2a. IF YES, GO TO 3.)

2a. What is your current position? (Select one.)

- ○ Full-time mentor (TAP master teacher, school- or district-based instructional coach)
- ○ Administrator (principal, assistant principal, director, school head)
- ○ Librarian or library media specialist
- ○ Other professional non-teaching staff (counselor, curriculum coordinator, social worker)
- ○ Teacher aide
- ○ Other, Please specify:_____

3. Are you currently serving as a mentor teacher during the 2018-19 ○ Yes ○ No
school year?
(SKIP PATTERN, IF YES GO TO 4, IF NO, GO TO 11)

4. How many mentees are you currently supporting? [drop down box] 1, 2, 3, 4, 5, 6, 7, 8, 9, 10+

5. Which category(ies) best describes your current mentee(s)? (Select all that apply.)

○ Undergraduate resident   ○ Post-baccalaureate teacher   ○ Experienced teacher

Responsibilities

6. How frequently have you performed each task with your mentee(s) during the 2018-19 school year:
(Select one for each statement.)

	More than once a week	Once a week	Monthly	Rarely	Never
Conduct an observation	○	○	○	○	○
Conduct scheduled one-on-one meetings	○	○	○	○	○
Model a lesson in the classroom	○	○	○	○	○
Model a teaching technique in the classroom	○	○	○	○	○
Analyze interim or benchmark assessment data	○	○	○	○	○
Co-plan a lesson	○	○	○	○	○

	More than once a week	Once a week	Monthly	Rarely	Never
Co-teach a lesson	◯	◯	◯	◯	◯
Help analyze tier one curriculum materials	◯	◯	◯	◯	◯
Help implement tier one curriculum materials	◯	◯	◯	◯	◯

Support

7. Have you received feedback or support from a school leader or district-based administrator in your role as a mentor teacher during the 2018-19 school year? (SKIP PATTERN. IF YES, GO TO 7a. IF NO, GO TO 8)

◯ Yes   ◯ No

7a. How frequently have you received feedback or support from a school leader or district-based administrator in your role as a mentor teacher during the 2018-19 school year?

◯ More than once a week   ◯ Once a week   ◯ Monthly   ◯ Rarely

7b. How frequently would you like to receive feedback or support from an administrator in your role as a mentor teacher during the upcoming 2019-20 school year?

◯ More than once a week	◯ Once a week	◯ Monthly	◯ Rarely	◯ Not at all

7c. What type(s) of support did you receive from an administrator in your role as a mentor teacher during the 2018-19 school year?
(Select all that apply.)

◯ Reduced teaching schedule
◯ Increased number of preparation periods
◯ Provided feedback on observed interactions with mentee(s)
◯ Provided regular supportive communication
◯ Other, Please specify:_____

7d. What type(s) of support <u>would you like to receive</u> from a school leader or district-based administrator in your role as a mentor teacher during the 2018-19 school year?
(Select all that apply.)

- ◯ Reduced teaching schedule
- ◯ Increased number of preparation periods
- ◯ Provided feedback on observed interactions with mentee(s)
- ◯ Provided regular supportive communication
- ◯ Other, Please specify:_____

8. Have you received support from university faculty in your role as a mentor teacher during the 2018-19 school year? (SKIP PATTERN. IF YES, GOT TO 8a. IF NO, GO TO 9.)

◯ Yes   ◯ No

8a. How often have you received support from university faculty regarding your work as a mentoring during the 2018-19 school year? (Select one.)

◯ More than once a week   ◯ Once a week   ◯ Monthly   ◯ Rarely

8b. What type(s) of support did you receive from university faculty in your role as a mentor teacher? (Select all that apply.)

- ◯ Provided feedback on observed interactions with mentee(s)
- ◯ Provided regular supportive communication
- ◯ Collaborated on feedback to mentee to ensure alignment
- ◯ Provided information about preparation provider requirements of mentors (ex. number of observations needed, etc.)
- ◯ Other, Please specify:_____

Challenges

9. Have you faced the following challenges in fulfilling your role as a mentor teacher during the 2018-19 school year? (Select all that apply.)

- ◯ Do not have a mentee to support
- ◯ Difficulty implementing the coaching cycle as presented in training
- ◯ Insufficient time to meet with mentee(s)
- ◯ Difficulty identifying appropriate coaching goals
- ◯ Difficulty identifying appropriate interventions or resources to meet mentee's needs
- ◯ Lack of school/administration support for mentoring in your school
- ◯ Other, Please specify:_____

10. On average, how much time <u>per week</u> do you have to meet with your mentee (if co-teaching, omit time spent on monitoring tasks):

○ Less than 1 hour   ○ 1-3 hours   ○ 4-6 hours   ○ 7-10 hours   ○ 10+ hours

Perceptions

11. Why did you decide to become a mentor teacher? (Select all that apply.)

- ○ To improve my skills working with early career teachers
- ○ To provide support to early career teachers
- ○ To improve my own teaching practice
- ○ My principal/school administrator asked me to serve as a mentor
- ○ To earn additional money
- ○ As a career ladder to education leadership roles
- ○ As a way to remain in the classroom while still expanding my influence
- ○ Other, Please specify:_____

12. In which role do you see yourself performing 5 years from now?

- ○ Classroom teacher
- ○ Classroom teacher and mentor teacher
- ○ Instructional coach
- ○ School administrator
- ○ District administrator
- ○ Education professional outside of the school system
- ○ A non-education related role
- ○ Other, Please specify:_____

Mentor Training

13. Did you attend the state-provided mentor training? (IF YES GO TO 14. IF NO, GO TO 13a.)

○ Yes   ○ No

13a. How long ago did you attend training to become a mentor teacher?

○
○
○
○
○
○

13b. For how many days did you attend training to become a mentor teacher?

○ Less than 1 day
○ 1 day
○ 2 days
○ 3 days
○ 4 days
○ 5 days
○ 6 days
○ 7 days
○ 8 days
○ 9 or more days

13c. Which of the following, if any, mentor teacher training include the following training topics and activities? (Select all that apply.)

○ Deep dive into the content standards
○ Deep dive into the tier one curriculum materials
○ Study of teacher mindset
○ Practice coaching cycle components
○ Discussion of coaching for classroom management
○ None of these
○ Other, please specify:_____

14. How useful have the following mentor teacher training topics and activities been to your work as a mentor teacher?

	Very useful	Useful	Moderately useful	Slightly useful	Not at all useful
Deep dive into the content standards	○	○	○	○	○
Deep dive into the tier one curriculum materials	○	○	○	○	○
Study of teacher mindset	○	○	○	○	○
Practice coaching cycle components	○	○	○	○	○
Discussion of coaching for classroom management	○	○	○	○	○

	Very useful	Useful	Moderately useful	Slightly useful	Not at all useful
Discussion of coaching for instructional improvement	◯	◯	◯	◯	◯

Mentor Assessments

15. Are you aware of the process to obtain your Ancillary Certificate?

(SKIP PATTERN. IF YES, GO TO 15a. IF NO, GO TO 16)

◯ Yes   ◯ No

15a. Have you started the process to obtain your Ancillary Certificate?

◯ Yes   ◯ No

15b. Have you completed the process to obtain your Ancillary Certificate?

◯ Yes   ◯ No

15c. When do you expect to complete the process to obtain your Ancillary Certificate?

- ◯ Prior to fall 2019
- ◯ During the 2019-2020 school year
- ◯ During summer 2020, prior to the 2020-21 school year deadline

Background Data

16. Please select your mentor cohort type:
(Select one.)

- ◯ Elementary
- ◯ Secondary ELA
- ◯ Secondary Math
- ◯ Secondary Universal

17. In which grade level band do you currently **PRIMARILY** teach? (Select one.)

- ◯ K-2/Elementary school
- ◯ 3-5/Elementary school
- ◯ 6-8/Middle school
- ◯ 9-12/High school

18. In which content area do you **PRIMARILY** serve as a lead teacher? (Select one.)

- ◯ All elementary school subjects
- ◯ English Language Arts (ELA)
- ◯ Math
- ◯ Science
- ◯ Social studies
- ◯ Art/music
- ◯ Career and technical education (CTE)
- ◯ Physical education/health
- ◯ Special education
- ◯ Other: Please specify:_____

19. In which district do you currently teach?

[select from drop down box]

Thank you for completing the survey!

Principal Survey

Initial Screening Information

1. How many mentor teachers did you have in your school during the 2018-19 school year?

- ◯ 1-3
- ◯ 4-6
- ◯ 7-9
- ◯ 10 or more

2. Did any teachers in your school participate in the state-provided mentor teacher training in 2017-18 or 2018-19? (SKIP PATTERN. IF YES, GO TO 2a. IF NO, GOT TO 3.)

◯ Yes   ◯ No

2a. How many mentor teachers currently working in your school have participated in state-provided mentor teacher training?

- ◯ 1-3
- ◯ 4-6
- ◯ 7-9
- ◯ 10 or more

3. Did you have undergraduate residents or student teachers on your campus during the 2018-19 school year? (SKIP PATTERN. IF YES, GO TO 3a. IF NO, GOT TO 4)

◯ Yes   ◯ No

3a. How many undergraduate residents or student teachers did you have on your campus during the 2018-19 school year?

- ◯ 1-3
- ◯ 4-6
- ◯ 7-9
- ◯ 10 or more

Principal Support

4. On average, how frequently did you observe your mentor teachers in their support of a mentee during the 2018-19 school year?

◯ More than once a week   ◯ Once a week   ◯ Monthly   ◯ Rarely   ◯ Never

5. On average, how frequently did you provide feedback or support to your mentor teachers in their support of a mentee during the 2018-19 school year?

◯ More than once a week ◯ Once a week ◯ Monthly ◯ Rarely ◯ Never

6. On average, how frequently did other members of the school leadership team (non-principal) provide feedback or support to your mentor teachers in support of a mentee during the 2018-19 school year?

◯ More than once a week ◯ Once a week ◯ Monthly ◯ Rarely ◯ Never

Mentor Teacher Rubric

7. Did you use the Mentor Teacher rubric provided by the LDOE to observe and provide feedback to mentor teachers on their performance in the role? (if yes go to 7a, if no go to 8)

◯ Yes ◯ No

7a. How effective did you find the Mentor Teacher rubric as a tool to provide feedback and support to mentor teachers?

◯ Very effective ◯ Effective ◯ Neutral ◯ Ineffective ◯ Very ineffective

8. If you did not use the Mentor Teacher rubric provided by the LDOE to observe and provide feedback to mentor teachers on their performance, did you use another rubric? (IF YES< GO TO 8a. IF NO, GOT TO 9.)

◯ Yes ◯ No

8a. Which rubric/tool did you use:

◯ TAP rubric
◯ School/district developed rubric
◯ Other, Please specify:_____

Mentor Responsibilities

9. On average, how frequently have you seen (or are you aware of) your typical mentor teacher performing each task during the 2018-19 school year: (Select one response for each statement.)

	More than once a week	Once a week	Monthly	Rarely	Never	Not Sure
Conduct an observation	◯	◯	◯	◯	◯	◯
Conduct a scheduled one-on-one meeting with mentee	◯	◯	◯	◯	◯	◯

	More than once a week	Once a week	Monthly	Rarely	Never	Not Sure
Set a data-informed growth goal for a mentee	○	○	○	○	○	○
Follow-up on a data informed growth goal with a mentee	○	○	○	○	○	○
Model a lesson in the classroom	○	○	○	○	○	○
Model a specific teaching technique in the classroom	○	○	○	○	○	○
Analyze benchmark or interim assessment data	○	○	○	○	○	○
Co-plan a lesson	○	○	○	○	○	○
Co-teach a lesson	○	○	○	○	○	○
Help analyze tier one curriculum materials	○	○	○	○	○	○
Help implement tier one curriculum materials	○	○	○	○	○	○

Challenges

10. Which, if any, of the following challenges have you faced in supporting mentor teachers in your school during the 2018-19 school year?

○ Do not have an undergraduate resident at my school
○ Insufficient time to meet with mentor teachers
○ Insufficient time to observe mentor teachers
○ Lack of funding from school district
○ Inability to provide release time for teachers
○ Lack of ability to select who serves as a mentor
○ Lack of guidance from the district to run the program effectively
○ Lack of autonomy to run the program effectively in my school
○ Other, Please specify:_____

Perceptions of Mentors

11. On average, what impact do you believe your mentor teachers are having on the performance of their mentee(s)?

○ Very positive   ○ Positive   ○ Neutral (neither positive nor negative)   ○ Negative   ○ Very negative

12. On average, what impact do you believe your mentor teachers are having on students in their classrooms as a result of participating in mentor teacher training?

○ Very positive   ○ Positive   ○ Neutral (neither positive nor negative)   ○ Negative   ○ Very negative

13. Do you believe that serving as a mentor teacher has increased retention for teachers at your school who serve in this role?

◯ Yes   ◯ No

14. Do you believe working with mentor teachers as a mentee has increased retention for undergraduate residents?

◯ Yes   ◯ No

Content Leaders

15. Did teachers in your school participate in state-provided content leader training in 2017-18 or 2018-19? (IF YES, GO TO 15a. IF NO, GO TO 16.)

◯ Yes   ◯ No

15a. Have your content leaders re-delivered content modules to other teachers in your school or district? (IF YES, GO TO 15b. IF NO, GO TO 16.)

◯ Yes   ◯ No

15b. Do your content leaders have time scheduled to re-deliver content modules to teachers in your school or district? (IF YES, GO TO 15c. IF NO, GO TO 16)

◯ Yes   ◯ No

15c. To which of the following groups will content leaders re-deliver content modules: (Select all that apply.)

◯ Small groups of teachers in your school
◯ All teachers in your school who teach the same content area
◯ Groups of teachers across the district who teach the same content area
◯ After-school professional development time
◯ Other, please specify:_____

15d. How frequently do you observe your content leaders re-deliver content modules?

◯ More than   ◯ Once a week   ◯ Monthly   ◯ Rarely   ◯ Never
once a week

15e. How frequently do you provide feedback/support to your content leaders regarding their re-delivery of content modules?

○ More than once a week   ○ Once a week   ○ Monthly   ○ Rarely   ○ Never

15f. How frequently do other members of the school or district leadership team provide feedback/support to your content leaders regarding their re-delivery of content modules?

○ More than once a week   ○ Once a week   ○ Monthly   ○ Rarely   ○ Never

15g. On average, what impact do you believe your teacher leaders are having on the performance of teachers to whom they have re-delivered the content modules?

○ Very positive   ○ Positive   ○ Neutral (neither positive nor negative)   ○ Negative   ○ Very negative

15h. On average, what impact do you believe your teacher leaders are having on students in their classrooms as a result of participating in content leader training?

○ Very positive   ○ Positive   ○ Neutral (neither positive nor negative)   ○ Negative   ○ Very negative

16. Do content leaders in your school receive additional compensation for serving as a content leader?

○ Yes   ○ No

Background information

17. Have you previously served as a mentor or instructional coach?

○ Yes   ○ No

18. For how many years have you been a principal at this school? _____ [Fill in number]

19. For how many years have you been a principal at ANY school? _____ [Fill in number]

Thank you for completing the survey!

Teacher Resident Survey

Initial Screening Information

1. Are you currently serving as an undergraduate resident: ◯ Yes ◯ No
(SKIP PATTERN. IF YES, GO TO 1a. IF NO, GO TO 2.)

1a. At which university are you a student? (Select one.) (SKIP PATTERN: SKIP TO Q3)

- ◯ Grambling State University
- ◯ Louisiana College
- ◯ Louisiana State University - Alexandria
- ◯ Louisiana State University - Baton Rouge
- ◯ Louisiana State University - Shreveport
- ◯ Louisiana Tech University
- ◯ Loyola University of New Orleans
- ◯ McNeese State University
- ◯ Northwestern State University
- ◯ Southeastern Louisiana University
- ◯ University of Holy Cross
- ◯ University of Louisiana at Lafayette
- ◯ University of Louisiana at Monroe

2. Are you currently enrolled in a post-baccalaureate program? ◯ Yes ◯ No

Responsibilities

3. How frequently did you have these interactions with your mentor teacher during the 2018-19 school year: (Select one for each statement.)

	Never	Rarely	Monthly	Once per week	More than once a week
Observation by mentor	◯	◯	◯	◯	◯
Have a scheduled one-on-one coaching meeting with mentor	◯	◯	◯	◯	◯
Watch a demonstration lesson in the mentor's classroom	◯	◯	◯	◯	◯
Watch a demonstration of a particular technique in the mentor's classroom	◯	◯	◯	◯	◯
Analyze tier one curriculum materials	◯	◯	◯	◯	◯
Teach lessons using tier one curriculum materials	◯	◯	◯	◯	◯

	Never	Rarely	Monthly	Once per week	More than once a week
Analyze assessment data with mentor	○	○	○	○	○
Co-plan with mentor	○	○	○	○	○
Co-teach with mentor	○	○	○	○	○

Support

4. On average, how many hours per week did you meet with your mentor teacher for <INSERT LANGUAGE> during the 2018-19 school year?

○ Less than 1 hour   ○ 1-3 hours   ○ 4-6 hours   ○ 7-10 hours   ○ 10+ hours

5. What additional type(s) of support would you have liked to receive from your mentor teacher? (Select all that apply.)

○ Preparing lessons that address learning standards
○ Developing student assessment tools
○ Providing strategies/practices for classroom management
○ Lesson implementation using curriculum
○ Other, Please specify:_____

6. To what extent to you agree with the following statements about the support you received from your mentor teacher during the 2018-19 school year: (Select one for each statement.)

	○	○	○	○
	○	○	○	○
	○	○	○	○
	○	○	○	○
	○	○	○	○
	○	○	○	○
	○	○	○	○
	○	○	○	○

Challenges

7. Which of the following challenges did you face as a mentee?
(Select all that apply.)

- ○ Insufficient time to meet with mentor
- ○ Difficulty identifying appropriate coaching goals
- ○ Difficulty identifying appropriate interventions or resources to meet my needs
- ○ Lack of school/district administration support for mentoring in your school
- ○ I did not face any challenges as a mentee.
- ○ Other, Please specify:_____

Perceptions

8. To what extent has your mentor impacted your understanding of the following topics?

9. How prepared do you feel to do the following?

	Not at all prepared	Somewhat prepared	Well prepared	Very well prepared
Handle a range of classroom management or discipline situations	○	○	○	○
Lesson planning based on standards or curriculum	○	○	○	○
Use Tier 1 instructional materials	○	○	○	○
Teach your subject matter	○	○	○	○
Assess students	○	○	○	○
Differentiate instruction for the classroom	○	○	○	○
Use data from student assessments to inform instruction	○	○	○	○
Teach to state content standards	○	○	○	○
Teach students who are limited-English proficient [LEP]or English-language learners [ELLs]	○	○	○	○
Teach students with special needs	○	○	○	○

10. <for undergraduate mentees only> To what extent has your undergraduate coursework prepared you for your residency experience?

○ ot a all   ○ To a small extent   ○ To a moderate extent   ○ To a great extent

Background Data

11. In which district did you teach/complete your residency in the 2018-19 school year?

[select from drop down box]

Thank you for completing the survey!