# NATIONAL CENTER FOR EDUCATION STATISTICS NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS 

# National Assessment of Educational Progress (NAEP) 

2019 and 2020

Appendix K2

NAEP 2019 Teacher Questionnaires

OMB\# 1850-0928 v. 10


September 2018

Appendix F provides the library of possible items to be used in the NAEP 2019 and 2020 questionnaires. This appendix (Appendix K2) includes the final version of the NAEP 2019 Teacher questionnaires, as well as a summary of any minor, non-substantive, wording changes made as a result of pilot and cognitive interview results and final reviews.

The confidentiality citation has been updated in September 2018. The teacher log-in screen will reflect the new confidentiality citation, as reflected in Part A.

| Abbreviation Key |
| :--- |
| CAFS: Computer Access and Familiarity |
| NIES: National Indian Education Study |

The items presented in this appendix are those to be used in the digitally based assessments. Some of the questionnaires will also be administered in paper based assessments. Adaptations to the item-level directions may be made, as appropriate (for example, "select one answer choice on each row" in DBA would become "fill in one oval on each line" in PBA).

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## Teacher Questionnaire Login Screens

Access to this site is limited to authorized users
via a personal link.


Online Questionnaires 2018

If you require access to this site:
Please contact the NAEP Help Desk at 1-800-283-NAEP (6237) or send an e-mail to NAEPHelp@westat.com

If you forgot your personal link:
Please enter your e-mail address and we will send it to you.


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## Appendix K-2a: Summary of Changes Operational Grade 4 Core

## 2019 Operational Grade 4 Core Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 1. What is your sex? <br> (大) Malc <br> (1) Female <br> (2018 Grade 4) | 1. What is your sex? <br> (1) Male <br> (1) Female <br> Issue: Gender | NC | N/A |
| 2. Are you Hispanic or Latino? Select all squares that apply. <br> (1) No, 1 am not Hispanic or Latino. <br> (1) Yes, I am Mexican, Mexican American, or Chicano. <br> - Yes, I am Pucrto Rican or Pucrto Rican American. <br> © Yes, Iam Cuban or Cuban American. <br> (D) Yes, 1 am from some other Hispanic or Latino background. <br> (2018 Grade 4) | 2. Are you Hispanic or Latino? Select all squares that apply. <br> (1) No. I am not Hispanic or Latino. <br> (1) Yes, Iam Mexican, Mexican American, or Chicano. <br> © Yes, 1 am Puerto Rican or Puerto Rican American. <br> (1) Yes, I am Cuban or Cuban American. <br> (1) Yes, 1 am from some other Hispanic or Latino background. <br> Issue: Race/Ethnicity | NC | N/A |
| 3. Which of the following best describes you? Select all squares that apply. <br> (ब) White <br> (1) Black or African American <br> - Asian <br> (1) American Indian or Alaska Native <br> (D) Native Hawaiian or other Pacific Islander <br> (2018 Grade 4) | 3. Which of the following best describes you? Select all squares that apply. <br> (c) White <br> (D) Black or African American <br> © Asian <br> (1) American Indian or Alaska Natiye <br> (c) Native Hawaiian or other Pacific Islander <br> Issue: Race/Ethnicity | NC | N/A |
| 4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year? <br> (2) Less than 1 year <br> (1) 1-2 years <br> © 3-5 years <br> (1) 6-10 years <br> (c) 11-20 years <br> (c) 21 or more years <br> (2018 Grade 4) | 4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year? <br> (4) Less than 1 year <br> (1) 1-2 years <br> (-) $3-5$ years <br> (1) 6-10 years <br> (D) 11-20 years <br> (D) 21 or more years <br> Issue: Teacher Preparation | NC | N/A |

## 2019 Operational Grade 4 Core Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 5. Have you been awarded tenure by the school, district, or diocese where you currently teach? <br> (2) Yes <br> (1) No <br> © My school, district, or diocese does not award tenure. <br> (2018 Grade 4) | 5. Have you been awarded tenure by the school. district, or diocese where you currently teach? Yes No My school, district, or diocese does not award tenure. <br> Issue: Teacher Preparation | NC | N/A |
| 6. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching? <br> (ब) Yes, I hold a permanent certificate. <br> (1) Yes, 1 hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.) <br> (Q) No, but I am currently working toward certification. <br> (1) No , and 1 am not planning to obtain certification. <br> (2018 Grade 4) | 6. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching? <br> (4) Yes, I hold a permanent certificate. <br> (1) Yes. I hold a temporary certificate. (This type of certificate may require additional coursework. student teaching, etc.) <br> © No, but I am currently working toward certification. <br> (1) No, and 1 am not planning to obtain certification. <br> Issue: Teacher Preparation | NC | N/A |
| 7. Did you enter teaching through an alternative route to certification program? <br> (An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.) Yes No <br> (2018 Grade 4) | 7. Did you enter teaching through an alternative route to certification program? <br> (An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching carcer, for example. a state. district, or university alternative route to certification program.) <br> (4) Yes <br> (1) No <br> Issue: Teacher Preparation | NC | N/A |
| 8. Are you certified by the National Board for Professional Teaching Standards in at least one content area? <br> (The National Board for Professional Teaching Standards is a nongovernmental organization that administers National Board certification, a voluntary national assessment program that certifies teachers who meet high professional standards. In order to gain certification, the candidate must at least complete a portfolio of classroom practice and pass one or more tests of content knowledge.) <br> (4) Yes, 1 am fully certified by the National Board for Professional Teaching Standards. <br> (1) 1 am working towards my National Board certification. <br> (c) No <br> (2018 Grade 4) | N/A | D | Due to a lack of a clear relationship to achievement and low response variability, this item was dropped. |

2019 Operational Grade 4 Core Teacher

| Previous item |  |  |  |  | 2019 item |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9. What is the highest academic degree you hold? <br> (Q) High school diploma <br> (1) Associate's degree/vocational certification <br> © Bachelor's degree <br> (1) Master's degree <br> (1) Education specialist's or professional diploma based on at least one year's work past master's degree <br> (1) Doctorate <br> (1) Professional degree (e.g., M.D., LL.B., I.D., D.D.S.) <br> (2018 Grade 4) |  |  |  |  | 8. What is the highest academic degree you hold? <br> (4) High school diploma <br> (1) Associate's degree/vocational certification <br> (1) Bachelor's degree <br> (1) Master's degree <br> (1) Education specialist's or professional diploma based on at least one year's work past master's degree <br> (1) Doctorate <br> (4. Professional degree (e.g.. M.D., LL.B.., J.D.. D.D.S.) <br> Issue: Teacher Preparation |  |  |  |  | N/A | N/A |
| 10. Did you have a major, minor, or special emphasis in any of the following subjects as part of your undergraduate coursework? Seleet one eirele in each row. |  |  |  |  | 9. Did you have a major, minor, or part of your undergraduate cou $\square$ <br> a. Biology or other life science | cial emphasis in ork? Select one | any of the followin ircle in each row. | ts as |  | R | This item is |
|  | Yes, a major | $\begin{aligned} & \text { Yes.a minor or } \\ & \text { special emphasis } \end{aligned}$ | No |  |  | Yes, a major | $\begin{aligned} & \text { Yes, a minor or } \\ & \text { special emphasis } \end{aligned}$ | No |  |  | by subject |
| a. Biology or other life science | $\stackrel{\square}{\square}$ | ${ }^{(1)}$ | $\bullet$ | woum |  | © | © | $\odot$ | a |  | and has been |
| b. Physics chemistry or other physical science | © | Ф | $\odot$ | nours | b. Physics, chemistry, or other physical science | © | $\oplus$ | - | mane |  | expanded |
| c. Earch or space science | $\stackrel{\square}{\circ}$ | ${ }^{\circ}$ | $\bigcirc$ | noum | c. Earth or space science | ¢ | (1) | $\odot$ | ,700 |  |  |
| (. Martematics or mathematics | $\stackrel{\square}{\circ}$ | $\oplus$ | $\odot$ | .n. | d. Mathematics or mathematics education | $\triangle$ | $\pm$ | $\oplus$ | neum |  |  |
| c. Science education | $\stackrel{\square}{\circ}$ | $\oplus$ | $\bigcirc$ | neare | e. Seience education | © | © | Q | nount |  | and math to |
| (t. Engineering or engineenng | © | $\oplus$ | © |  | f. Engincering or engineering | * | © | $\bullet$ | verme |  | also include |
| $\begin{array}{\|l} \text { g. Education (including elementary } \\ \text { or carly childhood) } \\ \hline \text { b. Seccial education Sincluding } \end{array}$ | $\pm$ | $\oplus$ | $\odot$ | nenras | 8. Reading, language arts, or literacy education | © | (1) | $\odot$ | mauta |  | sub-items for |
| h. Special education (including students with disabilitics) | © | © | ¢ | nouts | h. English | ¢ | ${ }^{\circ}$ | $\bigcirc$ | vanus |  | science. |
| (2018 Grade 4) |  |  |  |  | i. Other language arts-related | © | © | © | namas |  |  |
|  |  |  |  |  | i. Mathematics education | $\stackrel{\square}{\circ}$ | ${ }^{\text {® }}$ | $\bigcirc$ | manmo |  |  |
|  |  |  |  |  | k. Marhematics | ¢ | ¢ | $\cdots$ | samm |  |  |
|  |  |  |  |  | 1. Other mathematics-related subject such as statistics | © | ${ }^{\circ}$ | © | neurs |  |  |
|  |  |  |  |  | m. Education (ineluding elementary or early childhood) | ${ }^{\circ}$ | ${ }^{\oplus}$ | $\odot$ | naure |  |  |
|  |  |  |  |  | I. Special education (including students wid disabilities) | $\pm$ | ${ }^{(1)}$ | $\odot$ | 5 |  |  |
|  |  |  |  |  | o. English language learning | ${ }^{\circ}$ | ¢ | $\bigcirc$ | Trate |  |  |
|  |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |

2019 Operational Grade 4 Core Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 11. Since completing your undergraduate degrec. have you taken any graduate courses? <br> (a) Yes <br> (1) No $\rightarrow$ Question 12 is not applicable and will be skipped. <br> (2018 Grade 4) | 10. Since completing your undergraduate degree, have you taken any graduate courses? <br> (b) Yes <br> (1) No <br> Issue: Teacher Preparation | NC | Please note skip pattern directions have been removed given the transition from PPT to DBA. |

2019 Operational Grade 4 Core Teacher


2019 Operational Grade 4 Core Teacher

| Previous item |  |  |  |  | 2019 item |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14. During the last two years, have you recelved training from any source in any of the following areas? Select one circle in each row. |  |  |  |  | 14. During the last two years. have you received training from any source in any of the following areas? Select one circle in each row. |  |  |  |  | NC | N/A |
|  | $\begin{array}{\|c} \hline \begin{array}{c} \text { No, I Iam already } \\ \text { proficient. } \end{array} \\ \hline \hline \end{array}$ | No, I have not. | Yes |  |  | No. 1 am already proficient. | No. I have not. | Yes |  |  |  |
| - Basic compurer training | $\stackrel{\square}{\circ}$ | $\stackrel{\square}{\square}$ | $\bigcirc$ | Travem | a. Basic computer trrining | © | © | $\bigcirc$ | "num |  |  |
| b. Software applications | $\stackrel{\square}{\oplus}$ | $\stackrel{\oplus}{\oplus}$ | $\stackrel{\square}{\circ}$ | ${ }^{\text {ventax }}$ | b. Soffware applications | © | (1) | $\bigcirc$ | vrane |  |  |
| c. Use of other technology-for | © | ${ }^{\circ}$ | - | , | C. Use of the Internet | © | © | $\bullet$ | $\square$ |  |  |
| example, satellite access, wireless Web, interactive video, Cosed-circuit television. videoconterencing | © | © | © | Nouner | Usc of othcr technology - for example, satelite acces Web, interactive video. closed-circuit television. | © | (1) | $\bullet$ | 5 |  |  |
| $\begin{aligned} & \text { e. Integration of computers and } \\ & \text { other technology into classroom } \\ & \text { instruction } \end{aligned}$ | © | ¢ | © | nanuex | videoconterencing <br> e. Integration of computers and <br> other techology into classroom <br> instruction | © | © | © | m |  |  |
| (2018 Grade 4) |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |

2019 Operational Grade 4 Core Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 15. In this school year, did your school offer training for teachers on how to use computers or other digital devices? <br> (1) Yes, to all teachers <br> (1) Yes, to some teachers <br> (c) No <br> (2018 Grade 4) | 12. In this school year, did your school offer training for teachers on how to use computers or other digital devices? <br> (ब) Yes, to all teachers <br> (1) Yes, to some teachers <br> © No <br> Issue: Technology Use | NC | N/A |
| 16. In this school year, have you participated in training on computers or other digital devices through your school? <br> (4) No <br> (1) Once <br> (a) Twice <br> (1) Several times <br> (2018 Grade 4) | 13. In this school year, have you participated in training on computers or other digital devices through your school? <br> (2) No <br> (1) Once <br> - Twice <br> (1) Several times <br> Issue: Technology Use | NC | N/A |
| 17. In this school year, did your school provide you with a laptop computer (including Chromebooks) to use for teaching and class preparation? <br> (4) Yes, and I can take it home. <br> (1) Yes, but 1 cannot take it home. <br> © No <br> (2018 Grade 4) | N/A | D | Due to a lack of a clear relationship to achievement and to keep teacher burden low, this item was dropped. |
| 18. In this school year, did your school provide you with a tablet (for example, Surface Pro, iPad. Kindle Fire) to use for teaching and class preparation? <br> (2) Yes, and 1 can take it home. <br> (1) Yes, but I cannot take it home. <br> © No <br> (2018 Grade 4) | N/A | D | Due to a lack of a clear relationship to achievement and to keep teacher burden low, this item was dropped. |

2019 Operational Grade 4 Core Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 19. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply. <br> (4) Desktop computers <br> (1) Laptop computers (including Chromebooks) <br> © Tablets (for example. Surface Pro, iPad, Kindle Fire) <br> (1) Other digital devices (Please specify): $\qquad$ <br> (2018 Grade 4) | 15. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply. <br> (2) Desktop computers <br> (1) Laptop computers (including Chromebooks) <br> © Tablets (for example, Surface Pro, iPad, Kindle Fire) <br> Issue: Technology Use | R | The "Other <br> (Please <br> specify)" <br> response <br> option was <br> removed. This <br> response <br> option is only <br> used in pilot <br> administratio ns. |

## 2019 Operational Grade 4 Core Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 20. How well do the desktop computers in your school work? <br> (D) All computers are functional and operate quickly. <br> (1) All computers are functional, but some rum more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> (2018 Grade 4) | 16. How well do the desktop computers in your school work? <br> (4) All computers are functional and operate quickly. <br> (1) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> Issue: Technology Use | NC | N/A |
| 21. How well do the laptop computers (including Chromebooks) in your school work? <br> (4) All computers are functional and operate quickly. <br> (1) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> (2018 Grade 4) | 17. How well do the laptop computers (including Chromebooks) in your school work? <br> (2) All computers are functional and operate quickly. <br> (1) All computers are functional, but some run more slowly than others. <br> (1) All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> Issue: Technology Use | NC | N/A |
| 22. How well do the tablets (for example. Surface Pro, iPad. Kindle Fire) in your school work? <br> (1) All tablets are functional and operate quickly. <br> (1) All tablets are functional, but some run more slowly than others. <br> © All tablets are functional, but all or almost all run slowly. <br> (1) Some of the tablets do not operate and cannot be used. <br> (1) I don't know. <br> (2018 Grade 4) | 18. How well do the tablets (for example, Surface Pro, iPad. Kindle Fire) in your school work? <br> (8) All tablets are functional and operate quickly. <br> (1) All tablets are functional, but some run more slowly than others. <br> © All tablets are functional, but all or almost all run slowly. <br> (1) Some of the tablets do not operate and cannot be used. <br> (D) I don't know. <br> Issue: Technology Use | NC | N/A |


| Previous item |  |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23. How often do you do the following in this school? Sclect one circle in cach row. |  |  |  |  |  |  |  | 19. How often do you do the following in this school! Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  | Never | $\begin{gathered} \text { About } \\ \text { or w } \\ \text { ow } \end{gathered}$ |  | About once or twice a month | $\begin{array}{\|c\|c\|} \hline \text { Abour once } \\ \text { or wice a } \\ \text { week } \end{array}$ | $\left\|\begin{array}{c} \text { Every day or } \\ \text { almos } \\ \text { every day } \end{array}\right\|$ |  |  | Never | $\begin{gathered} \text { About } \\ \text { or twi } \\ \text { yed } \end{gathered}$ |  | About once or twice a month | $\begin{array}{\|c\|c\|} \substack{\text { About once } \\ \text { or tweec } \\ \text { week }} \end{array}$ | $\left\|\begin{array}{c} \text { Every day or } \\ \text { almost } \\ \text { avery day } \end{array}\right\|$ |  |  |  |
| $\begin{array}{\|l\|} \hline \text { a. Teach iointly as a } \\ \text { team in the same class } \end{array}$ | © | 0 |  | - | © | © | - yumes | a. Teach jointly as a <br> tcam in the same class | $\pm$ | © |  | © | $\oplus$ | Ф | Tremem |  |  |
| b. Obscrve other <br> teachers tlasses and <br> provide fecedback | © | $\oplus$ |  | $\odot$ | $\oplus$ | $\oplus$ | 4 | b. Observe other teachers classes and provide feedback | © | © |  | $\odot$ | © | $\oplus$ | 4* |  |  |
| c. Engage in discussions <br> about the leanning <br> develoment ont <br> specific studcnts | $\oplus$ |  |  | $\oplus$ | $\oplus$ | $\oplus$ | unv | C. Engage in liscussions <br> about the leaming <br> development of <br> specific students | © | $\pm$ |  | $\odot$ | $\odot$ | © | ¢orm |  |  |
|  | © |  |  | $\odot$ | $\oplus$ | © | 5070 |  | © | (1) |  | ¢ | $\oplus$ | ${ }^{\text {® }}$ | 5ose |  |  |
| (2018 Grade 4) |  |  |  |  |  |  |  | Issue: School Climate |  |  |  |  |  |  |  |  |  |
| 24. In your school. how severe is each problem? Select one circle in each row. nime |  |  |  |  |  |  |  | 20. In your school, how seyere is each problem? Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  | Not a problem |  | $\begin{gathered} \text { Minor } \\ \text { problem } \end{gathered}$ |  | Moderate problem | Serious problem |  |  <br> a. The school building needs <br> siemificant treait. | Not a problem |  | $\begin{array}{\|} \text { Minor } \\ \text { problem } \end{array}$ |  | Moderate problem | $\begin{aligned} & \text { Serious } \\ & \text { problem } \end{aligned}$ | $\square$ |  |  |
| a. The school building needs significant repair. |  |  | ¢ |  | - | $\oplus$ | momes |  |  |  | (1) | D | © | © | coses |  |  |
| b. Clastooms are |  |  | © |  | $\odot$ | © | veases | b. Classrooms are overcrowded. |  |  | $\pm$ | ¢ | $\bigcirc$ | © | wease |  |  |
| c. Teachcrs have too many teaching hours. |  |  | © |  | $\odot$ | $\odot$ | mesess | $\begin{aligned} & \text { c. Teachers have too many } \\ & \text { teaching hours. } \end{aligned}$ |  |  | ${ }^{\text {d }}$ | © | © | © | neases |  |  |
|  |  |  | Ф |  | $\cdots$ | ${ }^{\circ}$ | some | d. Teachers do not have idequate workspace (e.g. for preparation. or meeting with students). |  |  |  | (1) | $\odot$ | $\oplus$ | asese |  |  |
| $\begin{aligned} & \text { c. Teachers do not have } \\ & \text { adequate insuructional } \\ & \text { materials and supplies. } \\ & \hline \end{aligned}$ |  |  | $\Phi$ |  | $\odot$ | $\oplus$ | Soses | with students). <br> e. Teachers do not have <br> adequate instructional <br> materials and supplies. |  |  |  | ${ }^{(1)}$ | $\odot$ | $\oplus$ | - |  |  |
| (2018 Grade 4) |  |  |  |  |  |  |  | Issue: School Clima |  |  |  |  |  |  |  |  |  |


| 2019 Operational Grade 4 Core Teacher |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 25. How much does each of the following statements apply to you as a teacher? Select one viosed circle in each row. |  |  |  |  |  |  | 21. How much does each circle in each row.$\square$ | of the following statements apply to you as a teacher? Select one |  |  |  |  |  | NC | N/A |
|  | $\begin{aligned} & \text { Not at all } \\ & \text { like me } \end{aligned}$ | $\begin{gathered} \text { A little bit } \\ \text { like me } \end{gathered}$ | $\begin{gathered} \text { Somewhat } \\ \text { (ike me } \end{gathered}$ | $\begin{aligned} & \text { Quite a bit } \\ & \text { like me } \end{aligned}$ | $\underset{\text { me like }}{\text { Exactly lik }}$ |  |  | Not at all like me like me | $\begin{aligned} & \text { A little bit } \\ & \text { like me } \end{aligned}$ | Somewhat like me | Quite a bit like me | $\begin{array}{\|c\|} \text { Exactly like } \\ \text { me } \end{array}$ |  |  |  |
| a. Iam satisfied with <br> beinga teacher at this <br> school. <br> . | $\oplus$ | © | $\odot$ | © | © | vixeme | a. Tam satisfied with being ateacher ar this school. | © | $\pm$ | $\odot$ | © | © | momen |  |  |
| b. My work inspires me. | © | © | $\bigcirc$ | $\oplus$ | ${ }_{\square}$ | nneas | b. My work inspires me. | ${ }^{\circ}$ | ${ }^{\oplus}$ | $\bigcirc$ | ${ }_{\square}$ | ${ }_{\square}$ | momest |  |  |
| $\begin{aligned} & \text { c. I I Im frustrated as as at } \\ & \text { teacher at my school. } \end{aligned}$ | © | © | - | © | $\oplus$ | mant | C. Iam frustrated as a <br> teacher at my school. | © | $\oplus$ | $\bigcirc$ | $\oplus$ | ¢ | vumen |  |  |
| d. $\begin{aligned} & \text { amm supported by the } \\ & \text { teachers }\end{aligned}$ my my shool. | - | © | - | © | $\oplus$ | Isesal | d. I am supported by the teachers at my school. | © | © | $\odot$ | $\Phi$ | Ф | Noser |  |  |
| (2018 Grade 4) |  |  |  |  |  |  | Issue: School Climate |  |  |  |  |  |  |  |  |
| 26. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school. how possible is it for your students to change each of the following! Select one circle in each row. |  |  |  |  |  |  | 22. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school, how possible is it for your students to change each of the following? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{aligned} & \text { Not at all } \\ & \text { posible to } \\ & \text { change } \end{aligned}$ | $\begin{gathered} \text { A little } \\ \text { possible to } \\ \text { change } \end{gathered}$ | $\begin{gathered} \text { Somewhat } \\ \text { possible to } \\ \text { change } \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Quite } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c} \text { Completely } \\ \text { poossble to to } \\ \text { change } \end{array}$ |  |  | $\begin{gathered} \text { Not at all } \\ \text { possible to } \\ \text { change } \end{gathered}$ | $\begin{array}{c\|c} \text { A little } \\ \text { possible to } \\ \text { change } \end{array}$ | Somewhat possible to posthange chat | $\begin{array}{\|c} \text { Quite } \\ \text { possible to } \\ \text { change } \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Completely } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \end{array}$ |  |  |  |
| 9. Being intelligent | $\stackrel{\square}{\square}$ | © | $\bigcirc$ | $\stackrel{\square}{6}$ | $\stackrel{\square}{\circ}$ | $\pm$ | a. Being intelligent |  |  | © |  | © | - |  |  |
| $\begin{array}{\|l\|l\|} \hline \text { b. Putting forth a lot of } \\ \text { effort } \end{array}$ | © | © | $\bigcirc$ | © | $\odot$ | миомs | b. Putting forth a lot of effort | © | $\oplus$ | $\bigcirc$ | © | © | nemem |  |  |
| c. Behaving well in class | © | © | $\bigcirc$ | $\odot$ | $\odot$ | Trums | c. Behaving well in class | ${ }^{\circ}$ | ${ }^{\circ}$ | © | ${ }^{\circ}$ | $\triangle$ | nosmo |  |  |
| (2018 Grade 4) |  |  |  |  |  |  | Issue: Desire for Learning |  |  |  |  |  |  |  |  |

## Appendix K-2b: Operational Grade 4 Core

1. What is your sex?
(A) Male
(B) Female
2. Are you Hispanic or Latino? Select all squares that apply.
(A) No, I am not Hispanic or Latino.
(B) Yes, I am Mexican, Mexican American, or Chicano.
© Yes, I am Puerto Rican or Puerto Rican American.
(D) Yes, I am Cuban or Cuban American.
(E) Yes, I am from some other Hispanic or Latino background.
3. Which of the following best describes you? Select all squares that apply.
(4) White
(B) Black or African American
© Asian
(D) American Indian or Alaska Native
(©) Native Hawaiian or other Pacific Islander
4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year?
(A) Less than 1 year
(B) 1-2 years
© 3-5 years
(D) 6-10 years
(B) 11-20 years
© $\operatorname{c} 21$ or more years
5. Have you been awarded tenure by the school, district, or diocese where you currently teach?
(4) Yes
(B) No
© My school, district, or diocese does not award tenure.
6. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?
(A) Yes, I hold a permanent certificate.
(B) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)
© No, but I am currently working toward certification.
(D) No, and I am not planning to obtain certification.
7. Did you enter teaching through an alternative route to certification program?
(An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.)
(A) Yes
(B) No
8. What is the highest academic degree you hold?
(A) High school diploma
(B) Associate's degree/vocational certification
© Bachelor's degree
(1) Master's degree
(E) Education specialist's or professional diploma based on at least one year's work past master's degree
(®) Doctorate
© Professional degree (e.g., M.D., LL.B., J.D., D.D.S.)
9. Did you have a major, minor, or special emphasis in any of the following subjects as part of your undergraduate coursework? Select one circle in each row.

|  | Yes, a major | Yes, a minor or special emphasis | No |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Biology or other life science | (4) | (8) | © | VH241768 |
| b. Physics, chemistry, or other physical science | (4) | (B) | © | vH241769 |
| c. Earth or space science | (4) | (B) | $\bigcirc$ | VH241770 |
| d. Mathematics or mathematics education | (4) | (B) | © | VH241771 |
| e. Science education | (4) | (B) | $\bigcirc$ | VH241772 |
| f. Engineering or engineering education | (4) | (B) | $\bigcirc$ | VH241780 |
| g. Reading, language arts, or literacy education | (4) | (B) | © | vH241758 |
| h. English | (4) | (B) | $\bigcirc$ | VH241754 |
| i. Other language arts-related subject | (4) | (B) | $\bigcirc$ | VH241784 |
| j. Mathematics education | (4) | (8) | $\bigcirc$ | VH241760 |
| k. Mathematics | (4) | (B) | $\bigcirc$ | VH241761 |
| 1. Other mathematics-related subject such as statistics | (4) | (B) | © | VH24176 |
| m . Education (including elementary or early childhood) | (4) | (B) | © | VH241762 |
| n. Special education (including students with disabilities) | (4) | (B) | © | VH241781 |
| o. English language learning | (4) | (B) | $\bigcirc$ | VH241782 |

10. Since completing your undergraduate degree, have you taken any graduate courses?
(4) Yes
(B) No
11. Did you have a major, minor, or special emphasis in any of the following subjects as part of your graduate coursework? Select one circle in each row.

|  | Yes, a major | Yes, a minor or special emphasis | No |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Biology or other life science | (4) | (8) | © | VH241798 |
| b. Physics, chemistry, or other physical science | (4) | (8) | © | VH241799 |
| c. Earth or space science | (4) | (B) | $\bigcirc$ | VH241800 |
| d. Mathematics or mathematics education | (1) | (B) | $\bigcirc$ | VH241801 |
| e. Science education | (4) | (B) | $\bigcirc$ | VH241802 |
| f. Engineering or engineering education | (4) | (B) | © | vH241806 |
| g. Reading, language arts, or literacy education | (4) | (8) | © | vH241791 |
| h. English | (4) | (B) | $\bigcirc$ | vH241789 |
| i. Other language arts-related subject | (4) | (B) | $\bigcirc$ | VH241810 |
| j. Mathematics education | (4) | (B) | $\bigcirc$ | VH241792 |
| k. Mathematics | (4) | (B) | $\bigcirc$ | VH241793 |
| 1. Other mathematics-related subject such as statistics | (4) | (B) | © | VH241794 |
| m . Education (including elementary or early childhood) | (4) | (8) | © | vH241795 |
| n. Special education (including students with disabilities) | (4) | (B) | © | VH241807 |
| o. English language learning | (4) | (B) | $\bigcirc$ | VH241808 |

12. In this school year, did your school offer training for teachers on how to use computers or other digital devices?
(A) Yes, to all teachers
(B) Yes, to some teachers
© No
13. In this school year, have you participated in training on computers or other digital devices through your school?
(A) No
(B) Once
© Twice
(1) Several times
14. During the last two years, have you received training from any source in any of the following areas? Select one circle in each row.

|  | No, I am already proficient. | No, I have not. | Yes |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Basic computer training | (4) | (8) | © | VH241894 |
| b. Software applications | (4) | (8) | $\bigcirc$ | VH241895 |
| c. Use of the Internet | (4) | (8) | $\bigcirc$ | VH241898 |
| d. Use of other technology-for example, satellite access, wireless Web, interactive video, closed-circuit television, videoconferencing | (4) | © | $\bigcirc$ | VH241897 |
| e. Integration of computers and other technology into classroom instruction | (4) | (B) | © | VH241896 |

15. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply.
(A) Desktop computers
(B) Laptop computers (including Chromebooks)
© Tablets (for example, Surface Pro, iPad, Kindle Fire)
16. How well do the desktop computers in your school work?
(A) All computers are functional and operate quickly.
(B) All computers are functional, but some run more slowly than others.
© All computers are functional, but all or almost all run slowly.
(D) Some of the computers do not operate and cannot be used.
(E) I don't know.
17. How well do the laptop computers (including Chromebooks) in your school work?
(A) All computers are functional and operate quickly.
(B) All computers are functional, but some run more slowly than others.
© All computers are functional, but all or almost all run slowly.
(D) Some of the computers do not operate and cannot be used.
(E) I don't know.
18. How well do the tablets (for example, Surface Pro, iPad, Kindle Fire) in your school work?
(4) All tablets are functional and operate quickly.
(B) All tablets are functional, but some run more slowly than others.
© All tablets are functional, but all or almost all run slowly.
(D) Some of the tablets do not operate and cannot be used.
(E) I don't know.
19. How often do you do the following in this school? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Teach jointly as a team in the same class | (4) | (B) | © | (1) | (1) | vH304693 |
| b. Observe other teachers' classes and provide feedback | (4) | (B) | © | (1) | (®) | VH304698 |
| c. Engage in discussions about the learning development of specific students | (4) | (B) | $\bigcirc$ | (1) | (®) | vH304736 |
| d. Work with other teachers in my school to ensure common standards in evaluations for assessing student progress | (4) | (B) | © | (1) | (®) | VH304740 |

20. In your school, how severe is each problem? Select one circle in each row.

|  | Not a problem | Minor problem | Moderate problem | Serious problem |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. The school building needs significant repair. | (4) | (B) | © | (1) | VH222653 |
| b. Classrooms are overcrowded. | (4) | (B) | © | (1) | VH262654 |
| c. Teachers have too many teaching hours. | (4) | (B) | © | (1) | VH222655 |
| d. Teachers do not have adequate workspace (e.g., for preparation, collaboration, or meeting with students). | (4) | (B) | © | (1) | vH222656 |
| e. Teachers do not have adequate instructional materials and supplies. | (4) | (B) | © | (1) | vH262657 |

21. How much does each of the following statements apply to you as a teacher? Select one circle in each row.

|  | Not at all like me | A little bit like me | Somewhat like me | Quite a bit like me | Exactly like me |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I am satisfied with being a teacher at this school. | (4) | (B) | © | (1) | (1) | VH305016 |
| b. My work inspires me. | (4) | (B) | © | (1) | (1) | vH305024 |
| c. I am frustrated as a teacher at my school. | (4) | (B) | © | (1) | (1) | vH305032 |
| d. I am supported by the teachers at my school. | (4) | (B) | © | (1) | (c) | vH305033 |

22. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school, how possible is it for your students to change each of the following? Select one circle in each row.

|  | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Being intelligent | (4) | (B) | © | (1) | (c) | vH329967 |
| b. Putting forth a lot of effort | (4) | (B) | © | (1) | (E) | vH329968 |
| c. Behaving well in class | (4) | (B) | © | (1) | (1) | vH329970 |

## Appendix K-2c: Summary of Changes Pilot Grade 4 Core

| 2019 Pilot Grade 4 Core Teacher |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Previous item |  | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 1. Are you Hispanic or Latino? Select all squares that apply. <br> (4) No, I am not Hispanic or Latino. <br> (B) Yes, I am Mexican, Mexican American, or Chicano. <br> © Yes, I am Puerto Rican or Puerto Rican American. <br> (1) Yes, I am Cuban or Cuban American. <br> (1) Yes, I am from some other Hispanic or Latino background. <br> (2017 Grade 4) |  | 2. Are you Hispanic or Latino? Select all squares that apply. <br> (4) No, I am not Hispanic or Latino. <br> (1) Yes, I am Mexican, Mexican American, or Chicano. <br> © Yes, I am Puerto Rican or Puerto Rican American. <br> (1) Yes, I am Cuban or Cuban American. <br> (1) Yes, I am from some other Hispanic or Latino background. <br> Issue: Race/Ethnicity | NC | N/A |
| 2. Which of the following best describes you? Select all squares that apply. <br> (4) White <br> (B) Black or African American <br> © Asian <br> (1) American Indian or Alaska Native <br> (1) Native Hawaiian or other Pacific Islander <br> (2017 Grade 4) | vima | 3. Which of the following best describes you? Select all squares that apply. <br> (4) White <br> (B) Black or African American <br> - Asian <br> (1) American Indian or Alaska Native <br> (b) Native Hawaiian or other Pacific Islander <br> Issue: Race/Ethnicity | NC | N/A |
| 3. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year? <br> (1) Less than 1 year <br> (B) 1-2 years <br> (c) 3-5 years <br> (1) 6-10 years <br> (c) 11-20 years <br> (1) 21 or more years <br> (2017 Grade 4) | viems | 4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year? <br> (4) Less than 1 year <br> (B) 1-2 years <br> (1) 3-5 years <br> (1) 6-10 years <br> (1) 11-20 years <br> (1) 21 or more years <br> Issue: Teacher Preparation | NC | N/A |
| 4. Have you been awarded tenure by the school or district where you currently teach? <br> (4) Yes <br> (B) No <br> © My school or district does not award tenure. <br> (2017 Grade 4) | vimanis | 5. Have you been awarded tenure by the school, district, or diocese where you currently teach? Yes No My school, district, or diocese does not award tenure. <br> Issue: Teacher Preparation | R | This item was revised to include "diocese" as a source of tenure. |


| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 5. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching? <br> (4) Yes, I hold a permanent certificate. <br> (B) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.) <br> © No, but I am currently working toward certification. <br> (1) No, and I am not planning to obtain certification. <br> (2017 Grade 4) | 6. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching? <br> (4) Yes, I hold a permanent certificate. <br> (1) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.) <br> © No, but I am currently working toward certification. <br> (1) No, and I am not planning to obtain certification. <br> Issue: Teacher Preparation | NC | N/A |
| 6. Did you enter teaching through an alternative route to certification program? <br> (An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.) <br> (4) Yes <br> (B) No <br> (2017 Grade 4) | 7. Did you enter teaching through an alternative route to certification program? <br> (An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.) <br> (4) Yes <br> (B) No <br> Issue: Teacher Preparation | NC | N/A |
| 7. Are you certified by the National Board for Professional Teaching Standards in at least one content area? <br> (The National Board for Professional Teaching Standards is a nongovernmental organization that administers National Board certification, a voluntary national assessment program that certifies teachers who meet high professional standards In order to gain certification, the candidate must at least complete a portfolio of classroom practice and pass one or more tests of content knowledge.) <br> (A) Yes, I am fully certified by the National Board for Professional Teaching Standards. <br> (B) I am working towards my National Board certification. <br> © No | N/A | D | To create room in the questionnaire for new development and keep school administrator burden low, this item was dropped. |
| 8. What is the highest academic degree you hold? <br> (4) High school diploma <br> (1) Associate's degree/vocational certification <br> © Bachelor's degree <br> (1) Master's degree <br> (1) Education specialist's or professional diploma based on at least one year's work past master's degree <br> (1) Doctorate <br> (๑) Professional degree (e.g., M.D., LL.B., J.D., D.D.S.) <br> (2017 Grade 4) | 8. What is the highest academic degree you hold? <br> (4) High school diploma <br> (B) Associate's degree/vocational certification <br> © Bachelor's degree <br> (1) Master's degree <br> (1) Education specialist degree <br> (1) Doctor of Education degree (i.e., Ed.D.) <br> (๑) Other doctoral degree (e.g., Ph.D, D.F.A., D.Sc) <br> (1) Other academic degree (Please specify): $\qquad$ <br> Issue: Teacher Preparation | R | Response options e, f, and $g$ were revised and an openended response option has been added. |


| Previous item |  |  |  |  | 2019 item |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9. Did you have a major, minor, or special emphasis in any of the following subjects as part of your undergraduate coursework? Select one circle in each row. |  |  |  |  | 9. Did you have a major, minor, or special emphasis in any of the following subjects as part of your undergraduate coursework? Select one circle in each row. |  |  |  |  | R | This item is customized by subject and has been expanded from reading and math to also include sub-items for science. |
|  | Yes, a major | $\begin{array}{\|c\|c\|} \hline \begin{array}{c} \text { Yes, a minor or } \\ \text { special emphasis } \end{array} \\ \hline \hline \end{array}$ | No |  |  | Yes, a major | $\begin{aligned} & \text { Yes, a minor or } \\ & \text { special emphasis } \end{aligned}$ | No |  |  |  |
| a. Reading, language arts, or literacy education | ® | $\stackrel{\square}{\square}$ | $\odot$ | vaurs | a. Reading, language arts, or literacy education | © | © | $\odot$ | $4{ }^{145 s}$ |  |  |
| b. English | ${ }_{\square}$ | ${ }^{\circ}$ | $\odot$ | vents | b. English | $\stackrel{\square}{\square}$ | ${ }_{\square}$ | $\bigcirc$ | venurs |  |  |
| C. Other language arts-related | © | ${ }^{\circ}$ | $\odot$ | vearse | c. Other language arts-related subject | $\oplus$ | $\oplus$ | $\odot$ | veurs |  |  |
| d. Mathematics education | $\stackrel{\square}{\square}$ | $\oplus$ | $\odot$ | vinute | d. Mathematics education | $\oplus$ | © | $\odot$ | viatre |  |  |
| e. Mathematics | ${ }^{\circ}$ | ${ }^{\circ}$ | $\odot$ | vante | e. Mathematics | ${ }^{\circ}$ | ${ }_{\square}$ | $\odot$ | viatra |  |  |
| f. Other mathematics.r-clated | © | $\odot$ | - | veants | f. Other mathematics-related subject such as statistics | © | $\odot$ | - | veaurs |  |  |
| g. Education (including elementary or carly childhood) | $\oplus$ | $\oplus$ | $\odot$ | 4172 | g. Biology or other life science | $\stackrel{\square}{\square}$ | ${ }^{\circ}$ | $\odot$ | visure |  |  |
| h. Special education (including students with disabilities) | $\stackrel{\square}{\circ}$ | $\oplus$ | $\odot$ | vs | h. Physics. chemistry, or other physical science | $\odot$ | $\oplus$ | $\odot$ | vinurs |  |  |
| i. English language learning | ${ }_{\square}$ | ${ }^{\circ}$ | $\bigcirc$ | ventra | i. Earth or space science | ${ }^{\bullet}$ | ${ }^{\circ}$ | $\odot$ | wneatro |  |  |
|  |  |  |  |  | j. Mathematics or mathematics | $\oplus$ | $\oplus$ | $\odot$ | veatrı |  |  |
|  |  |  |  |  | k. Science education | ${ }_{\square}$ | ${ }^{\circ}$ | $\odot$ | vizum |  |  |
|  |  |  |  |  | 1. Enginecring or enginecring | $\oplus$ | $\odot$ | - | vinurso |  |  |
|  |  |  |  |  | m. Education (including elementary or carly childhood) | © | $\oplus$ | - | vearca |  |  |
|  |  |  |  |  | n. Special education (including | $\oplus$ | © | $\odot$ | vraurs |  |  |
|  |  |  |  |  | o. English language learning | ${ }_{\square}$ | ${ }_{\square}$ | $\odot$ | vinure |  |  |
| (2017 Grade 4) |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |
| 10. Since completing your undergraduate degree, have you taken any graduate courses? <br> (1) Yes <br> (1) No Question 11 is not applicable and will be skipped. |  |  |  |  | 10. Since completing your undergraduate degree, have you taken any graduate courses? <br> (1) Yes <br> (1) No |  |  |  |  | NC | N/A |
| (2017 Grade 4) |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |




## 2019 Pilot Grade 4 Core Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 16. In this school year, have you participated in training on computers or other digital devices through your school? <br> (4) No <br> (B) Once <br> © Twice <br> (1) Several times <br> (2017 Grade 4) | 13. In this school year, have you participated in training on computers or other digital devices through your school? <br> (4) No <br> (B) Once <br> © Twice <br> (1) Several times <br> Issue: Technology Use | NC | N/A |
| 17. In this school year, did your school provide you with a laptop computer (including Chromebooks) to use for teaching and class preparation? <br> (A) Yes, and I can take it home. <br> (1) Yes, but I cannot take it home. <br> - No <br> (2017 Grade 4) | N/A | D | To create room in the questionnaire for new development and keep school administrator burden low, this item was dropped. |


| 2019 Pilot Grade 4 Core Teacher |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  | 2019 item |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 18. In this school year, did your school provide you with a tablet (for example, Surface Pro, iPad, Kindle Fire) to use for teaching and class preparation? <br> (A) Yes, and I can take it home. <br> (B) Yes, but I cannot take it home. <br> © No <br> (2017 Grade 4) | neman | N/A |  | D | To create room in the questionnaire for new development and keep school administrator burden low, this item was dropped. |
| 19. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply. <br> (4) Desktop computers <br> (b) Laptop computers (including Chromebooks) <br> © Tablets (for example, Surface Pro, iPad, Kindle Fire) <br> (1) Other digital devices (Please specify): $\qquad$ <br> (2017 Grade 4) | ${ }^{\text {nemam }}$ | 15. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply, <br> (2) Desktop computers <br> (1) Laptop computers (including Chromebooks) <br> © Tablets (for example, Surface Pro, iPad. Kindle Fire) <br> (1) Other digital devices (Please specify): $\qquad$ <br> Issue: Technology Use | verese | NC | N/A |
| 20. How well do the desktop computers in your school work? <br> (4) All computers are functional and operate quickly. <br> (1) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> (2017 Grade 4) |  | 16. How well do the desktop computers in your school work? <br> (4) All computers are functional and operate quickly. <br> (B) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> Issue: Technology Use |  | NC | N/A |
| 21. How well do the laptop computers (including Chromebooks) in your school work? <br> (4) All computers are functional and operate quickly. <br> (®) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> (2017 Grade 4) |  | 17. How well do the laptop computers (including Chromebooks) in your school work? <br> (4) All computers are functional and operate quickly. <br> (B) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (b) I don't know. <br> Issue: Technology Use | VH592059 | NC | N/A |


| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22. How well do the tablets (for example, Surface Pro, iPad, Kindle Fire) in your school work? <br> (1) All tablets are functional and operate quickly. <br> (B) All tablets are functional, but some run more slowly than others. <br> © All tablets are functional, but all or almost all run slowly. <br> (1) Some of the tablets do not operate and cannot be used. <br> (1) I don't know. <br> (2017 Grade 4) |  |  |  |  |  |  | 18. How well do the tablets (for example, Surface Pro, iPad, Kindle Fire) in your school work? <br> (A) All tablets are functional and operate quickly. <br> (B) All tablets are functional, but some run more slowly than others. <br> © All tablets are functional, but all or almost all run slowly. <br> (1) Some of the tablets do not operate and cannot be used. <br> (1) I don't know. <br> Issue: Technology Use |  |  |  |  |  |  |  | NC | N/A |
| 23. How often do you do the following in this school? Select one circle in each row. |  |  |  |  |  |  | 19. How often do you do the following in this school? Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  | Never | About once or twice a year | $\begin{array}{c\|c\|} \hline \text { e } & \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { month } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { week } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array} \\ \hline \end{array}$ |  |  | Ner |  | $\begin{array}{\|c\|c} \hline \text { About once } \\ \text { or twice a } \\ \text { year } \end{array}$ | About once or twice a month | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { week } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{gathered}$ |  |  |  |
|  | © | © | $\odot$ | $\odot$ | $\odot$ | vixues |  <br> a. Teach iointly as a <br> team in the same class | © |  | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\odot$ | 4 |  |  |
| $\begin{array}{\|l} \hline \text { b. Observe other } \\ \text { teachers classes and } \\ \text { provide feeddack } \end{array}$ | © | ${ }^{\circ}$ | $\odot$ | $\odot$ | © | 4es |  | © |  | ${ }^{(1)}$ | $\odot$ | $\odot$ | © | 4 |  |  |
| c.Engage in discussions <br> about the learnung <br> develome <br> specific students | © | ${ }^{\circ}$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ | ${ }^{438}$ | (c. Engage in discussions | © |  | ${ }^{\circ}$ | $\odot$ | ${ }^{\circ}$ | $\odot$ | Wsb |  |  |
|  | © | $\oplus$ | $\odot$ | ${ }^{\circ}$ | ${ }^{\circ}$ | 4 |  | © |  | © | $\odot$ | $\odot$ | © | Sorso |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: School Climate |  |  |  |  |  |  |  |  |  |
| 24. In your school, how severe is each problem? Select one circle in each row. |  |  |  |  |  |  | 20. In your school, how severe is each problem? Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  | Not a | roblem ${ }^{\text {P }}$ | Minor problem | Moderate problem | Serious problem |  |  |  | Not a | problem | $\begin{gathered} \text { Minor } \\ \text { problem } \end{gathered}$ | Moderate problem | Serious <br> problem |  |  |  |
| a. The shool building needs significant repair. |  |  | $\oplus$ | - | $\odot$ | mens | a. The school building |  |  | - | ${ }^{\circ}$ | $\bigcirc$ | $\oplus$ | 4s3 |  |  |
| b. Classrooms are overrowded. |  |  | $\stackrel{\square}{\square}$ | $\odot$ | $\odot$ | vunges | b. Classrooms are |  |  | © | © | $\odot$ | $\odot$ | vrubuss |  |  |
| $\begin{aligned} & \text { c. Teachers have too many } \\ & \text { teaching hours. } \end{aligned}$ |  |  | ${ }^{\circ}$ | $\odot$ | © | venows | $\begin{array}{\|l} \text { c. Teachers have too } \mathrm{m} \\ \text { teaching hours. } \\ \hline \end{array}$ |  |  | © | ${ }^{\bullet}$ | $\odot$ | $\oplus$ | nemess |  |  |
|  |  |  | ${ }^{\circ}$ | $\odot$ | $\odot$ | vreass | $\begin{aligned} & \text { d. Teachers do not have } \\ & \text { adequate owrospace } \\ & \text { for reperation, } \\ & \text { collaboration or mee } \\ & \text { with students). } \end{aligned}$ |  |  | © | © | $\odot$ | © | 2656 |  |  |
| $\begin{array}{\|c\|} \hline \text { e. Teachers do not have } \\ \text { adequate instructional } \\ \text { materials and supplies. } \end{array}$ |  |  | $\oplus$ | $\odot$ | $\odot$ | 2057 | $\begin{array}{\|l\|} \text { with students). } \\ \hline \begin{array}{l} \text { e. Teachers do not have } \\ \text { adequate instructiona } \\ \text { materials and supplie } \end{array} \\ \hline \end{array}$ |  |  | $\triangle$ | $\pm$ | $\odot$ | $\oplus$ | ${ }^{\text {vreabes }}$ |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: School Climate |  |  |  |  |  |  |  |  |  |


| 2019 Pilot Grade 4 Core Teacher |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 25. How much does each of the following statements apply to you as a teacher? Select one circle in each row. |  |  |  |  |  |  | 21. How much does each of the following statements apply to you as a teacher? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{aligned} & \text { Not at all } \\ & \text { like me } \end{aligned}$ | $\begin{aligned} & \text { A little bit } \\ & \text { like me } \end{aligned}$ | $\begin{array}{\|c} \text { Somewhat } \\ \text { like me } \end{array}$ | $\begin{aligned} & \text { Quite a bit } \\ & \text { like me } \end{aligned}$ | $\underset{\substack{\text { Exactly like } \\ \text { me }}}{ }$ |  |  | Not at all like me | $\begin{aligned} & \text { A little bit } \\ & \text { like me } \end{aligned}$ | Somewhat like me | Quite a bit like me | $\begin{array}{\|c\|} \hline \text { Exactly like } \\ \text { me } \end{array}$ |  |  |  |
| $\begin{aligned} & \text { a. I am satisfied with } \\ & \text { being teacher at this } \\ & \text { school. } \end{aligned}$ | $\oplus$ | ${ }^{\circ}$ | - | $\oplus$ | $\oplus$ | visuant | a. I am satisfied with <br> being a teacher at this <br> school. <br> ber | © | $\odot$ | $\odot$ | $\odot$ | © | vusous |  |  |
| b. My work inspires me. | ${ }^{\circ}$ | $\stackrel{\square}{\square}$ | $\odot$ | $\stackrel{\square}{\square}$ | $\odot$ | versomis | b. My work inspires me. | $\odot$ | ${ }^{\circ}$ | $\bigcirc$ | $\odot$ | $\odot$ | visisaza |  |  |
| c. $\begin{aligned} & \text { c. } \mathrm{I} \text { am frustrated as a } \\ & \text { teacher at my school. }\end{aligned}$ | © | $\oplus$ | - | - | $\odot$ | vinosm |  | $\oplus$ | $\oplus$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ | visase |  |  |
| d. I am supported by the teachers at my school. | © | $\odot$ | $\odot$ | $\oplus$ | $\odot$ | vibusas | d. Iame spported by the the teachers at my school. | © | ${ }^{\circ}$ | $\odot$ | $\stackrel{\square}{\circ}$ | $\odot$ | veisoms |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: School Climate |  |  |  |  |  |  |  |  |
| 26. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school, how possible is it for your students to change each of thefollowing? Select one circle in each row. |  |  |  |  |  |  | 22. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are casier for your students to change than others. In school, how possible is it for your students to change each of thefollowing? Select one circle in each row. following! select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{gathered} \text { Not at all } \\ \text { possible to } \\ \text { change } \\ \hline \end{gathered}$ | $\begin{gathered} \text { A listle eto } \\ \text { poshange } \\ \text { change } \end{gathered}$ | $\begin{array}{\|c} \begin{array}{c} \text { Somewhat } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \end{array}$ | $\begin{aligned} & \text { Quite } \\ & \text { possible to } \\ & \text { change } \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Completely } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \hline \end{array}$ |  |  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Not at all } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { A little } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Somewhat } \\ \text { possible to to } \\ \text { change } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Quite } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \end{array}$ | Completely possible to change |  |  |  |
| a. Being inteligent | $\triangle$ | $\oplus$ | $\bigcirc$ | $\odot$ | $\bigcirc$ | vizese | a. Being intelligent | © | © | $\bigcirc$ | $\bigcirc$ | © | vatese |  |  |
| b. Putting forth a lot of effort | $\stackrel{\square}{\circ}$ | $\oplus$ | $\odot$ | $\odot$ | $\oplus$ | venzese | $\begin{aligned} & \text { a. Demg memgent } \\ & \text { effort } \end{aligned}$ | $\oplus$ | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | vieseses |  |  |
| c. Behaving well in class | $\square^{\circ}$ | ${ }^{\circ}$ | $\bigcirc$ |  |  | viz2900 | C. Eehaving well in class | $\stackrel{\square}{\square}$ | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\oplus$ | $\pm$ |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Desire for Learning |  |  |  |  |  |  |  |  |
| N/A |  |  |  |  |  |  | 1. What is your sex? <br> (A) Male <br> (B) Female <br> Issue: Gender |  |  |  |  |  | vinus | A | This item was added to provide additional contextual information. |

## Appendix K-2d: Pilot Grade 4 Core

1. What is your sex?
(A) Male
(B) Female
2. Are you Hispanic or Latino? Select all squares that apply.
(A) No, I am not Hispanic or Latino.
(B) Yes, I am Mexican, Mexican American, or Chicano.
© Yes, I am Puerto Rican or Puerto Rican American.
(D) Yes, I am Cuban or Cuban American.
(E) Yes, I am from some other Hispanic or Latino background.
3. Which of the following best describes you? Select all squares that apply.
(A) White
(B) Black or African American
© Asian
(D) American Indian or Alaska Native
(©) Native Hawaiian or other Pacific Islander
4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year?
(A) Less than 1 year
(B) 1-2 years
© 3-5 years
(D) 6-10 years
(B) 11-20 years
© $\operatorname{c} 21$ or more years
5. Have you been awarded tenure by the school, district, or diocese where you currently teach?
(4) Yes
(B) No
© My school, district, or diocese does not award tenure.
6. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?
(A) Yes, I hold a permanent certificate.
(B) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)
© No, but I am currently working toward certification.
(D) No, and I am not planning to obtain certification.
7. Did you enter teaching through an alternative route to certification program?
(An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.)
(4) Yes
(B) No
8. What is the highest academic degree you hold?
(4) High school diploma
(B) Associate's degree/vocational certification
© Bachelor's degree
(D) Master's degree
(E) Education specialist degree
© Doctor of Education degree (i.e., Ed.D.)
© Other doctoral degree (e.g., Ph.D, D.F.A., D.Sc)
$\oplus$ Other academic degree (Please specify):
9. Did you have a major, minor, or special emphasis in any of the following subjects as part of your undergraduate coursework? Select one circle in each row.

|  | Yes, a major | Yes, a minor or special emphasis | No |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Reading, language arts, or literacy education | (4) | (B) | © | vH241758 |
| b. English | (4) | (8) | $\bigcirc$ | VH241754 |
| c. Other language arts-related subject | (4) | (B) | $\bigcirc$ | vH241784 |
| d. Mathematics education | (4) | (8) | $\bigcirc$ | VH241760 |
| e. Mathematics | (4) | (8) | © | VH241761 |
| f. Other mathematics-related subject such as statistics | (4) | (B) | © | vH241776 |
| g. Biology or other life science | (4) | (8) | © | VH241768 |
| h. Physics, chemistry, or other physical science | (4) | (B) | © | vH241769 |
| i. Earth or space science | (4) | (8) | $\bigcirc$ | VH241770 |
| j. Mathematics or mathematics education | (4) | (B) | © | vH241771 |
| k. Science education | (4) | (B) | $\bigcirc$ | VH241772 |
| 1. Engineering or engineering education | (4) | (B) | © | vH241780 |
| m . Education (including elementary or early childhood) | (4) | (B) | © | VH241762 |
| n. Special education (including students with disabilities) | (4) | (B) | © | vH241781 |
| o. English language learning | (1) | (B) | © | VH241782 |

10. Since completing your undergraduate degree, have you taken any graduate courses?
(A) Yes
(B) No
11. Did you have a major, minor, or special emphasis in any of the following subjects as part of your graduate coursework? Select one circle in each row.

|  | Yes, a major | Yes, a minor or special emphasis | No |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Reading, language arts, or literacy education | (4) | (B) | © | vH241791 |
| b. English | (4) | (8) | $\bigcirc$ | VH241789 |
| c. Other language arts-related subject | (4) | (B) | © | VH241810 |
| d. Mathematics education | (4) | (B) | © | VH241792 |
| e. Mathematics | (4) | (8) | $\bigcirc$ | VH241793 |
| f. Other mathematics-related subject such as statistics | (4) | (B) | © | vH241794 |
| g. Biology or other life science | (4) | (B) | $\bigcirc$ | VH241798 |
| h. Physics, chemistry, or other physical science | (4) | (B) | © | VH241799 |
| i. Earth or space science | (4) | (8) | © | VH241800 |
| j. Mathematics or mathematics education | (4) | (B) | © | VH241801 |
| k. Science education | (4) | (B) | $\bigcirc$ | VH241802 |
| 1. Engineering or engineering education | (4) | (B) | © | VH241806 |
| m . Education (including elementary or early childhood) | (4) | (B) | © | VH241795 |
| n. Special education (including students with disabilities) | (4) | (B) | © | VH241807 |
| o. English language learning | (4) | (B) | $\bigcirc$ | VH241808 |

12. In this school year, did your school offer training for teachers on how to use computers or other digital devices?
(A) Yes, to all teachers
(B) Yes, to some teachers
© No
13. In this school year, have you participated in training on computers or other digital devices through your school?
(A) No
(B) Once
© Twice
(D) Several times
14. During the last two school years, have you received training from any source in any of the following areas? Select one circle in each row.

|  | No, I have not needed training in this area. | No, I have not received training from any source in this area. | Yes |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Basic computer training (e.g., moving files, creating folders, or using keyboard/mouse) | (4) | (B) | © | VH852920 |
| b. Software applications (e.g., Excel, Adobe Acrobat, or Google Docs) | (4) | (B) | © | vH852921 |
| c. Use of the Internet | (4) | (8) | © | VH852924 |
| d. Use of other digital devices (e.g., scanners, mobile devices, Chromebooks, interactive panels) | (4) | (B) | $\bigcirc$ | vH852923 |
| e. Integration of computers and other digital devices into classroom instruction | (1) | (B) | © | VH852922 |

15. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply.
(A) Desktop computers
(B) Laptop computers (including Chromebooks)
© Tablets (for example, Surface Pro, iPad, Kindle Fire)
(D) Other digital devices (Please specify): $\qquad$
16. How well do the desktop computers in your school work?
(A) All computers are functional and operate quickly.
(B) All computers are functional, but some run more slowly than others.
© All computers are functional, but all or almost all run slowly.
(1) Some of the computers do not operate and cannot be used.
(E) I don't know.
17. How well do the laptop computers (including Chromebooks) in your school work?
(A) All computers are functional and operate quickly.
(B) All computers are functional, but some run more slowly than others.
© All computers are functional, but all or almost all run slowly.
(1) Some of the computers do not operate and cannot be used.
(E) I don't know.
18. How well do the tablets (for example, Surface Pro, iPad, Kindle Fire) in your school work?
(A) All tablets are functional and operate quickly.
(B) All tablets are functional, but some run more slowly than others.
© All tablets are functional, but all or almost all run slowly.
(D) Some of the tablets do not operate and cannot be used.
(E) I don't know.
19. How often do you do the following in this school? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Teach jointly as a team in the same class | (4) | (B) | © | (1) | (1) | vH304693 |
| b. Observe other teachers' classes and provide feedback | (4) | (B) | © | (1) | (1) | vн304698 |
| c. Engage in discussions about the learning development of specific students | (4) | (B) | © | (1) | (®) | vн304736 |
| d. Work with other teachers in my school to ensure common standards in evaluations for assessing student progress | (4) | (B) | © | (1) | (®) | vн304740 |

20. In your school, how severe is each problem? Select one circle in each row.

|  | Not a problem | Minor problem | Moderate problem | Serious problem |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. The school building needs significant repair. | (4) | (B) | © | (1) | VH222653 |
| b. Classrooms are overcrowded. | (4) | (B) | © | (1) | VH262654 |
| c. Teachers have too many teaching hours. | (4) | (B) | © | (1) | VH222655 |
| d. Teachers do not have adequate workspace (e.g., for preparation, collaboration, or meeting with students). | (4) | (B) | © | (1) | vH222656 |
| e. Teachers do not have adequate instructional materials and supplies. | (4) | (B) | © | (1) | vH262657 |

21. How much does each of the following statements apply to you as a teacher? Select one circle in each row.

|  | Not at all like me | A little bit like me | Somewhat like me | Quite a bit like me | Exactly like me |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I am satisfied with being a teacher at this school. | (4) | (B) | © | (1) | (1) | VH305016 |
| b. My work inspires me. | (4) | (B) | © | (1) | (1) | vH305024 |
| c. I am frustrated as a teacher at my school. | (4) | (B) | © | (1) | (1) | vH305032 |
| d. I am supported by the teachers at my school. | (4) | (B) | © | (1) | (c) | vH305033 |

22. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school, how possible is it for your students to change each of the following? Select one circle in each row.

|  | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Being intelligent | (4) | (B) | © | (1) | (c) | vH329967 |
| b. Putting forth a lot of effort | (4) | (B) | © | (1) | (E) | vH329968 |
| c. Behaving well in class | (4) | (B) | © | (1) | (1) | vH329970 |

## Appendix K-2e: Summary of Changes Operational Grade 8 Core

| Grade 8 Core Teacher |  |  |  |
| :---: | :---: | :---: | :---: |
| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 1. What is your sex? <br> (4) Male <br> (1) Female <br> (2018 Grade 8) | 1. What is your sex? <br> (4) Male <br> (1) Female <br> Issue: Gender | NC | N/A |
| 2. Are you Hispanic or Latino? Select all squares that apply. <br> (4) No, I am not Hispanic or Latino. <br> (1) Yes, I am Mexican, Mexican American, or Chicano. <br> © Yes, I am Puerto Rican or Puerto Rican American. <br> (1) Yes, I am Cuban or Cuban American. <br> (D) Yes, I am from some other Hispanic or Latino background. <br> (2018 Grade 8) | 2. Are you Hispanic or Latino? Select all squares that apply. <br> (4) No, 1 am not Hispanic or Latino. <br> (1) Yes, I am Mexican, Mexican American, or Chicano. <br> © Yes, I am Puerto Rican or Puerto Rican American. <br> (1) Yes, I am Cuban or Cuban American. <br> (1) Yes, I am from some other Hispanic or Latino background. <br> Issue: Race/Ethnicity | NC | N/A |
| 3. Which of the following best describes you? Select all squares that apply. <br> (4) White <br> (B) Black or African American <br> © Asian <br> (1) American Indian or Alaska Native <br> (1) Native Hawaiian or other Pacific Islander <br> (2018 Grade 8) | 3. Which of the following best describes you? Select all squares that apply. <br> (4) White Black or African American Asian American Indian or Alaska Native Native Hawaiian or other Pacific Islander <br> Issue: Race/Ethnicity | NC | N/A |
| 4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year? <br> (4) Less than 1 year <br> (B) 1-2 years <br> © 3-5 years <br> (1) 6-10 years <br> (1) 11-20 years <br> (1) 21 or more years <br> (2018 Grade 8) | 4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year? <br> (4) Less than 1 year <br> (D) 1-2 years <br> © 3-5 years <br> (1) 6-10 years <br> (1) 11-20 years <br> (1) 21 or more years <br> Issue: Teacher Preparation | NC | N/A |


| Grade 8 Core Teacher |  |  |  |
| :---: | :---: | :---: | :---: |
| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| N/A | 5. Excluding student teaching, how many years have you taught reading, writing, or language arts in grades 6 through 12, counting this year? <br> (4) Less than 1 year <br> (B) 1-2 years <br> (1) 3-5 years <br> (1) $6-10$ years <br> (1) 11-20 years <br> (1) 21 or more years <br> Issue: Teacher Preparation | A | This item has been added to collect subjectspecific teacher training information. |
| N/A | 6. Excluding student teaching, how many years have you taught mathematics in grades 6 through 12 , counting this year? <br> (4) Less than 1 year <br> (b) 1-2 years <br> © 3-5 years <br> (D) 6-10 years <br> (D) 11-20 years <br> (D) 21 or more years <br> Issue: Teacher Preparation | A | This item has been added to collect subjectspecific teacher training information. |
| 5. Excluding student teaching, how many years have you taught science in grades 6 through 12 , counting this year? <br> (4) Less than 1 year <br> (1) 1-2 years <br> © 3-5 years <br> (1) 6-10 years <br> (D) 11-20 years <br> (1) 21 or more years <br> (2018 Grade 8) | 7. Excluding student teaching, how many years have you taught science in grades 6 through 12 , counting this year? <br> (4) Less than 1 year <br> (B) 1-2 years <br> © 3-5 years <br> (1) 6-10 years <br> (D) 11-20 years <br> (ㄷ) 21 or more years <br> Issue: Teacher Preparation | NC | N/A |
| 6. Have you been awarded tenure by the school, district, or diocese where you currently teach? <br> (D) Yes <br> (1) No <br> © My school. district, or diocese does not award tenure. <br> (2018 Grade 8) | 8. Have you been awarded tenure by the school, district, or diocese where you currently teach? <br> (4) Yes <br> (8) No <br> © My school, district, or diocese does not award tenure. <br> Issue: Teacher Preparation | NC | N/A |


| Grade 8 Core Teacher |  |  |  |
| :---: | :---: | :---: | :---: |
| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 7. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching? <br> (4) Yes, I hold a permanent certificate. <br> (1) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.) <br> © No, but I am currently working toward certification. <br> (1) No, and I am not planning to obtain certification. <br> (2018 Grade 8) | 9. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching? <br> (4) Yes, I hold a permanent certificate. <br> (1) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.) <br> © No, but I am currently working toward certification. <br> (1) No, and I am not planning to obtain certification. <br> Issue: Teacher Preparation | NC | N/A |
| 8. Did you enter teaching through an alternative route to certification program? <br> (An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.) <br> (b) Yes <br> (b) No <br> (2018 Grade 8) | 10. Did you enter teaching through an alternative route to certification program? <br> (An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.) <br> (1) Yes <br> (a) No <br> Issue: Teacher Preparation | NC | N/A |
| 9. Are you certified by the National Board for Professional Teaching Standards in at least one content area? <br> (The National Board for Professional Teaching Standards is a nongovernmental organization that administers National Board certification, a voluntary national assessment program that certifies teachers who meet high professional standards. In order to gain certification, the candidate must at least complete a portfolio of classroom practice and pass one or more tests of content knowledge.) <br> (1) Yes, I am fully certified by the National Board for Professional Teaching Standards. <br> (1) I am working towards my National Board certification. <br> © No <br> (2018 Grade 8) | N/A | D | Due to a lack of a clear relationship to achievement and low response variability, this item was dropped. |


| Grade 8 Core Teacher |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  |  |  |  | 2019 item |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 10. What is the highest academic degree you hold? <br> (D) High school diploma <br> (®) Associate's degree/vocational certification <br> © Bachelor's degree <br> (1) Master's degree <br> (1) Education specialist's or professional diploma based on at least one year's work past master's degree <br> (1) Doctorate <br> © Professional degree (e.g., M.D., LL.B., J.D., D.D.S.) |  |  |  |  | 11. What is the highest academic degree you hold? <br> (8) High school diploma <br> (1) Associate's degree/vocational certification <br> - Bachelor's\|degree <br> (1) Master's degree <br> (1) Education specialist's or professional diploma based on at least one year's work past master's degree <br> (1) Doctorate <br> © Professional degree (e.g., M.D., LL.B., J.D., D.D.S.) <br> Issue: Teacher Preparation |  |  |  |  | NC | N/A |
| 11. Did you have a major, minor, or special emphasis in any of the following subjects as part of your undergraduate coursework? Select one circle in each row. |  |  |  |  | 12. Did you have a major, minor, or part of your undergraduate cour | cial emphasis in | any of the followin circle in each row. | cts as |  | R | This item is customized |
|  | Yes, a major | $\begin{array}{l}\text { Yes, a minor or } \\ \text { special emphasis }\end{array}$ | No |  |  |  | Yes a minor or |  |  |  | by subject |
| 2. Biology or other life science | ${ }^{\circ}$ | $\bigcirc$ | $\odot$ |  |  | Yes, a major | special emphasis | No |  |  | and has been |
| b. Physics, chemistry, or other physical science | © | $\oplus$ | $\odot$ |  | a. Reading. language arts, or literacy education | $\oplus$ | ¢ | $\bigcirc$ | nuarse |  | expanded |
| c. Earth or space science | $\oplus$ | ${ }^{\circ}$ | $\odot$ | meatro | b. English | ¢ | © | $\odot$ | veatrs |  | from read |
| d. Mathematics or mathematics | © | $\oplus$ | $\bigcirc$ |  | c. Other language arts-related | © | © | $\odot$ | neatra |  | from reading |
| e. Science education | ${ }^{\circ}$ | $\oplus$ | $\odot$ | nmatm | d. Mathematics education | © | © | $\odot$ | mpatee |  | and math to |
| E. Engineering or engineering | $\oplus$ | © | $\odot$ |  | e. Mathematics | $\stackrel{\square}{\circ}$ | ${ }^{\oplus}$ | $\odot$ | mente |  | also include |
| 8. Elementary or secondary | © | © | $\odot$ |  | f. Other mathematics-related subject such as statistics | © | © | $\odot$ |  |  | sub-items for |
| h. Special education (including | © | © | $\odot$ | \% | g. Biology or other life science | $\triangle$ | ${ }^{\circ}$ | $\bullet$ | neures |  |  |
| - ${ }^{\text {Students with disabilities) }}$ | © | $\oplus$ | $\odot$ | vearm | C. $\begin{aligned} & \text { Mhysics, chemistry, or other } \\ & \text { physical science }\end{aligned}$ | © | © | $\odot$ | mantes |  |  |
|  |  |  |  |  | i. Earth or space science | ¢ | $\oplus$ | $\bigcirc$ | neairm |  |  |
|  |  |  |  |  | 1.- Mathematics or mathematics | $\oplus$ | © | $\odot$ | mpation |  |  |
|  |  |  |  |  | k. Science education | © | ${ }^{\oplus}$ | $\odot$ | nisult |  |  |
|  |  |  |  |  | 1. Engineering or engineering | © | © | - | mianco |  |  |
|  |  |  |  |  | m. Elementary or secondary education | © | © | $\odot$ | mante |  |  |
|  |  |  |  |  | n. Special education (including students with disabilities) | $\oplus$ | $\oplus$ | $\odot$ | neurs |  |  |
|  |  |  |  |  | 0. English language learning | $\stackrel{\square}{\square}$ | ${ }^{\circ}$ | $\odot$ | mavma |  |  |
| (2018 Grade 8) |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |
| 12. Since completing your undergraduate degree, have you taken any graduate courses? <br> (b) Yes <br> (D) No $\rightarrow$ Question 13 is not applicable and will be skipped. <br> (2018 Grade 8) |  |  |  |  | 13. Since completing your undergraduate degree, have you taken any graduate courses? <br> (d) Yes <br> (b) No <br> Issue: Teacher Preparation |  |  |  |  | NC | N/A |



| Grade 8 Core Teacher |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  |  |  |  | 2019 item |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 15. During the last two years, have you received training from any source in any of the following areas? Select one circle in each row. |  |  |  |  | 17. During the last two years, have you received training from any source in any of the following areas? Select one circle in each row. |  |  |  |  | NC | N/A |
|  | No, I am already proficient. | No, I have not. | Yes |  |  | $\begin{gathered} \hline \text { No, I am already } \\ \text { proficient. } \end{gathered}$ | No, I have not. | Yes |  |  |  |
| a. Basic computer training | © | ${ }^{1}$ | $\odot$ | venas | a. Basic computer training | $\stackrel{\square}{\square}$ | ${ }_{\square}$ | $\odot$ | , |  |  |
| b. Software applications | ¢ | ¢ | $\odot$ | vnates | b. Software applications | © | © | $\odot$ | ${ }^{\text {meuses }}$ |  |  |
| c. Use of the Internet | $\oplus$ | ¢ | $\odot$ | vasatel | c. Use of the Internet | ¢ | ¢ | $\odot$ | miates |  |  |
| d. Use of other technology-for <br> eexample.satellite access, wireless <br> Web interative video, <br> closed-circuit television, <br> videoconferencing | $\oplus$ | $\oplus$ | - | 1807 | $\begin{array}{\|l\|} \hline \text { d. Use of other technology-for } \\ \text { example, satellite access, wireless } \\ \text { Web. interactive video, } \\ \text { closed.c-cratuit television, } \\ \text { videoconferencing } \\ \hline \end{array}$ | © | Ф | $\odot$ | ner |  |  |
| e. Integration of computers and other technology into classroom instruction | © | © | $\odot$ |  | e. Integration of computers and other technology into classroom instruction | ¢ | © | $\odot$ |  |  |  |
| (2018 Grade 8) |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |
| 16. In this school year, did your school offer training for teachers on how to use computers or other digital devices? <br> (4) Yes, to all teachers <br> (b) Yes, to some teachers <br> © No <br> (2018 Grade 8) |  |  |  |  | 15. In this school year, did your school offer training for teachers on how to use computers or other digital devices? <br> (4) Yes, to all teachers <br> (D) Yes, to some teachers <br> © No <br> Issue: Technology Use |  |  |  |  | NC | N/A |
| 17. In this school year, have you participated in training on computers or other digital devices through your school? <br> (4) No <br> (1) Once <br> © Twice <br> (1) Several times <br> (2018 Grade 8) |  |  |  |  | 16. In this school year, have you participated in training on computers or other digital devices through your school? <br> No Once Twice Several times. <br> Issue: Technology Use |  |  |  |  | NC | N/A |
| 18. In this school year, did your school provide you with a laptop computer (including Chromebooks) to use for teaching and class preparation? <br> (4) Yes, and I can take it home. <br> (D) Yes, but I cannot take it home. <br> © No <br> (2018 Grade 8) |  |  |  |  | N/A |  |  |  |  | D | Due to a lack of a clear relationship to achievement and to keep teacher burden low, this item was dropped. |


| Grade 8 Core Teacher |  |  |  |
| :---: | :---: | :---: | :---: |
| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 19. In this school year, did your school provide you with a tablet (for example, Surface Pro, iPad, Kindle Fire) to use for teaching and class preparation? <br> (4) Yes, and I can take it home. <br> (D) Yes, but I cannot take it home. <br> © No | N/A | D | Due to a lack of a clear relationship to achievement and to keep teacher burden low, this item was dropped. |
| 20. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply. <br> (4) Desktop computers <br> (B) Laptop computers (including Chromebooks) <br> © Tablets (for example, Surface Pro, iPad, Kindle Fire) <br> (1) Other digital devices (Please specify): $\qquad$ | 18. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply. <br> (4) Desktop computers <br> (1) Laptop computers (including Chromebooks) <br> © Tablets (for example, Surface Pro, iPad, Kindle Fire) <br> Issue: Technology Use | R | The "Other (Please specify)" response option was removed. This response option is only used in pilot administratio ns. |
| 21. How well do the desktop computers in your school work? <br> (A) All computers are functional and operate quickly. <br> (B) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> (2018 Grade 8) | 19. How well do the desktop computers in your school work? <br> (D) All computers are functional and operate quickly. <br> (1) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> Issue: Technology Use | NC | N/A |


| Grade 8 Core Teacher |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 22. How well do the laptop computers (including Chromebooks) in your school work? <br> (D) All computers are functional and operate quickly. <br> (b) All computers are functional, but some run more slowly than others. <br> Q All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> (2018 Grade 8) |  |  |  |  |  |  | 20. How well do the laptop computers (including Chromebooks) in your school work? <br> (8) All computers are functional and operate quickly. <br> (B) All computers are functional, but some run more slowly than others. <br> (0) All computers are functional, but all or almost all run slowly. <br> (D) Some of the computers do not operate and cannot be used. <br> (D) I don't know. <br> Issue: Technology Use |  |  |  |  |  |  | NC | N/A |
| 23. How well do the tablets (for example, Surface Pro, iPad, Kindle Fire) in your school work? <br> (4) All tablets are functional and operate quickly. <br> (1) All tablets are functional, but some run more slowly than others. <br> © All tablets are functional, but all or almost all run slowly. <br> (1) Some of the tablets do not operate and cannot be used. <br> (1) I don't know. <br> (2018 Grade 8) |  |  |  |  |  |  | 21. How well do the tablets (for example, Surface Pro, iPad, Kindle Fire) in your school work? <br> (1) All tablets are functional and operate quickly. <br> (1) All tablets are functional, but some run more slowly than others. <br> © All tablets are functional, but all or almost all run slowly. <br> (1) Some of the tablets do not operate and cannot be used. <br> (1) I don't know. <br> Issue: Technology Use |  |  |  |  |  |  | NC | N/A |
| 24. How often do you do the following in this school? Select one circle in each row. |  |  |  |  |  |  | 22. How often do you do the following in this school? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | Never | About once or twice a | About once or twine a mont | $\begin{aligned} & \text { About once } \\ & \text { or twice a } \\ & \text { week } \end{aligned}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array} \\ \hline \end{array}$ |  |  | Never | About once or twice year | About once or twice a month | About once or twice a week | Every day or $\begin{aligned} & \text { almost } \\ & \text { every day } \end{aligned}$ |  |  |  |
| a.Teach iontly as a <br> team in the same class | © | © | $\odot$ | $\odot$ | $\oplus$ |  | , Teach iointly as a | © | $\oplus$ | $\odot$ | ¢ | © | vneoes |  |  |
| $\begin{aligned} & \text { b. Observe other } \\ & \text { teachers classes and } \\ & \text { provide feedsack } \end{aligned}$ | $\oplus$ | $\oplus$ | $\odot$ | © | $\oplus$ |  | b. Observe other teachers' classes and provide feedback | © | (1) | $\odot$ | $\odot$ | $\oplus$ | roaeser |  |  |
| c. Engage in discussions <br> about the learning <br> development of <br> specific students <br> derk | © | ${ }^{(1)}$ | $\odot$ | $\oplus$ | $\oplus$ | W7a | $$ | © | (1) | $\odot$ | $\odot$ | (1) | maxas |  |  |
|  | © | ${ }^{(1)}$ | $\odot$ | $\odot$ | ${ }^{\circ}$ | are | d. Work with other <br> teachers in my school <br> to ensure commmon <br> standards in in <br> evaluations for <br> assessing student <br> progress | © | ${ }^{(1)}$ | $\odot$ | $\odot$ | ${ }^{( }$ | masas |  |  |
| (2018 Grade 8) |  |  |  |  |  |  | Issue: School Clim |  |  |  |  |  |  |  |  |


| Grade 8 Core Teacher |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  |  |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 25. In your school, how severe is each problem? Select one circle in each row. |  |  |  |  |  |  |  |  | 23. In your school, how severe is each problem? Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  | Nota problem |  | $\begin{aligned} & \text { Minor } \\ & \text { problem } \end{aligned}$ |  | $\begin{aligned} & \text { Moderate } \\ & \text { problem } \end{aligned}$ |  | Serious problem |  | a. The school building needs significant repair. | Not a problem |  | $\begin{gathered} \text { Minor } \\ \text { problem } \end{gathered}$ |  | Moderate problem | Serious problem |  |  |  |
| $\begin{array}{\|l} \hline \text { a. The school building needs } \\ \text { significant repair. } \end{array}$ | ds ${ }^{\text {d }}$ |  |  |  |  | $\bigcirc$ | $\oplus$ | wnees |  | ds |  |  | © | $\odot$ | $\odot$ | nne |  |  |
| b. Classooms are | - |  |  |  |  | $\odot$ | $\odot$ | nowese | b. Classtooms are | $\bigcirc$ |  |  | © | $\odot$ | ¢ | manses |  |  |
| c. Teachers have too many teaching hours. | © |  |  |  |  | $\odot$ | $\oplus$ | mosess | - ${ }_{\text {c. }}^{\text {c. Teacterowded. }}$ have too many | - |  |  | © | $\odot$ | $\oplus$ | mases |  |  |
|  | \% ${ }^{\circ}$ |  |  |  |  | $\odot$ | ${ }^{\circ}$ | uss | $\begin{aligned} & \text { teaching hours. } \\ & \hline \text { d. Teachers do not have } \\ & \text { adequate workspace (e.g. } \\ & \text { for preparation. } \\ & \text { corlaboration. or meeting } \end{aligned}$ | g |  |  | (1) | $\odot$ | $\oplus$ |  |  |  |
| e. Teachers do not have adequate instructional materials and supplies. | - |  |  |  |  | $\odot$ | © | nueses |  | - |  |  | (1) | $\odot$ | $\oplus$ |  |  |  |
| (2018 Grade 8) |  |  |  |  |  |  |  |  | Issue: School Clim | ate |  |  |  |  |  |  |  |  |
| 26. How much does each of th circle in each row. | f the followin | gstaten | ents ap | pply to | ous | s teacher? Se | elect one | ve | 24. How much does each of circle in each row. | f the following | statem | nts app | pply to you as | s a teacher? Sele | ect one | vumas | NC | N/A |
|  | Not at all like me | ${ }^{\text {A }}$ Alitu |  | Some |  | Quite a bit like me | $\begin{array}{\|c\|} \hline \text { Exactly like } \\ \text { me } \end{array}$ |  |  | Not at all like me | ${ }^{\text {A }}$ Alittle |  | Somewhat like me | Quite a bit like me | $\begin{array}{\|c} \text { Exactly like } \\ \text { me } \end{array}$ |  |  |  |
| a. Iam satisfied with <br> bengot teacher at this <br> school. | $\oplus$ |  |  | ${ }^{\circ}$ |  | $\oplus$ | $\oplus$ | sob | a. I am satisfied with <br> being a teacher at this <br> school. | $\oplus$ | © |  | $\odot$ | $\odot$ | $\oplus$ | Hosous |  |  |
| b. My work inspires me. | ${ }^{\circ}$ |  |  | c |  | ${ }^{\circ}$ | ${ }^{\circ}$ | masma | b. My work inspires me. | $\stackrel{\square}{\square}$ | © |  | - | $\stackrel{\square}{\circ}$ | ${ }^{\circ}$ | mizame |  |  |
|  | © |  |  | $\bigcirc$ |  | © | $\oplus$ | visane |  | $\oplus$ | © |  | - | $\odot$ | ${ }^{\circ}$ | nesom |  |  |
| d. I am supported by the teachers at my school. | © |  |  | © |  | $\odot$ | $\oplus$ | ame | d. I am supported by the teachers at my schoo. | $1{ }^{\circ}$ | © |  | $\odot$ | $\oplus$ | $\oplus$ | , |  |  |
| (2018 Grade 8) |  |  |  |  |  |  |  |  | Issue: School Climate |  |  |  |  |  |  |  |  |  |
| 27. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school, how possible is it for your students to change each of the following? Select one circle in each row. |  |  |  |  |  |  |  |  | 25. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school, how possible is it for your students to change each of the following? Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  | $\begin{gathered} \text { Not at all } \\ \text { possible to } \\ \text { change } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { A } 1 \text { itid } \\ \text { possia } \\ \text { cha } \end{array}$ |  | $\begin{gathered} \text { Some } \\ \text { possib } \\ \text { chan } \end{gathered}$ |  | $\begin{gathered} \text { Quite } \\ \text { possibe to } \\ \text { change } \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Completely } \\ \text { posslble to } \\ \text { clange } \end{array} \\ \hline \end{array}$ |  |  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Not at all } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \hline \end{array}$ |  |  | $\begin{gathered} \text { Somewhat } \\ \text { possible to } \\ \text { change } \end{gathered}$ | $\begin{gathered} \text { Quite } \\ \text { possible to } \\ \text { change } \end{gathered}$ | Completely <br> possible to <br> chang |  |  |  |
|  | ¢ | (1) |  | - |  | $\bigcirc$ |  |  | a. Being intelligent | $\odot$ | (1) |  | $\bigcirc$ | $\stackrel{\square}{\circ}$ | $\oplus$ | vuzse |  |  |
| $\begin{array}{l}\text { b. } \\ \text { Putting forth a lot of } \\ \text { effort }\end{array}$ | © | ${ }^{\text {® }}$ |  | $\odot$ |  | ${ }^{\circ}$ | $\oplus$ | nusses | b. Putting forth a lot of | , |  |  | , | $\oplus$ | $\oplus$ | - |  |  |
| c. Behaving well in class | $\oplus$ |  |  | $\odot$ |  | ¢ |  | nuasmo | c. Behaving well in class | ${ }_{\square}$ | ${ }^{(1)}$ |  | $\odot$ | $\odot$ |  | ทutaser |  |  |
| (2018 Grade 8) |  |  |  |  |  |  |  |  | Issue: Desire for Learning |  |  |  |  |  |  |  |  |  |

## Appendix K-2f: Operational Grade 8 Core

1. What is your sex?
(A) Male
(B) Female
2. Are you Hispanic or Latino? Select all squares that apply.
(A) No, I am not Hispanic or Latino.
(B) Yes, I am Mexican, Mexican American, or Chicano.
© Yes, I am Puerto Rican or Puerto Rican American.
(D) Yes, I am Cuban or Cuban American.
(E) Yes, I am from some other Hispanic or Latino background.
3. Which of the following best describes you? Select all squares that apply.
(A) White
(B) Black or African American
© Asian
(D) American Indian or Alaska Native
(©) Native Hawaiian or other Pacific Islander
4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year?
(A) Less than 1 year
(B) 1-2 years
© 3-5 years
(D) 6-10 years
(E) 11-20 years
© $\operatorname{c} 21$ or more years
5. Excluding student teaching, how many years have you taught reading, writing, or language arts in grades 6 through 12, counting this year?
(A) Less than 1 year
(B) 1-2 years
© 3-5 years
(1) 6-10 years
(B) 11-20 years
() 21 or more years
6. Excluding student teaching, how many years have you taught mathematics in grades 6 through 12, counting this year?
(A) Less than 1 year
(B) 1-2 years
© 3-5 years
(1) 6-10 years
(E) 11-20 years
(c) 21 or more years
7. Excluding student teaching, how many years have you taught science in grades 6 through 12 , counting this year?
(A) Less than 1 year
(B) 1-2 years
(c) 3-5 years
(D) 6-10 years
(B) 11-20 years
() 21 or more years
8. Have you been awarded tenure by the school, district, or diocese where you currently teach?
(A) Yes
(B) No
© My school, district, or diocese does not award tenure.
9. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?
(A) Yes, I hold a permanent certificate.
(B) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)
© No, but I am currently working toward certification.
(D) No, and I am not planning to obtain certification.
10. Did you enter teaching through an alternative route to certification program?
(An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.)
(4) Yes
(B) No
11. What is the highest academic degree you hold?
(A) High school diploma
(B) Associate's degree/vocational certification
© Bachelor's degree
(D) Master's degree
© Education specialist's or professional diploma based on at least one year's work past master's degree
(7) Doctorate
© Professional degree (e.g., M.D., LL.B., J.D., D.D.S.)
12. Did you have a major, minor, or special emphasis in any of the following subjects as part of your undergraduate coursework? Select one circle in each row.

|  | Yes, a major | Yes, a minor or special emphasis | No |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Reading, language arts, or literacy education | (4) | (8) | $\bigcirc$ | VH241758 |
| b. English | (4) | (8) | $\bigcirc$ | VH241754 |
| c. Other language arts-related subject | (4) | (B) | © | VH241784 |
| d. Mathematics education | (4) | (8) | $\bigcirc$ | VH241760 |
| e. Mathematics | (4) | (8) | © | VH241761 |
| f. Other mathematics-related subject such as statistics | (4) | (B) | $\bigcirc$ | VH241776 |
| g. Biology or other life science | (4) | (8) | © | VH241768 |
| h. Physics, chemistry, or other physical science | (4) | (B) | © | VH241769 |
| i. Earth or space science | (4) | (8) | $\bigcirc$ | VH24170 |
| j. Mathematics or mathematics education | (4) | (B) | © | VH241771 |
| k. Science education | (4) | (8) | $\bigcirc$ | vH241772 |
| 1. Engineering or engineering education | (4) | (B) | © | VH241780 |
| m . Elementary or secondary education | (4) | (B) | © | VH241767 |
| n. Special education (including students with disabilities) | (4) | (B) | $\bigcirc$ | VH241781 |
| o. English language learning | (8) | (8) | $\bigcirc$ | VH241782 |

13. Since completing your undergraduate degree, have you taken any graduate courses?
(4) Yes
(B) No
14. Did you have a major, minor, or special emphasis in any of the following subjects as part of your graduate coursework? Select one circle in each row.

|  | Yes, a major | Yes, a minor or special emphasis | No |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Reading, language arts, or literacy education | (4) | (B) | © | vH241791 |
| b. English | (4) | (8) | $\bigcirc$ | VH241789 |
| c. Other language arts-related subject | (4) | (B) | © | VH241810 |
| d. Mathematics education | (4) | (B) | © | VH241792 |
| e. Mathematics | (4) | (8) | © | VH241793 |
| f. Other mathematics-related subject such as statistics | (4) | (B) | © | vH241794 |
| g. Biology or other life science | (4) | (B) | © | VH241798 |
| h. Physics, chemistry, or other physical science | (4) | (B) | © | VH241799 |
| i. Earth or space science | (4) | (8) | © | VH241800 |
| j. Mathematics or mathematics education | (4) | (B) | © | VH241801 |
| k. Science education | (4) | (B) | © | VH241802 |
| 1. Engineering or engineering education | (4) | (B) | © | VH241806 |
| m. Elementary or secondary education | (4) | (B) | © | VH241797 |
| n. Special education (including students with disabilities) | (4) | (B) | © | VH241807 |
| o. English language learning | (4) | (8) | $\bigcirc$ | VH241808 |

15. In this school year, did your school offer training for teachers on how to use computers or other digital devices?
(A) Yes, to all teachers
(B) Yes, to some teachers
© No
16. In this school year, have you participated in training on computers or other digital devices through your school?
(A) No
(B) Once
© Twice
(1) Several times
17. During the last two years, have you received training from any source in any of the following areas? Select one circle in each row.

|  | No, I am already proficient. | No, I have not. | Yes |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Basic computer training | (4) | (8) | © | vH241894 |
| b. Software applications | (4) | (8) | $\bigcirc$ | vH241895 |
| c. Use of the Internet | (4) | (8) | © | VH241898 |
| d. Use of other technology-for example, satellite access, wireless Web, interactive video, closed-circuit television, videoconferencing | (4) | (B) | $\bigcirc$ | vH241897 |
| e. Integration of computers and other technology into classroom instruction | (4) | (B) | $\bigcirc$ | vH241896 |

18. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply.
(4) Desktop computers
(B) Laptop computers (including Chromebooks)
© Tablets (for example, Surface Pro, iPad, Kindle Fire)
19. How well do the desktop computers in your school work?
(A) All computers are functional and operate quickly.
(B) All computers are functional, but some run more slowly than others.
© All computers are functional, but all or almost all run slowly.
(D) Some of the computers do not operate and cannot be used.
(e) I don't know.
20. How well do the laptop computers (including Chromebooks) in your school work?
(A) All computers are functional and operate quickly.
(B) All computers are functional, but some run more slowly than others.
© All computers are functional, but all or almost all run slowly.
(D) Some of the computers do not operate and cannot be used.
(c) I don't know.
21. How well do the tablets (for example, Surface Pro, iPad, Kindle Fire) in your school work?
(4) All tablets are functional and operate quickly.
(B) All tablets are functional, but some run more slowly than others.
© All tablets are functional, but all or almost all run slowly.
(D) Some of the tablets do not operate and cannot be used.
(c) I don't know.
22. How often do you do the following in this school? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Teach jointly as a team in the same class | (4) | (8) | © | (1) | (®) | vH304693 |
| b. Observe other teachers' classes and provide feedback | (4) | (B) | © | (1) | © | vH304698 |
| c. Engage in discussions about the learning development of specific students | (4) | (B) | $\bigcirc$ | (1) | (1) | VH304736 |
| d. Work with other teachers in my school to ensure common standards in evaluations for assessing student progress | (4) | (B) | © | (1) | (e) | vH304740 |

23. In your school, how severe is each problem? Select one circle in each row.

|  | Not a problem | Minor problem | Moderate problem | Serious problem |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. The school building needs significant repair. | (4) | (B) | © | (1) | vH262653 |
| b. Classrooms are overcrowded. | (4) | (B) | © | (1) | vH262654 |
| c. Teachers have too many teaching hours. | (4) | (B) | © | (1) | vH262655 |
| d. Teachers do not have adequate workspace (e.g., for preparation, collaboration, or meeting with students). | (4) | (B) | © | (1) | vH262656 |
| e. Teachers do not have adequate instructional materials and supplies. | (4) | (B) | © | (1) | VH262657 |

24. How much does each of the following statements apply to you as a teacher? Select one circle in each row.

|  | Not at all like me | A little bit like me | Somewhat like me | Quite a bit like me | Exactly like me |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I am satisfied with being a teacher at this school. | (4) | (B) | © | (1) | (1) | VH305016 |
| b. My work inspires me. | (4) | (B) | © | (1) | (1) | vH305024 |
| c. I am frustrated as a teacher at my school. | (4) | (B) | © | (1) | (1) | vH305032 |
| d. I am supported by the teachers at my school. | (4) | (B) | © | (1) | (c) | vH305033 |

25. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school, how possible is it for your students to change each of the following? Select one circle in each row.

|  | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Being intelligent | (4) | (B) | © | (1) | (c) | vH329967 |
| b. Putting forth a lot of effort | (4) | (B) | © | (1) | (E) | vH329968 |
| c. Behaving well in class | (4) | (B) | © | (1) | (1) | vH329970 |

## Appendix K-2g: Summary of Changes Pilot Grade 8 Core

| 2019 Pilot Grade 8 Core Teacher |  |  |  |
| :---: | :---: | :---: | :---: |
| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 1. Are you Hispanic or Latino? Select all squares that apply. <br> (4) No, I am not Hispanic or Latino. <br> (B) Yes, I am Mexican, Mexican American, or Chicano. <br> © Yes, I am Puerto Rican or Puerto Rican American. <br> (1) Yes, I am Cuban or Cuban American. <br> (1) Yes, I am from some other Hispanic or Latino background. <br> (2017 Grade 8) | 2. Are you Hispanic or Latino? Select all squares that apply. <br> (4) No, I am not Hispanic or Latino. <br> (B) Yes, I am Mexican, Mexican American, or Chicano. <br> - Yes, I am Puerto Rican or Puerto Rican American. <br> (1) Yes, I am Cuban or Cuban American. <br> (1) Yes, I am from some other Hispanic or Latino background. <br> Issue: Race/Ethnicity | NC | N/A |
| 2. Which of the following best describes you? Select all squares that apply. <br> (4) White <br> (1) Black or African American <br> - Asian <br> (1) American Indian or Alaska Native <br> (1) Native Hawaiian or other Pacific Islander <br> (2017 Grade 8) | 3. Which of the following best describes you? Select all squares that apply. <br> (4) White <br> (B) Black or African American <br> - Asian <br> (1) American Indian or Alaska Native <br> (c) Native Hawaiian or other Pacific Islander <br> Issue: Race/Ethnicity | NC | N/A |
| 3. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year? <br> (4) Less than 1 year <br> (B) 1-2 years <br> © 3-5 years <br> (1) 6-10 years <br> (c) 11-20 years <br> (1) 21 or more years <br> (2017 Grade 8) | 4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year? <br> (4) Less than 1 year <br> (B) 1-2 years <br> © 3-5 years <br> (1) 6-10 years <br> (b) 11-20 years <br> (1) 21 or more years <br> Issue: Teacher Preparation | NC | N/A |
| 4. Excluding student teaching, how many years have you taught reading, writing, or language arts in grades 6 through 12, counting this year? <br> (4) Less than 1 year <br> (B) 1-2 years <br> © 3-5 years <br> (1) 6-10 years <br> (c) 11-20 years <br> (1) 21 or more years <br> (2017 Grade 8) | 5. Excluding student teaching, how many years have you taught reading, writing, or language arts in grades 6 through 12, counting this year? <br> (4) Less than 1 year <br> (B) 1-2 years <br> © 3-5 years <br> (1) 6-10 years <br> (1) 11-20 years <br> (1) 21 or more years <br> Issue: Teacher Preparation | NC | N/A |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| 2019 Pilot Grade 8 Core Teacher |  |  |  |
| :---: | :---: | :---: | :---: |
| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 5. Have you been awarded tenure by the school or district where you currently teach? <br> (4) Yes <br> (B) No <br> © My school or district does not award tenure. <br> (2017 Grade 8) | 7. Have you been awarded tenure by the school, district, or diocese where you currently teach? Yes No My school, district, or diocese does not award tenure. <br> Issue: Teacher Preparation | R | This item was revised to include "diocese" as a source of tenure. |
| 6. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching? <br> (4) Yes, I hold a permanent certificate. <br> (D) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.) <br> © No, but I am currently working toward certification. <br> (1) No, and I am not planning to obtain certification. <br> (2017 Grade 8) | 8. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching? <br> (4) Yes, I hold a permanent certificate. <br> (1) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework. student teaching, etc.) <br> © No, but I am currently working toward certification. <br> (1) No, and I am not planning to obtain certification. <br> Issue: Teacher Preparation | NC | N/A |
| 7. Did you enter teaching through an alternative route to certification program? <br> (An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.) <br> (4) Yes <br> (1) No <br> (2017 Grade 8) | 9. Did you enter teaching through an alternative route to certification program? <br> (An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example. a state, district, or university alternative route to certification program.) Yes <br> (1) No <br> Issue: Teacher Preparation | NC | N/A |
| 8. Are you certified by the National Board for Professional Teaching Standards in at least one content area? <br> (The National Board for Professional Teaching Standards is a nongovernmental organization that administers National Board certification, a voluntary national assessment program that certifies teachers who meet high professional standards. In order to gain certification, the candidate must at least complete a portfolio of classroom practice and pass one or more tests of content knowledge.) <br> (1) Yes, I am fully certified by the National Board for Professional Teaching Standards. <br> (1) I am working towards my National Board certification. <br> © No <br> (2017 Grade 8) | N/A | D | To create room in the questionnaire for new development and keep school administrator burden low, this item was dropped. |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Pilot Grade 8 Core Teacher



+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| Previous item |  |  |  |  | 2019 item |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14. During the last two years, have you received training from any source in any of the following areas? Select one circle in each row. |  |  |  |  | 16. During the last two school years, have you received training from any source in any of the following areas? Select one circle in each row. |  |  |  |  | R | Example |
|  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { No, I am already } \\ \text { proficient. } \end{array} \\ \hline \hline \end{array}$ | No, I have not. | Yes |  |  | No. I have not needed training in | $\begin{aligned} & \text { No, I have not } \\ & \text { received training } \end{aligned}$ | Yes |  |  | added to sub- |
| - ${ }^{\text {a. Basic computer training }}$ - ${ }^{\text {b. Software applications }}$ | $\stackrel{\square}{\square}$ | $\stackrel{\square}{\square}$ | $\bigcirc$ | virunas |  | this area. | from any source in this area. | Yes |  |  | items $a$ and $b$, |
| c. Use of the Internet | ¢ | ${ }^{\circ}$ | $\odot$ | vraters | a. Basic computer training le.g., or | © | ${ }^{(1)}$ | $\bigcirc$ |  |  | and the |
| d. Use of other tecthnology-for <br> example.satellite access, wireless <br> Webs interative vicos. <br> closed.-circuit television. | © | ${ }^{\circ}$ | - | venus? | $\begin{array}{\|l\|} \begin{array}{c} \text { moving files. creating folders, or } \\ \text { using keyboard/mouse) } \end{array} \\ \hline \begin{array}{l} \text { b. Softwarareapplications (e.g.. Excel., } \\ \text { Adobe Acrobat. or Google Docs) } \end{array} \\ \hline \end{array}$ | © | ${ }^{\circ}$ | $\stackrel{\circ}{\circ}$ | 4 masen |  | example content for |
| $\begin{array}{\|l} \text { e. Integration of computers and } \\ \text { other technology into classroom } \\ \text { instruction } \end{array}$ | © | $\oplus$ | - |  | $\begin{array}{\|l\|} \hline \text { c. Use of the Internet } \\ \hline \text { d. Use of other digital devices (e.g.. } \\ \text { scanners. mobile devices, } \\ \text { Chromebooks. interactive panels) } \end{array}$ | © ${ }^{\circ}$ | ${ }^{(1)}$ | $\bigcirc$ | 7usse2. |  | sub-item d was updated. |
|  |  |  |  |  | e. Integration of computers and <br> other digital devices into <br> classroom instruction | © | ${ }^{(1)}$ | $\odot$ |  |  |  |
| (2017 Grade 8) |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |
| 15. In this school year, did your school offer training for teachers on how to use computers or other digital devices? <br> (4) Yes, to all teachers <br> (B) Yes, to some teachers <br> (c) No <br> (2017 Grade 8) |  |  |  |  | 14. In this school year. did your school offer training for teachers on how to use computers or other digital devices? Yes, to all teachers Yes, to some teachers No <br> Issue: Teacher Preparation |  |  |  |  | NC | N/A |
| 16. In this school year, have you participated in training on computers or other digital devices through your school? <br> (4) No <br> (B) Once <br> © Twice <br> (D) Several times <br> (2017 Grade 8) |  |  |  |  | 15. In this school year, have you participated in training on computers or other digital devices through your school? No Once Twice Several times <br> Issue: Technology Use |  |  |  |  | NC | N/A |
| 17. In this school year, did your school provide you with a laptop computer (including Chromebooks) to use for teaching and class preparation? <br> (4) Yes, and I can take it home. <br> (B) Yes, but I cannot take it home. <br> © No <br> (2017 Grade 8) |  |  |  |  | N/A |  |  |  |  | D | To create room in the questionnaire for new development and keep school administrator burden low, this item was dropped. |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Pilot Grade 8 Core Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 18. In this school year, did your school provide you with a tablet (for example, Surface <br> Pro, iPad, Kindle Fire) to use for teaching and class preparation? <br> (D) Yes, and I can take it home. <br> (1) Yes, but I cannot take it home. <br> © No <br> (2017 Grade 8) | N/A | D | To create room in the questionnaire for new development and keep school administrator burden low, this item was dropped. |
| 19. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply. <br> (D) Desktop computers <br> (B) Laptop computers (including Chromebooks) <br> © Tablets (for example, Surface Pro, iPad, Kindle Fire) <br> (1) Other digital devices (Please specify): $\qquad$ <br> (2017 Grade 8) | 17. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply. <br> (4) Desktop computers <br> (1) Laptop computers (including Chromebooks) <br> © Tablets (for example, Surface Pro, iPad, Kindle Fire) <br> (1) Other digital devices (Please specify): $\qquad$ <br> Issue: Technology Use | NC | N/A |
| 20. How well do the desktop computers in your school work? <br> (4) All computers are functional and operate quickly. <br> (B) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> (2017 Grade 8) | 18. How well do the desktop computers in your school work? <br> (4) All computers are functional and operate quickly. <br> (1) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (1) I don't know. <br> Issue: Technology Use | NC | N/A |
| 21. How well do the laptop computers (including Chromebooks) in your school work? <br> (4) All computers are functional and operate quickly. <br> (B) All computers are functional, but some run more slowly than others. <br> © All computers are functional, but all or almost all run slowly. <br> (1) Some of the computers do not operate and cannot be used. <br> (2) I don't know. <br> (2017 Grade 8) | 19. How well do the laptop computers (including Chromebooks) in your school work? <br> (1) All computers are functional and operate quickly. All computers are functional, but some run more slowly than others. All computers are functional, but all or almost all run slowly. Some of the computers do not operate and cannot be used. I don't know. <br> Issue: Technology Use | NC | N/A |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| 2019 Pilot Grade 8 Core Teacher |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 22. How well do the tablets (for example, Surface Pro, iPad, Kindle Fire) in your school work? <br> (4) All tablets are functional and operate quickly. <br> (B) All tablets are functional, but some run more slowly than others. <br> © All tablets are functional, but all or almost all run slowly. <br> (1) Some of the tablets do not operate and cannot be used. <br> (1) I don't know. <br> (2017 Grade 8) |  |  |  |  |  |  | 20. How well do the tablets (for example, Surface Pro, iPad. Kindle Fire) in your school work? <br> (4) All tablets are functional and operate quickly. <br> (1) All tablets are functional, but some run more slowly than others. <br> © All tablets are functional, but all or almost all run slowly. <br> (1) Some of the tablets do not operate and cannot be used. <br> (1) I don't know. <br> Issue: Technology Use |  |  |  |  |  |  |  | NC | N/A |
| 23. How often do you do the following in this school? Select one circle in each row. |  |  |  |  |  |  | 21. How often do you do the following in this school? Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  | Never | $\begin{array}{\|c} \begin{array}{c} \text { About once } \\ \text { or twiee } \\ \text { year ar } \end{array} \\ \hline \end{array}$ | $\begin{aligned} & \text { About once } \\ & \text { or twice a } \\ & \text { month } \end{aligned}$ | $\begin{gathered} \hline \text { About once } \\ \text { or twice a } \\ \text { week } \\ \hline \hline \end{gathered}$ | $\left.\begin{array}{\|c\|} \hline \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array} \right\rvert\,$ |  |  | Never |  |  | About once or twice a month | About once or twice week | $\left.\begin{array}{\|c} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array} \right\rvert\,$ |  |  |  |
| a. Teach jointly as a <br> team in the same class <br> t. | © | © | $\odot$ | $\odot$ | $\odot$ | ws | a. Teach iointly as a <br> team in the same class | © | ¢ ${ }^{\circ}$ |  | $\bigcirc$ | $\odot$ | $\oplus$ | тниен |  |  |
| $\begin{array}{\|l} \begin{array}{l} \text { b. Observe other } \\ \text { teachers classes and } \\ \text { provide feedback } \end{array} \\ \hline \text { c. Engage in discussions } \end{array}$ | © | © | $\odot$ | $\odot$ | ${ }^{\circ}$ | ss | $\begin{array}{\|l\|} \text { team in the same class } \\ \hline \text { b. Observe other } \\ \text { teachers classe and } \\ \text { provide feedback } \end{array}$ | ¢ | © |  | $\odot$ | $\odot$ | $\odot$ | usess |  |  |
| $\begin{array}{\|l} \hline \text { c. Engage in discussions } \\ \text { about the learning } \\ \text { development of } \\ \text { specific students } \\ \hline \end{array}$ | $\odot$ | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\oplus$ | \% 9 | c. Engage in discussions about the learning development of s. | $\odot$ | © |  | $\odot$ | © | ${ }^{\circ}$ | нията |  |  |
|  | © | © | $\odot$ | ${ }^{\circ}$ | $\oplus$ | sew |  | © | $\oplus$ |  | $\odot$ | $\oplus$ | $\odot$ | Sarso |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: School Climate |  |  |  |  |  |  |  |  |  |
| 24. In your school, how severe is each problem? Select one circle in each row. |  |  |  |  |  |  | 22. In your school, how severe is each problem? Select one circle in each row. vinsas? |  |  |  |  |  |  |  | NC | N/A |
|  | Not a problem |  | $\begin{gathered} \text { Minor } \\ \text { problem } \end{gathered}$ | $\begin{gathered} \text { Moderate } \\ \text { problem } \\ \hline \hline \end{gathered}$ | $\begin{gathered} \text { Serious } \\ \text { problem } \end{gathered}$ |  |  | Not a problem |  | $\begin{gathered} \text { Minor } \\ \text { problem } \end{gathered}$ |  | Moderate problem | Serious problem |  |  |  |
| $\begin{aligned} & \text { a. The school building needs } \\ & \text { significant repair. } \\ & \hline \end{aligned}$ | © |  | $\oplus$ | - | $\odot$ | 45 |  | © |  | $\stackrel{\square}{\square}$ |  | $\odot$ | $\odot$ |  |  |  |
|  | $\odot$ |  | $\stackrel{\square}{*}$ | $\odot$ | © | viness | significant repair. <br> b. Classrooms are <br> overcrowded. <br> . | $\stackrel{\square}{\circ}$ |  | ${ }^{\circ}$ |  | $\odot$ | $\odot$ | nneass |  |  |
| c. Teachers have too many teaching hours. | © |  | ${ }^{\odot}$ | $\odot$ | $\oplus$ | vitaess | $\begin{array}{\|l} \text { c. Teachers have too many } \\ \text { teaching hours. } \end{array}$ |  |  |  | - | $\odot$ | © | vazases |  |  |
|  | © |  | ${ }^{\circ}$ | $\odot$ | $\oplus$ | 2065 | d. Teachers do not have <br> adequate workspace (e.g., <br> for preparation. <br> collaboration, or meeting <br> with students). <br> . | © |  | $\oplus$ |  | $\odot$ | $\bullet$ | wronses |  |  |
| $\begin{array}{\|c} \text { e. Teachers do not have } \\ \text { adequate instructional } \\ \text { materials and supplies. } \end{array}$ | © |  | © | $\odot$ | $\odot$ | 2ss7 | e. Teachers do not have adequate instructional materials and supplies. | © |  | © |  | $\odot$ | $\bullet$ | vineses |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: School Clima |  |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25. How much does each of the following statements apply to you as a teacher? Select one circle in each row. |  |  |  |  |  |  | 23. How much does each of the following statements apply to you as a teacher? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{aligned} & \text { Not at all } \\ & \text { like me } \end{aligned}$ | $\begin{gathered} \text { A little bit } \\ \text { like me } \\ \hline \hline \end{gathered}$ | $\begin{aligned} & \text { Somewhat } \\ & \text { like me } \end{aligned}$ | $\begin{array}{\|c} \begin{array}{c} \text { Quite a bit } \\ \text { (ike me } \end{array} \\ \hline \hline \end{array}$ | $\begin{gathered} \text { Exactly like } \\ \text { me } \end{gathered}$ |  |  | Not at all like me | A little bit like me | Somewhat like me | Quite a bit like me | $\begin{array}{\|c\|} \hline \text { Exactly like } \\ \text { me } \end{array}$ |  |  |  |
| a. $\begin{array}{l}\text { Iam satisfied with } \\ \text { becing teacher at this } \\ \text { school. }\end{array}$ <br> c. . | ${ }^{\bullet}$ | $\oplus$ | ${ }^{\circ}$ | $\stackrel{\square}{\odot}$ | $\odot$ | ${ }_{\text {cosan }}$ | a. I am satisfied with beeng a teacher at this school. | © | © | $\odot$ | $\odot$ | $\odot$ | Mussat |  |  |
| c. I am frustrated as a | ${ }^{\circ}$ |  |  |  |  |  | b. My work inspires me. | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\odot$ | $\odot$ | visesmat |  |  |
| teacher at my school. | ${ }^{\circ}$ | ${ }^{\circ}$ | $\bigcirc$ | $\odot$ | © |  |  | © | © | $\odot$ | $\bullet$ | © | Huxom |  |  |
| d. I I am supported by the teachers at my school. | © | ${ }^{\circ}$ | $\odot$ | $\stackrel{\square}{\circ}$ | $\oplus$ | smas | d. I am supported by the teachers at my schoo | © | © | - | $\odot$ | $\odot$ |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: School Climate |  |  |  |  |  |  |  |  |
| 26. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school, how possible is it for your students to change each of thefollowing? Select one circle in each row following? Select one circle in each row. |  |  |  |  |  |  | 24. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school. how possible is it for your students to change each of the following? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{array}{\|c\|c\|} \hline \begin{array}{c} \text { Not at all } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { A little } \\ \begin{array}{c} \text { possible to } \\ \text { change } \end{array} \\ \hline \end{gathered}$ | Somewhat possible to change | $\begin{gathered} \begin{array}{c} \text { Quite } \\ \text { possible to } \\ \text { change } \end{array} \\ \hline \hline \end{gathered}$ | $\begin{array}{\|c} \text { Completely } \\ \text { possible ty } \\ \text { change } \end{array}$ |  |  | Not at all <br> possible t <br> change | $\begin{gathered} \text { A little } \\ \text { possible to } \\ \text { change } \end{gathered}$ | Somewhat <br> possible to <br> change | $\begin{gathered} \text { Quite } \\ \text { possible to } \\ \text { change } \end{gathered}$ | $\left\|\begin{array}{c} \text { Completely } \\ \text { possibe to } \\ \text { change } \end{array}\right\|$ |  |  |  |
| a. Being intelligent | ${ }^{\circ}$ | ${ }^{\circ}$ | $\bigcirc$ | ¢ | ¢ | vibese | a. Being intelligent | © | © | $\bigcirc$ | © | ${ }^{\circ}$ | , |  |  |
| - $\begin{aligned} & \text { b. Putting forth a lot of } \\ & \text { effort }\end{aligned}$ | $\odot$ | $\oplus$ | $\odot$ | $\odot$ | © | *s | $\begin{array}{\|c} \hline \text { b. Putting forth a lot of } \\ \text { effort } \end{array}$ | © | $\stackrel{\square}{\square}$ | $\odot$ | $\stackrel{\square}{\circ}$ | $\stackrel{\square}{\square}$ |  |  |  |
| c. Behaving well in class | $\bullet$ | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\odot$ | vineme | C. Behaving well in class | © | ${ }^{\circ}$ | $\odot$ | ${ }^{\circ}$ | ${ }^{\circ}$ | vurese |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Desire for Learning |  |  |  |  |  |  |  |  |
| N/A |  |  |  |  |  |  | 1. What is your sex? <br> (4) Male <br> (B) Female <br> Issue: Gender |  |  |  |  |  |  | A | This item was added to provide additional contextual information. |
| N/A |  |  |  |  |  |  | 6. Excluding student teaching, how many years have you taught mathematics in grades 6 through 12, counting this year? <br> (D) Less than 1 year <br> (B) 1-2 years <br> (อ) 3-5 years <br> (1) 6-10 years <br> (c) 11-20 years <br> (1) 21 or more years <br> Issue: Teacher Preparation |  |  |  |  |  |  | A | This trend item is included in the questionnaire because the mathematics is being assessed in this |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

|  |  | administratio <br> n. |
| :--- | :--- | :--- | :--- |

## Appendix K-2h: Pilot Grade 8 Core

1. What is your sex?
(A) Male
(B) Female
2. Are you Hispanic or Latino? Select all squares that apply.
(A) No, I am not Hispanic or Latino.
(B) Yes, I am Mexican, Mexican American, or Chicano.
© Yes, I am Puerto Rican or Puerto Rican American.
(D) Yes, I am Cuban or Cuban American.
(E) Yes, I am from some other Hispanic or Latino background.
3. Which of the following best describes you? Select all squares that apply.
(A) White
(B) Black or African American
© Asian
(D) American Indian or Alaska Native
(©) Native Hawaiian or other Pacific Islander
4. Excluding student teaching, how many years have you worked as an elementary or secondary teacher, counting this year?
(A) Less than 1 year
(B) 1-2 years
© 3-5 years
(D) 6-10 years
(E) 11-20 years
© $\operatorname{c} 21$ or more years
5. Excluding student teaching, how many years have you taught reading, writing, or language arts in grades 6 through 12, counting this year?
(4) Less than 1 year
(B) 1-2 years
© 3-5 years
(1) 6-10 years
(B) 11-20 years
() 21 or more years
6. Excluding student teaching, how many years have you taught mathematics in grades 6 through 12 , counting this year?
(A) Less than 1 year
(B) 1-2 years
© 3-5 years
(1) 6-10 years
(E) 11-20 years
(c) 21 or more years
7. Have you been awarded tenure by the school, district, or diocese where you currently teach?
(A) Yes
(B) No
© My school, district, or diocese does not award tenure.
8. Do you hold a regular or standard certificate that is valid in the state in which you are currently teaching?
(A) Yes, I hold a permanent certificate.
(B) Yes, I hold a temporary certificate. (This type of certificate may require additional coursework, student teaching, etc.)
© No, but I am currently working toward certification.
(D) No, and I am not planning to obtain certification.
9. Did you enter teaching through an alternative route to certification program?
(An alternative route to certification program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative route to certification program.)
(4) Yes
(B) No
10. What is the highest academic degree you hold?
(4) High school diploma
(B) Associate's degree/vocational certification
© Bachelor's degree
(D) Master's degree
(E) Education specialist degree
© Doctor of Education degree (i.e., Ed.D.)
(a) Other doctoral degree (e.g., Ph.D, D.F.A., D.Sc)
$\oplus$ Other academic degree (Please specify):
11. Did you have a major, minor, or special emphasis in any of the following subjects as part of your undergraduate coursework? Select one circle in each row.

|  | Yes, a major | Yes, a minor or special emphasis | No |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Reading, language arts, or literacy education | (4) | (8) | $\bigcirc$ | VH241758 |
| b. English | (4) | (8) | $\bigcirc$ | VH241754 |
| c. Other language arts-related subject | (4) | (B) | © | VH241784 |
| d. Mathematics education | (4) | (8) | $\bigcirc$ | VH241760 |
| e. Mathematics | (4) | (8) | © | VH241761 |
| f. Other mathematics-related subject such as statistics | (4) | (B) | $\bigcirc$ | VH241776 |
| g. Biology or other life science | (4) | (8) | © | VH241768 |
| h. Physics, chemistry, or other physical science | (4) | (B) | © | VH241769 |
| i. Earth or space science | (4) | (8) | $\bigcirc$ | VH24170 |
| j. Mathematics or mathematics education | (4) | (B) | © | VH241771 |
| k. Science education | (4) | (8) | $\bigcirc$ | vH241772 |
| 1. Engineering or engineering education | (4) | (B) | © | VH241780 |
| m . Elementary or secondary education | (4) | (B) | © | VH241767 |
| n. Special education (including students with disabilities) | (4) | (B) | $\bigcirc$ | VH241781 |
| o. English language learning | (8) | (8) | $\bigcirc$ | VH241782 |

12. Since completing your undergraduate degree, have you taken any graduate courses?
(A) Yes
(B) No
13. Did you have a major, minor, or special emphasis in any of the following subjects as part of your graduate coursework? Select one circle in each row.

|  | Yes, a major | Yes, a minor or special emphasis | No |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Reading, language arts, or literacy education | (4) | (B) | © | VH24791 |
| b. English | (4) | (B) | © | VH241789 |
| c. Other language arts-related subject | (4) | (B) | © | vH241810 |
| d. Mathematics education | (4) | (B) | © | VH241792 |
| e. Mathematics | (4) | (8) | © | VH241793 |
| f. Other mathematics-related subject such as statistics | (4) | (B) | © | vH241794 |
| g. Biology or other life science | (4) | (B) | © | VH241798 |
| h. Physics, chemistry, or other physical science | (4) | (B) | © | VH241799 |
| i. Earth or space science | (4) | (B) | © | VH241800 |
| j. Mathematics or mathematics education | (4) | (B) | © | VH241801 |
| k. Science education | (4) | (B) | © | VH241802 |
| 1. Engineering or engineering education | (4) | (B) | $\bigcirc$ | VH241806 |
| m. Elementary or secondary education | (1) | (B) | © | VH241797 |
| n. Special education (including students with disabilities) | (4) | (B) | © | VH241807 |
| o. English language learning | (4) | (B) | © | VH241808 |

14. In this school year, did your school offer training for teachers on how to use computers or other digital devices?
(A) Yes, to all teachers
(B) Yes, to some teachers
© No
15. In this school year, have you participated in training on computers or other digital devices through your school?
(A) No
(B) Once
© Twice
(D) Several times
16. During the last two school years, have you received training from any source in any of the following areas? Select one circle in each row.

|  | No, I have not needed training in this area. | No, I have not received training from any source in this area. | Yes |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Basic computer training (e.g., moving files, creating folders, or using keyboard/mouse) | (4) | (B) | © | VH852920 |
| b. Software applications (e.g., Excel, Adobe Acrobat, or Google Docs) | (4) | (B) | © | VH852921 |
| c. Use of the Internet | (4) | (B) | © | vH852924 |
| d. Use of other digital devices (e.g., scanners, mobile devices, Chromebooks, interactive panels) | (4) | (B) | $\bigcirc$ | VH852923 |
| e. Integration of computers and other digital devices into classroom instruction | (4) | (B) | © | VH852922 |

17. In this school year, which of the following types of computers or other digital devices are available in your school for student use? Select all squares that apply.
(A) Desktop computers
(B) Laptop computers (including Chromebooks)
© Tablets (for example, Surface Pro, iPad, Kindle Fire)
(D) Other digital devices (Please specify): $\qquad$
18. How well do the desktop computers in your school work?
(A) All computers are functional and operate quickly.
(B) All computers are functional, but some run more slowly than others.
© All computers are functional, but all or almost all run slowly.
(D) Some of the computers do not operate and cannot be used.
(ㄹ) I don't know.
19. How well do the laptop computers (including Chromebooks) in your school work?
(A) All computers are functional and operate quickly.
(B) All computers are functional, but some run more slowly than others.
© All computers are functional, but all or almost all run slowly.
(D) Some of the computers do not operate and cannot be used.
(e) I don't know.
20. How well do the tablets (for example, Surface Pro, iPad, Kindle Fire) in your school work?
(4) All tablets are functional and operate quickly.
(B) All tablets are functional, but some run more slowly than others.
© All tablets are functional, but all or almost all run slowly.
(D) Some of the tablets do not operate and cannot be used.
(E) I don't know.
21. How often do you do the following in this school? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Teach jointly as a team in the same class | (4) | (B) | © | (1) | (1) | vH304693 |
| b. Observe other teachers' classes and provide feedback | (4) | (B) | © | (1) | (1) | VH304698 |
| c. Engage in discussions about the learning development of specific students | (4) | (B) | $\bigcirc$ | (1) | (1) | VH304736 |
| d. Work with other teachers in my school to ensure common standards in evaluations for assessing student progress | (4) | (B) | $\bigcirc$ | (1) | (1) | VH304740 |

22. In your school, how severe is each problem? Select one circle in each row.

|  | Not a problem | Minor problem | Moderate problem | Serious problem |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. The school building needs significant repair. | (4) | (B) | © | (1) | VH222653 |
| b. Classrooms are overcrowded. | (4) | (B) | © | (1) | VH262654 |
| c. Teachers have too many teaching hours. | (4) | (B) | © | (1) | VH222655 |
| d. Teachers do not have adequate workspace (e.g., for preparation, collaboration, or meeting with students). | (4) | (B) | © | (1) | vH222656 |
| e. Teachers do not have adequate instructional materials and supplies. | (4) | (B) | © | (1) | vH262657 |

23. How much does each of the following statements apply to you as a teacher? Select one circle in each row.

|  | Not at all like me | A little bit like me | Somewhat like me | Quite a bit like me | Exactly like me |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I am satisfied with being a teacher at this school. | (4) | (B) | © | (1) | (1) | VH305016 |
| b. My work inspires me. | (4) | (B) | © | (1) | (1) | vH305024 |
| c. I am frustrated as a teacher at my school. | (4) | (B) | © | (1) | (1) | vH305032 |
| d. I am supported by the teachers at my school. | (4) | (B) | © | (1) | (c) | vH305033 |

24. Whether a student does well or poorly in school may depend on a lot of different things. You may feel that some of these things are easier for your students to change than others. In school, how possible is it for your students to change each of the following? Select one circle in each row.

|  | Not at all possible to change | A little possible to change | Somewhat possible to change | Quite possible to change | Completely possible to change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Being intelligent | (4) | (8) | © | (1) | (1) | VH329967 |
| b. Putting forth a lot of effort | (4) | (B) | © | (1) | (1) | vH329968 |
| c. Behaving well in class | (1) | (8) | © | (1) | (1) | vH329970 |

## Appendix K-2i: Summary of Changes Operational Grade 4 Reading

## 2019 Operational Grade 4 Reading Teacher

| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading, writing, literature, and related topics. Select one circle. <br> (1) I do not teach English/language arts to this class. Questions 2-11 are not applicable and will be skipped. <br> (B) I teach all or most subjects, including English/language arts. <br> © The only subject I teach is English/language arts. <br> (1) We team teach, and I have primary responsibility for teaching English/language arts. <br> (2017 Grade 4) |  |  |  |  |  | 1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading, writing, literature, and related topics. Select one circle. <br> (4) I do not teach English/language arts to this class. <br> (8) I teach all or most subjects, including English/language arts. <br> © The only subject I teach is English/language arts. <br> (1) We team teach, and I have primary responsibility for teaching English/language arts. <br> Issue: Resources for Learning and Instruction |  |  |  |  |  | NC | Please note inline directions are different given transition from PBA to DBA. |
| 2. How many students are in this class? Enter the number of students. $\square$ <br> (2017 Grade 4) |  |  |  |  |  | 2. How many students are in this class? Enter the number of students. $\square$ <br> Issue: Resources for Learning and Instruction |  |  |  |  |  | NC | N/A |
| 3. In a typical week, about how much time in total do you spend with this class on English/language arts instruction? Language arts refers to reading, writing, literature, and related topics. Enter the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week <br> (2017 Grade 4) |  |  |  |  |  | 3. In a typical week, about how much time in total do you spend with this class on English/language arts instruction? Language arts refers to reading, writing, literature, and related topics. Enter the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week <br> Issue: Resources for Learning and Instruction |  |  |  |  |  | NC | N/A |
| 4. To what extent have you provided instruction in the following in English/language arts class so far this year? Select one circle in each row. |  |  |  |  |  | 4. To what extent have you provided instruction in the following in English/language arts class so far this year? Select one circle in each row. |  |  |  |  |  | R | Sub-items |
|  | Not at all | Small extent | Moderate extent | Large extent |  |  | Not at all | Small extent | Moderate extent | Large extent |  |  | to reduce |
| 2. Fiction | © | $\odot$ | $\bigcirc$ | $\odot$ | vinuesas | a. Fiction | © | $\square^{\circ}$ | $\bigcirc$ | $\stackrel{\square}{\circ}$ | vinuesz |  | teacher |
| b. Literary nonfiction | $\stackrel{\square}{\square}$ | $\stackrel{\oplus}{\oplus}$ | $\bigcirc$ | $\stackrel{\square}{\square}$ | vincosid | b. Exposition | © | ${ }^{( }$ | $\odot$ | $\stackrel{\square}{\square}$ | $\xrightarrow{ }$ |  | burden and |
| C. Peorry | $\stackrel{\square}{\odot}$ | ${ }_{\square}^{\square}$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\oplus}{\oplus}$ | ${ }_{\text {coser }}$ | c. Argumentation and | © | © | $\odot$ | $\odot$ | nnusaz |  | burden and |
| e. Argumentation and | © | $\oplus$ | $\odot$ | © |  | Issue: Organization of Instruction |  |  |  |  |  |  | create |
| $\begin{array}{\|l\|} \hline \text { f. Procuastural texts and } \\ \text { documents } \\ \hline \end{array}$ | © | ${ }^{\circ}$ | $\odot$ | $\stackrel{\square}{ }$ | s |  |  |  |  |  |  |  | opportunity <br> for new |
| (2017 Grade 4) |  |  |  |  |  |  |  |  |  |  |  |  |  |



## 2019 Operational Grade 4 Reading Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. When you teach English/language arts, how often do you use the following strategies? Select one circle in each row. |  |  |  |  |  |  | 7. When you teach English/language arts, how often do you use the following strategies? Select one circle in each row |  |  |  |  |  |  | R | Sub-items were revised and added to align with grade 8 development. |
|  | Never or hardly ever | ${ }^{\text {Once in a }}$ while | Sometimes | Often | Always or almost always |  |  | (eyere or | Once ina $\begin{gathered}\text { while } \\ \text { w }\end{gathered}$ | Sometimes | Offen |  |  |  |  |
| a. $\begin{aligned} & \text { a teach reading as a } \\ & \text { whole-clas activity. }\end{aligned}$ | - | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\stackrel{\square}{\circ}$ | 23sas |  | $\oplus$ | ${ }^{\circ}$ | - | $\cdots$ | © | mon |  |  |
| b. I create student groups with the same achievement level. | © | © | - | $\odot$ | $\odot$ | masa |  | Ф | $\oplus$ | - | $\oplus$ | ${ }^{\circ}$ | mane |  |  |
|  | $\oplus$ | ${ }^{\circ}$ | $\bigcirc$ | $\odot$ | ${ }^{\circ}$ | ass |  | © | ${ }^{\circ}$ | $\odot$ | © | ${ }^{\circ}$ | nreas |  |  |
| d. I allow students to choose their own | - | ${ }^{\circ}$ | $\bigcirc$ | ${ }^{\circ}$ | $\odot$ | ess |  | ¢ | $\oplus$ | - | $\oplus$ | $\oplus$ | nomem |  |  |
|  | © | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\stackrel{\square}{\circ}$ | masa |  | ¢ | ${ }^{\circ}$ | $\odot$ | ¢ | $\pm$ | numem |  |  |
| instruction for reading, <br> f. Students work <br> independently on an <br> assigned plan or goal. | $\odot$ | $\oplus$ | - | $\odot$ | $\odot$ | ass |  | ${ }^{\circ}$ | $\oplus$ | $\odot$ | © | $\oplus$ | ser |  |  |
| $\begin{aligned} & \text { g. Students work } \\ & \text { independently on a } \\ & \text { goal they choose } \\ & \text { themselves. } \\ & \hline \end{aligned}$ | $\odot$ | ${ }^{\circ}$ | $\odot$ | ${ }^{\circ}$ | $\odot$ | asas |  | - | - | - | * | ¢ | crem |  |  |
|  |  |  |  |  |  |  |  | $\infty$ | Ф | - | ${ }^{\circ}$ | ${ }^{\circ}$ | ues |  |  |
|  |  |  |  |  |  |  |  | $\oplus$ | $\pm$ | - | $\oplus$ | ${ }^{\circ}$ |  |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |


| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8. When you teach English/language arts to your students, how do you use each of the following resources? Select one circle in each row. |  |  |  |  |  |  | 8. When you teach English/language arts to your students, how do you use each of the following resources? Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  |  | Not used | Supplement |  | Basis for instruction |  | a. Hardback text or worksheets |  | Not used | Supplement |  | $\begin{aligned} & \text { Basis for } \\ & \text { instruction } \end{aligned}$ |  |  |  |  |
| a. Hardback textbooks, wor | poks, | $\oplus$ | © |  | $\odot$ | vineser |  |  | © | $\oplus$ |  |  | - | пизиея |  |  |
| b. Electronic textbooks |  | © | ${ }^{\circ}$ |  | $\odot$ | Seses | b. Electronic textbooks |  | $\stackrel{\square}{\circ}$ | $\oplus$ |  |  | $\odot$ | visues |  |  |
| $\begin{array}{\|l} \hline \text { c. A variety of children's bo } \\ \text { novels, collections of stor } \\ \text { nonfiction) } \end{array}$ | (e.g. | © | ${ }^{\circ}$ |  | $\odot$ | vinero | $\begin{aligned} & \text { c. A variety of children's books (e.g. } \\ & \text { novels. ollections of stories. } \\ & \text { nonfiction) } \end{aligned}$ |  | - | $\odot$ |  |  | - | veaver |  |  |
| d. Materials from different curricular areas |  | © | $\oplus$ |  | $\odot$ | viners | D. Materials from different <br> cuuricular arcas |  | © | $\oplus$ |  |  | $\odot$ | нзаня |  |  |
| e. Children's newspapers a |  | © | $\odot$ |  | $\odot$ | 4204 | $\begin{aligned} & \text { e. Children's newspapers and/or } \\ & \text { magazines } \end{aligned}$ |  | © | $\oplus$ |  |  | $\odot$ | viesos |  |  |
| f. Reading-related websites |  | $\stackrel{\square}{\circ}$ | ${ }^{\circ}$ |  | $\bigcirc$ | vineve | f. Reading.related websit | rapps | ${ }^{\circ}$ | ${ }_{\square}$ |  |  | $\odot$ | nems |  |  |
| $\begin{aligned} & \text { g. Reading-related educatio } \\ & \text { games } \end{aligned}$ |  | © |  |  | - | 20274 | g. Reading-related educational |  | © | © |  |  | - | мпия |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |  |
| 9. In your fourth-grade English/language arts class this year, how often do your students use a computer or other digital device to do each of the following? Select one circle in each row. |  |  |  |  |  |  | 9. In your fourth-grade English/language arts class this year, how often do your students do each of the following? Select one circle in each row. |  |  |  |  |  |  |  | R | The phrase "use a computer or digital device to" was removed to align with grade 8 development. |
|  | Never | $\begin{array}{\|c\|} \hline \text { About once } \\ \text { or twice a } \\ \text { year } \end{array}$ | $\begin{gathered} \text { About once } \\ \text { or wrive a } \\ \text { month } \end{gathered}$ | $\begin{array}{\|c} \substack{\text { About once } \\ \text { or wice a } \\ \text { wwek }} \end{array}$ |  |  |  | Never | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \hline \text { or twice a } \\ \text { year } \end{array}$ | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \hline \text { or twice } \\ \text { month a } \end{array}$ |  |  |  |  |  |  |
| $\begin{array}{\|l\|l\|} \hline \text { a. Build and practice } \\ \text { vocaulary } \\ \hline \end{array}$ | © | $\stackrel{\square}{*}$ | $\odot$ | $\odot$ | $\bigcirc$ | nnemen |  | $\stackrel{\square}{\odot}$ | - | O |  |  |  | \% |  |  |
| b. Build reading fluency | $\odot$ | $\odot$ | $\bigcirc$ | $\oplus$ | $\odot$ |  | b. Build reading fluency | © | ${ }^{\circ}$ | $\odot$ |  |  | ${ }^{\circ}$ | Nisumo |  |  |
| c. Build reading <br> comprehension <br> cel | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | $\odot$ | vatrive | c.c. Build reading <br> comprehension | © | $\odot$ | $\odot$ |  |  | ¢ | vвеноя |  |  |
| d. Practice spelling and grammar | $\oplus$ | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | mineas | d. Practice spelling and grammar | © | © | $\odot$ |  |  |  | visuer |  |  |
| e. Access reading-related | $\oplus$ | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | veneses | e. Access reading-related websites | © | $\oplus$ | $\odot$ |  |  |  | visuru |  |  |
| $\begin{array}{\|l\|} \hline \text { f. Conduct research for } \\ \text { reading projects } \end{array}$ | © | © | $\odot$ | $\odot$ | $\odot$ | vneuss | $\begin{array}{\|l} \text { f. Conduct research for } \\ \text { reading projects } \end{array}$ | © | $\odot$ | $\odot$ |  |  | © | \%184e9 |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |  |



## Appendix K-2j: Operational Grade 4 Reading

1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading, writing, literature, and related topics. Select one circle.
(A) I do not teach English/language arts to this class.
(B) I teach all or most subjects, including English/language arts.
© The only subject I teach is English/language arts.
(D) We team teach, and I have primary responsibility for teaching English/language arts.
2. How many students are in this class? Enter the number of students.

3. In a typical week, about how much time in total do you spend with this class on English/language arts instruction? Language arts refers to reading, writing, literature, and related topics. Enter the hours and minutes.
$\qquad$ hours and $\qquad$ minutes per week
4. To what extent have you provided instruction in the following in English/language arts class so far this year? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Fiction | (4) | (8) | © | (1) | VH240523 |
| b. Exposition | (4) | (B) | © | (1) | VH240526 |
| c. Argumentation and persuasion | (4) | (B) | © | (1) | VH240527 |

5. When reading a story, article, or other passage with your students, how often do you ask your students to do the following? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Summarize the passage | (4) | (B) | © | (1) | (E) | vH334295 |
| b. Interpret the meaning of the passage | (4) | (B) | © | (1) | (1) | vH334296 |
| c. Question the motives or feelings of the characters | (4) | (B) | © | (1) | (1) | vH334299 |
| d. Identify the themes of the passage | (4) | (B) | © | (1) | (®) | vH335901 |
| e. Analyze two or more texts on the same topic | (4) | (B) | © | (1) | (1) | vH334297 |

6. This school year, to what extent have you emphasized the following cognitive processes when teaching informational and literary texts in class? Select one circle in each row.

|  | No emphasis | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Locate and recall (e.g., identify main ideas or focus on specific elements of a story) | (4) | (B) | © | (1) | (1) | VH261256 |
| b. Integrate and interpret (e.g., make comparisons, explain character motivation, or examine relations of ideas across the text) | (4) | (B) | © | (1) | (1) | VH261257 |
| c. Critique and evaluate (e.g., evaluate text critically from many perspectives or evaluate overall text quality) | (4) | (B) | © | (1) | (c) | VH261258 |

7. When you teach English/language arts, how often do you use the following strategies? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I teach reading as a whole-class activity. | (4) | (B) | © | (1) | (®) | vн334361 |
| b. I create student groups with the same achievement level. | (4) | (B) | $\bigcirc$ | (1) | © | vH334362 |
| c. I create student groups with different achievement levels. | (4) | (B) | © | (1) | © | vH548665 |
| d. I create groups by random assignment. | (4) | (B) | © | (1) | (1) | vH334363 |
| e. I allow students to choose their own groups. | (1) | (B) | © | (1) | (8) | vH334368 |
| f. I use differentiated instruction for reading (i.e., instruction tailored to student ability and learning style). | (1) | (B) | © | (1) | (®) | vH562894 |
| g. I ask students to work independently on an assignment or task. | (1) | (B) | $\bigcirc$ | (1) | © | vH548666 |
| h. I ask students to work independently on a task they choose themselves. | (4) | (B) | $\bigcirc$ | (1) | © | vH548667 |
| i. Other strategies (Please specify): | (4) | (B) | © | (1) | (1) | vH562900 |

8. When you teach English/language arts to your students, how do you use each of the following resources? Select one circle in each row.

|  | Not used | Supplement | Basis for instruction |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Hardback textbooks, workbooks, or worksheets | (4) | (B) | © | vH33485 |
| b. Electronic textbooks | (4) | (8) | © | vH334486 |
| c. A variety of children's books (e.g., novels, collections of stories, nonfiction) | (4) | (B) | © | vH262701 |
| d. Materials from different curricular areas | (4) | (8) | © | VH33498 |
| e. Children's newspapers and/or magazines | (4) | (B) | © | VH262704 |
| f. Reading-related websites or apps | (4) | (B) | © | VH334995 |
| g. Reading-related educational games | (4) | (B) | © | VH334491 |

9. In your fourth-grade English/language arts class this year, how often do your students do each of the following? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Build and practice vocabulary | (4) | (B) | © | (1) | (1) | vH84696 |
| b. Build reading fluency | (4) | (8) | © | (1) | (1) | VH844700 |
| c. Build reading comprehension | (4) | (B) | © | (1) | (E) | VH844698 |
| d. Practice spelling and grammar | (4) | (B) | © | (1) | (1) | VH844697 |
| e. Access reading-related websites | (4) | (B) | © | (1) | (1) | vH847701 |
| f. Conduct research for reading projects | (4) | © | © | (1) | (1) | VH844699 |

10. Suppose your students did very well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (4) | (B) | © | (1) | (1) | vH262948 |
| b. My students did well because they put in a lot of effort. | (4) | (B) | © | (1) | (1) | vH262949 |
| c. My students did well because they always do well on tests. | (4) | (B) | © | (1) | (E) | vH262950 |
| d. My students did well because I taught the concepts well. | (1) | (B) | © | (1) | (1) | vH262951 |
| e. My students did well because they guessed well on the test. | (4) | (B) | © | (1) | (®) | vH337286 |
| $\begin{aligned} & \text { f. } \begin{array}{l} \text { My students did well } \\ \text { because they are just } \\ \text { good at reading. } \end{array} \\ & \hline \end{aligned}$ | (4) | (B) | $\bigcirc$ | (1) | (1) | vH337287 |

11. In your view, to what extent do the following limit how you teach this class? Select one circle in each row.

|  | Not applicable | Not at all | Some | A lot |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Students lacking prerequisite knowledge or skills | (4) | (B) | $\bigcirc$ | (1) | VH262636 |
| b. Students with special needs (e.g., physical disabilities, mental or emotional/psychological impairment) | (4) | (B) | $\bigcirc$ | (1) | vH262637 |
| c. Disruptive students | (4) | (8) | © | (1) | VH262638 |
| d. Uninterested students | (4) | (8) | © | (1) | VH226239 |

## Appendix K-2k: Summary of Changes Pilot Grade 4 Reading

## 2019 Pilot Grade 4 Reading Teacher



2019 Pilot Grade 4 Reading Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | item was added. |
| 5. When reading a story article, or other passage with your students, how often do you ask your students to do the following? Select one circle in each row. |  |  |  |  |  |  | 5. When reading a story, article, or other passage with your students, how often do you ask your students to do the following activities? Select one circle in each row. |  |  |  |  |  |  | R | In the stem, "activities" was added; two subitems were removed; and one sub-item was added. |
|  | $\begin{aligned} & \text { Neyer or } \\ & \text { hardly ever } \end{aligned}$ | $\begin{gathered} \text { Once in a } \\ \text { while } \end{gathered}$ | Sometimes | Often | $\begin{gathered} \text { Always or } \\ \text { almost } \\ \text { always } \end{gathered}$ |  |  | Never or hardly ever | Once in a while | Sometimes | Often | $\begin{gathered} \text { Always or } \\ \text { almost } \\ \text { always } \end{gathered}$ |  |  |  |
| $\begin{aligned} & \text { a. Summarize the } \\ & \text { passage } \\ & \hline \end{aligned}$ | © | $\oplus$ | $\odot$ | © | $\oplus$ | vonax | $\begin{aligned} & \text { a. Summarize the } \\ & \text { passage } \end{aligned}$ | © | $\oplus$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ | neur" |  |  |
| b. Interpret the meaning of the passage | ¢ | © | - | ¢ | ¢ | newer | b. Interpret the meaning of the passage | © | © | ¢ | © | © | ที𠃊\% |  |  |
| $\begin{array}{\|l\|l} \hline \text { c. Question the motives } \\ \text { or feelings of the } \\ \text { characters } \end{array}$ | $\triangle$ | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | ท®orw | c. Question the motives or feelings of the characters | © | (1) | $\odot$ | $\oplus$ | © | nnusm |  |  |
| d. Identify the main ideas of the passage | © | $\oplus$ | $\bigcirc$ | $\oplus$ | ¢ | vom | d. Identify the themes of the passage | * | © | © | © | © | verame |  |  |
| e. Identify the themes of the passage | © | ${ }^{\circ}$ | ¢ | $\pm$ | - | nuase | $\begin{aligned} & \text { c. Analyze two or more } \\ & \text { texts on the same } \\ & \text { topic } \\ & \hline \end{aligned}$ |  | ${ }^{\circ}$ | $\bigcirc$ | ${ }^{\circ}$ | © | numas |  |  |
| f. Analyze two or more textson the same topic | © | $\oplus$ | $\odot$ | $\odot$ | © | 4205 |  | - |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | f. Analyze the suthor's <br> orranization of <br> information in a <br> passage | © | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\oplus$ | 7mam |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | 8. Critique the author's cratt or technique | © | © | $\odot$ | © | $\oplus$ | numan |  |  |
|  |  |  |  |  |  |  | $\begin{aligned} & \text { h. Analyze the author's } \\ & \text { use of multimedia or } \\ & \text { non-primt exxe (e.g." } \\ & \text { texts including } \\ & \text { images. infographics. } \\ & \text { or animations) } \\ & \hline \end{aligned}$ | © | $\cdots$ | $\odot$ | © | $\oplus$ | usmes |  |  |
|  |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| 6. This school year, to what extent have you emphasized the following cognitive processes when teaching informational and literary texts in class? Select one circle in each tow. |  |  |  |  |  |  | 6. This school year, to what extent have you emphasized the following tasks when teaching informational and literary texts in class? Select one circle in each row. |  |  |  |  |  |  | R | In the stem, "cognitive processes" was replaced with "tasks". |
|  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | Very litule emphasis | $\begin{gathered} \text { Some } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { Quite a bit } \\ \text { of emphasis } \end{array}$ | $\begin{aligned} & \text { A lot of } \\ & \text { a } \end{aligned}$ |  |  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | $\begin{aligned} & \text { Very litle } \\ & \text { emphasis } \end{aligned}$ | Some emphasis | $\begin{array}{\|c} \text { Quite a bit } \\ \text { of emphasis } \\ \hline \end{array}$ | $\begin{aligned} & \text { A lot of } \\ & \text { emphasis } \end{aligned}$ |  |  |  |
| a. Locate and recall (e.g. <br> identiy main <br> focus on spcifes or <br> elements of astory) | © | $\Phi$ | $\bigcirc$ | $\oplus$ | © | 415 | a. Locate and recall (e.e.g. idenatify mani ideas or focus son scific elements of a s story) | © | © | - | $\oplus$ | ${ }^{\circ}$ | noblea |  |  |
| b. Integrate and interpret (e.g. make comparisons, explain or examine relations ideas across the text) | © | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | 50, | b. Integrate and interpret <br> (e.g., make <br> comparisons, explain <br> character motivation. <br> or examine relations of <br> ideas across the text) | © | $\oplus$ | $\odot$ | © | © | verzam |  |  |
| c. Critique and evaluate <br> (e....valuate text <br> criticall from many <br> perspectives or <br> evaluate overall text <br> quality) | © | © | $\bigcirc$ | $\odot$ | $\Phi$ | 4 x | c. Critique and evaluate <br> (e.g., evaluate text <br> critacally from many <br> perspectives or <br> evaluate everall text <br> quality) | © | © | $\odot$ | $\oplus$ | $\oplus$ | 50 |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Organization | n of Inst | ruction |  |  |  |  |  |  |

2019 Pilot Grade 4 Reading Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. When you teach English/language arts, how often do you use the following strategies? Select one circle in each row. |  |  |  |  |  |  | 7. When you teach English/language arts, how often do you use the following teaching strategies? Select one circle in each row. |  |  |  |  |  |  | R | In the stem, "teaching" was added and four subitems were added. |
|  | $\begin{aligned} & \text { Never or } \\ & \text { hardly ever } \end{aligned}$ | Once in a while | Sometimes | Often | $\begin{gathered} \text { Always or } \\ \text { almost } \\ \text { always } \end{gathered}$ |  |  | Never or hardly ever | Once in a while | Sometimes | Often | $\begin{gathered} \text { Always or } \\ \text { almost } \\ \text { always } \end{gathered}$ |  |  |  |
| $\begin{array}{\|c\|} \hline \hline \text { a. I teach reading as a } \\ \text { whole-class activity. } \end{array}$ | © | $\oplus$ | © | ${ }^{\circ}$ | © | поан | a. I teach reading as a whole-class activity. | © | © | $\odot$ | $\oplus$ | $\stackrel{\square}{\circ}$ | ${ }^{\text {massons }}$ |  |  |
| b. I create student groups with the same achievement level. | © | $\oplus$ | $\bigcirc$ | $\oplus$ | $\odot$ | мпих | b. I create student groups <br> $\begin{array}{l}\text { with the same } \\ \text { achievement level. }\end{array}$ <br> c. | © | © | $\odot$ | $\odot$ | $\odot$ | Ws,on |  |  |
| c. I create groups hy random assignment. | © | $\oplus$ | - | $\oplus$ | © | nuwes | c. I create student groups with mixed | © | $\odot$ | $\odot$ | $\odot$ | $\bullet$ | 5 smos |  |  |
| $\begin{array}{\|l} \hline \text { d. } 1 \text { allow students to } \\ \text { choose their own } \\ \text { groups. } \\ \hline \end{array}$ | (1) | © | $\odot$ | $\oplus$ | $\oplus$ | vs |  | ${ }^{\circ}$ | © | $\odot$ | $\odot$ | ${ }^{\circ}$ | vessar |  |  |
| c. 1 use individualized <br> instruction for reading. | ¢ | © | $\bigcirc$ | $\oplus$ | © | cas | e. I allow students to | © | © | $\odot$ | $\odot$ | $\odot$ | vissos |  |  |
| f. Sudents work <br> independently on an <br> assigned plam or goal. | © | $\oplus$ | $\cdots$ | © | ${ }^{\circ}$ | cs | chrose their own <br> groups. <br> f. I use individualized <br> instruction for reading. | $\triangle$ | $\stackrel{\square}{*}$ | $\odot$ | $\odot$ | ${ }^{\circ}$ | vessmas |  |  |
| g. Students work $\begin{aligned} & \text { independently on a } \\ & \text { soal they choose }\end{aligned}$ goal they choos hemselves. | (1) | ${ }^{\circ}$ | $\odot$ | $\oplus$ | © | som | g.Students work <br> independently on an <br> assigned plan or goal. | © | © | $\odot$ | $\odot$ | $\odot$ | smo |  |  |
|  |  |  |  |  |  |  | h. Students work independently on a goal they choose goal they choos themselves. | © | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | Ssasi |  |  |
|  |  |  |  |  |  |  | i. $\begin{aligned} & \text { Students use } \\ & \text { self.paced reading } \\ & \text { propans }\end{aligned}$ programs or apps. | © | © | $\odot$ | $\odot$ | $\odot$ | Ssaz |  |  |
|  |  |  |  |  |  |  | \|i. I create opportunities | (1) | (1) | $\odot$ | © | $\bullet$ | ${ }^{\text {assa3 }}$ |  |  |
|  |  |  |  |  |  |  | $\substack{\text { k. Students collaborate } \\ \text { with peers and experts } \\ \text { throughth Internet } \\ \text { Oo other digitital } \\ \text { connections. }}$ | © | (1) | $\odot$ | $\odot$ | $\odot$ | 5 mm |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |


| Previous item |  |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8. When you tcach English/language arts to your students, how do you use cach of the following resources? Selcct one circle in each row. |  |  |  |  |  |  |  | 8. When you teach English/language arts to your students. how do you use each of the following resources? Select one circle in each row. |  |  |  |  |  |  |  | R | Two subitems were added. |
|  |  | Not used | Supplement |  |  | Basis for struction |  |  <br> a. Hartback or soff cover/paperback <br> texbocks. workbooks. or <br> worksheets |  | Not used | Supplement |  | Basis for instruction |  |  |  |  |
| $\begin{array}{\|l\|} \hline \text { 2. Hardback texthooks, } \\ \text { or worksheets } \end{array}$ | books, | © | © |  |  | $\odot$ | veem |  |  | ${ }^{(1)}$ | (1) |  | - |  | nnumes |  |  |
| b. Electronie textbooks |  | - | (1) |  |  | $\bigcirc$ | amam |  |  |  |  |  |  |  |  |  |  |
| c. A variety of children's novels. collections of nonfiction | ${ }_{\text {cs. }}^{\text {ks c.g. }}$ | © | © |  |  | $\odot$ | vowem | b. Electronic textbooks, workbooks or worksheets |  | © | © |  |  |  | nusmes |  |  |
| d. Materials from differen urricular areas |  | © | $\oplus$ |  |  | $\bigcirc$ | \%amm | c. Children's books (e.g, novels. collections of storics, nonfiction. graphic novels) |  | © | $\pm$ © |  |  |  | mesos |  |  |
| c. Children's newspapers magazines |  | - | ${ }^{(1)}$ |  |  | $\bigcirc$ | nowsom | d. Matcrials from different subicctarcas (e., r. rticles from sciectec.passages from history. etc.) |  | (1) | $\oplus$ |  | $\odot$ |  | namer |  |  |
| \%. Reading-related websit | rapps | © | (1) |  | $\bigcirc$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. Realing-related educat games |  | © | © |  |  |  |  | e. Children's newspapers and/or magazines |  | © | ${ }^{\circ}$ |  | $\odot$ |  | nemem |  |  |
|  |  |  |  |  |  |  |  | f. Reading-related websites or apps |  | © | ${ }^{\circ}$ |  | $\bigcirc$ |  | nusmen |  |  |
|  |  |  |  |  |  |  |  | 8. Reading-related educational <br> games |  | © | $\oplus$ |  | $\odot$ |  | nnuesom |  |  |
|  |  |  |  |  |  |  |  |  |  | ${ }^{\circ}$ |  |  | $\bigcirc$ |  | nomsem |  |  |
|  |  |  |  |  |  |  |  |  |  | © | ${ }_{\square}^{\text {© }}$ |  | $\odot$ |  |  |  |  |
| (2017 Grade 4) |  |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |  |
| 9. In your fourth-grade English/language arts class this year. how often do your students use a computer or other digital device to do each of the following? Select one circle in each row. |  |  |  |  |  |  |  | 9. In your fourth-grade English/language arts class this year, how often do your students do each of the following activities? Select one circle in each row |  |  |  |  |  |  |  | R | The phrase "use a computer or digital device to" was removed to align with grade 8 development and two subitems were added. |
|  | Never | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array} \\ \hline \end{array}$ | $\begin{array}{c\|} \hline \text { About once } \\ \text { or twice a } \\ \text { month } \end{array}$ | $\substack{\text { About once } \\ \text { or twee } \\ \text { week }}$ Eexy day or or <br> every <br> every day |  |  |  |  | Never | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array} \\ \hline \end{array}$ | About once or twice a month | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { week } \end{gathered}$ |  | $\left\|\begin{array}{c} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}\right\|$ | "wabe |  |  |
| (2. Build and practice | ¢ | $\oplus$ | $\bigcirc$ | - |  |  | , | $\begin{array}{\|l\|} \hline \text { a. Build and practice } \\ \text { vocabulary } \\ \hline \end{array}$ | ${ }^{\circ}$ | ${ }^{(1)}$ | $\odot$ | ¢ |  | - |  |  |  |
| b. Build reading fluency | $\oplus$ | ${ }^{\circ}$ | $\odot$ | © |  | ${ }^{\circ}$ | пий0\% | $\begin{array}{\|l\|} \hline \text { b. Build reading fluency } \\ \hline \text { c. Build reading } \\ \text { comprehension } \\ \hline \end{array}$ | © | ${ }^{\circ}$ |  | ¢ |  | ${ }^{\circ}$ | \%anames |  |  |
| $\begin{array}{\|l\|} \hline \text { c. Build reading } \\ \text { comprehension } \\ \hline \end{array}$ | © | $\oplus$ | $\odot$ | © |  | © | veenmo |  | * | © | - |  |  | $\oplus$ | 5mas |  |  |
| d. Practice specling and | $\bullet$ | $\oplus$ | $\odot$ | © |  | $\oplus$ | nocus | $\begin{array}{\|l\|} \hline \text { d. Practice spelling. } \\ \text { krammar } \\ \text { capitalization. } \\ \text { punctuation, and other } \\ \text { mechanics } \end{array}$ | © | © | $\bigcirc$ | $\oplus$ |  | ${ }^{\oplus}$ | moman |  |  |
| $\begin{aligned} & \text { c. Access reading-related } \\ & \text { websites } \end{aligned}$ | © | © | - | © |  | ¢ | vesem |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { f. Conduct research for } \\ & \text { reading projects } \end{aligned}$ | © | © | $\odot$ | $\oplus$ |  | Ф | 5ase | c. Access reading-related | © | © | $\odot$ | ${ }^{\circ}$ |  | ${ }^{\circ}$ | omman |  |  |
| (2017 Grade 4) |  |  |  |  |  |  |  | f. Conduct research for | © | $\pm$ | $\odot$ | $\oplus$ |  | $\oplus$ | momme |  |  |
|  |  |  |  |  |  |  |  | $\begin{aligned} & \text { g. Read something they } \\ & \text { have chosen } \\ & \text { themselves } \end{aligned}$ | (1) | $\oplus$ | $\odot$ | $\oplus$ |  | © | nommons |  |  |
|  |  |  |  |  |  |  |  | h. Work in pairs or small groups so talk bout something they have read | © | $\oplus$ | $\odot$ | $\oplus$ |  | © | nutson |  |  |
|  |  |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |  |


| Previous item |  |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10. Suppose your students did very well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in cach row. |  |  |  |  |  |  |  | 10. Suppose your students did very well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{gathered} \text { Not at all } \\ \text { likely } \\ \hline \end{gathered}$ | Not lik |  | $\begin{array}{\|l\|} \hline \text { Somewhat } \\ \text { likely } \end{array}$ | Quite likely | $\begin{array}{\|c} \hline \begin{array}{c} \text { Extremely } \\ \text { likely } \end{array} \\ \hline \end{array}$ |  |  | $\begin{gathered} \text { Not at all all } \\ \hline \text { likely } \end{gathered}$ | Not likely | Somewhat likely | Quite likely | Exiremely <br> likely |  |  |  |
| a. My students did well because they studied and were prepared. | © | $\oplus$ |  | $\odot$ | $\pm$ | $\Phi$ | mosem | a. My students did well because they studied and were prepared. | © | (1) | $\bigcirc$ | $\oplus$ | $\bigcirc$ |  |  |  |
| b. My students did wellbecause they put in a <br> lot ot offort. | © | ${ }^{\circ}$ |  | $\bigcirc$ | © | © | vresw | b. My students did well becauss thy put in a lot of effort. | (1) | © | $\odot$ | $\oplus$ | $\oplus$ | ทesse |  |  |
| $\begin{aligned} & \text { c. My sududents did well } \\ & \text { because they always } \\ & \text { do well on tests. } \end{aligned}$ | © | ${ }^{(1)}$ |  | $\bigcirc$ | $\oplus$ | $\oplus$ | mes | c. My sududents did well because they always do well on tests. | (1) | (1) | ¢ | ¢ | ¢ | nuseo |  |  |
| d. My students did well because t taught the concepts well. | © | Ф |  | © | $\oplus$ | $\oplus$ | mbase | d. My students did well because I taught the concepts well. | © | $\oplus$ | $\odot$ | $\oplus$ | Ф | neoss |  |  |
| $\begin{aligned} & \text { e. My students did well } \\ & \text { becuuse they yuessed } \\ & \text { well on the test. } \end{aligned}$ | ¢ | $\oplus$ |  | $\odot$ | $\oplus$ | ${ }^{\circ}$ | nursem | $\begin{aligned} & \text { c. My sudented did well } \\ & \text { because they guessed } \\ & \text { well on the test. } \end{aligned}$ | © | $\pm$ | © | ¢ | ¢ | nums |  |  |
| $\begin{array}{\|l\|l\|} \hline \text { f. } \begin{array}{c} \text { My students did well } \\ \text { because they are iust } \\ \text { bood at reading. } \end{array} \\ \text { goid } \end{array}$ | © | $\oplus$ |  | $\odot$ | $\oplus$ | $\oplus$ | ns | $\begin{aligned} & \text { F. My students did well } \\ & \text { becausc they are pust } \\ & \text { goond at reading. } \\ & \hline \end{aligned}$ | $\oplus$ | ${ }^{(1)}$ | $\odot$ | $\oplus$ | Ф | musar |  |  |
| (2017 Grade 4) |  |  |  |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |  |  |
| 11. In your view, to what extent do the following limit how you teach this class? Select one circle in each row. |  |  |  |  |  |  |  | 11. How well has your education and professional training prepared yout to teach students with the following attributes? Select one circle in each row. |  |  |  |  |  |  | R | The entire stem was revised and three subitems were added. |
|  | Not applicable |  | Not at all |  | Some | A lot |  |  | $\begin{array}{\|c} \hline \text { Not well at } \\ \text { all } \end{array}$ | A litule | Somewhat | Quite a bit | Extremely <br> well |  |  |  |
| $\begin{aligned} & \text { a. Students lacking } \\ & \text { prerequisite knowledge or } \\ & \text { skills } \\ & \hline \end{aligned}$ | $\bigcirc$ - |  |  | (1) | $\odot$ | $\oplus$ | moses |  | © | $\oplus$ | $\cdots$ | $\oplus$ | $\oplus$ | nancim |  |  |
| $\begin{array}{\|l\|} \hline \text { b. Students with special } \\ \text { needs (e.g...pyssical } \\ \text { disabilites. mental or } \\ \text { emotional/psychological } \\ \text { impairment) } \\ \hline \end{array}$ | © |  |  | (1) | $\bigcirc$ | © | пием |  | © | ${ }^{(1)}$ | $\bigcirc$ | © | $\Phi$ | Henser |  |  |
| C. Distuptive students | $\stackrel{\square}{\odot}$ |  |  | ${ }_{\square}^{\text {® }}$ | $\odot$ | $\stackrel{\Phi}{\Phi}$ |  | psychological impairment) |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | c. Distuptive students | (1) | ${ }^{1}$ | $\odot$ | ${ }_{\square}$ | © | vortam |  |  |
|  |  |  |  |  |  |  |  | d. Unintersested stadents | $\oplus$ | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | vanuse |  |  |
|  |  |  |  |  |  |  |  |  | © | ${ }^{( }$ | - | $\oplus$ | $\oplus$ | neuse |  |  |
|  |  |  |  |  |  |  |  | E. $\begin{aligned} & \text { Gifted and talented } \\ & \text { students }\end{aligned}$ | © | $\pm$ | $\bigcirc$ | © | $\oplus$ | 45 |  |  |
|  |  |  |  |  |  |  |  | 8. Students with <br> different cultural <br> backerrounds (e.g. <br> racial/ /ethic. <br> socioctonomic. <br> religious) <br> res. | © | $\oplus$ | $\odot$ | $\odot$ |  | $4 \times$ |  |  |
| (2017 Grade 4) |  |  |  |  |  |  |  | Issue: Resources for Learning and Instruction |  |  |  |  |  |  |  |  |

## Appendix K-2l: Pilot Grade 4 Reading

1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading, writing, literature, and related topics using print and digital texts. Select one circle.
(A) I do not teach English/language arts to this class.
(B) I teach all or most subjects, including English/language arts.
© The only subject I teach is English/language arts.
(D) We team teach, and I have primary responsibility for teaching English/language arts.
2. How many students are in this class? Enter the number of students.

3. In a typical week, about how much time in total do you spend with this class on English/language arts instruction? Language arts refers to reading, writing, literature, and related topics. Enter the hours and minutes and include in-class time only.
$\qquad$ hours and $\qquad$ minutes per week
4. To what extent have you provided instruction in the following types of text in English/language arts class so far this year? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Fiction | (4) | (8) | © | (1) | VH85052 |
| b. Exposition (i.e., text that aims to explain, inform, or describe, like newspaper or magazine articles, textbooks, or informational essays) | (4) | (B) | © | (1) | VH85055 |
| c. Argumentation and persuasion | (4) | (B) | © | (1) | vH85056 |
| d. Multimedia or non-print text (e.g., texts including images, infographics, or animations) | (4) | (B) | $\bigcirc$ | (1) | vH855055 |

5. When reading a story, article, or other passage with your students, how often do you ask your students to do the following activities? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Summarize the passage | (4) | (B) | © | (1) | (1) | vH811995 |
| b. Interpret the meaning of the passage | (4) | (B) | © | (1) | (1) | VH811997 |
| c. Question the motives or feelings of the characters | (1) | (B) | $\bigcirc$ | (1) | (1) | vH81998 |
| d. Identify the themes of the passage | (4) | (B) | © | (1) | (E) | VH812001 |
| e. Analyze two or more texts on the same topic | (4) | (B) | © | (1) | (c) | vH812005 |
| f. Analyze the author's organization of information in a passage | (4) | (B) | © | (1) | ( ${ }^{\text {c }}$ | vH812009 |
| g. Critique the author's craft or technique | (4) | (B) | $\bigcirc$ | (1) | (c) | vH812011 |
| h. Analyze the author's use of multimedia or non-print text (e.g., texts including images, infographics, or animations) | (4) | © | © | (1) | (1) | vH855005 |

6. This school year, to what extent have you emphasized the following tasks when teaching informational and literary texts in class? Select one circle in each row.

|  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Locate and recall (e.g., identify main ideas or focus on specific elements of a story) | (4) | (B) | © | (1) | (e) | VH812042 |
| b. Integrate and interpret (e.g., make comparisons, explain character motivation, or examine relations of ideas across the text) | (1) | (B) | © | (1) | (e) | vH812044 |
| c. Critique and evaluate (e.g., evaluate text critically from many perspectives or evaluate overall text quality) | (4) | (B) | © | (1) | (c) | vH812047 |

7. When you teach English/language arts, how often do you use the following teaching strategies? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I teach reading as a whole-class activity. | (4) | (B) | © | (1) | (1) | vH855024 |
| b. I create student groups with the same achievement level. | (4) | (B) | © | (1) | (E) | vH855025 |
| c. I create student groups with mixed achievement levels. | (4) | (B) | $\bigcirc$ | (1) | (®) | vH855026 |
| d. I create groups by random assignment. | (4) | (B) | © | (1) | (®) | VH855027 |
| e. I allow students to choose their own groups. | (4) | (B) | © | (1) | (1) | vH855028 |
| f. I use individualized instruction for reading. | (4) | (B) | © | (1) | (E) | vH855034 |
| g. Students work independently on an assigned plan or goal. | (4) | (B) | $\bigcirc$ | (1) | (E) | vH855030 |
| h. Students work independently on a goal they choose themselves. | (4) | (B) | © | © | (1) | vH855031 |
| i. Students use self-paced reading programs or apps. | (4) | (B) | © | (1) | (®) | vH855032 |
| j. I create opportunities for students to participate in (online or in-person) book clubs. | (4) | (B) | © | © | (1) | vH855033 |
| k. Students collaborate with peers and experts through the Internet or other digital connections. | (4) | (B) | © | (1) | (®) | vH855029 |

8. When you teach English/language arts to your students, how do you use each of the following resources? Select one circle in each row.

|  | Not used | Supplement | Basis for instruction |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Hardback or soft cover/paperback textbooks, workbooks, or worksheets | (4) | (B) | © | VH855084 |
| b. Electronic textbooks, workbooks or worksheets | (4) | (B) | © | vH855085 |
| c. Children's books (e.g., novels, collections of stories, nonfiction, graphic novels) | (4) | (B) | © | vH855086 |
| d. Materials from different subject areas (e.g., articles from science, passages from history, etc.) | (4) | (8) | © | vH855087 |
| e. Children's newspapers and/or magazines | (4) | (B) | © | vH855092 |
| f. Reading-related websites or apps | (4) | (B) | © | vH855089 |
| g. Reading-related educational games | (4) | (B) | © | vH855090 |
| h. Materials found on the Internet | (4) | (8) | © | vH855091 |
| i. Multimedia or non-print texts (e.g., texts including images, infographics, or animations) | (4) | (B) | © | vH855088 |

9. In your fourth-grade English/language arts class this year, how often do your students do each of the following activities? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Build and practice vocabulary | (4) | (B) | © | (1) | (E) | VH812077 |
| b. Build reading fluency | (4) | (8) | © | (1) | © | VH812078 |
| c. Build reading comprehension | (4) | (B) | © | (1) | (1) | VH812083 |
| d. Practice spelling, grammar, capitalization, punctuation, and other mechanics | (4) | (B) | © | (1) | (1) | VH812084 |
| e. Access reading-related websites | (1) | (B) | © | (1) | (1) | VH812086 |
| f. Conduct research for reading projects | (4) | (B) | © | (1) | (1) | VH812088 |
| g. Read something they have chosen themselves | (1) | (8) | © | (1) | (E) | VH812089 |
| h. Work in pairs or small groups to talk about something they have read | (4) | (B) | $\bigcirc$ | (1) | (1) | VH812091 |

10. Suppose your students did very well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (1) | (B) | © | (1) | © | vH262948 |
| b. My students did well because they put in a lot of effort. | (1) | © | © | (1) | (®) | VH262949 |
| c. My students did well because they always do well on tests. | (4) | © | © | (1) | (E) | VH262950 |
| d. My students did well because I taught the concepts well. | (4) | (B) | $\bigcirc$ | (1) | (1) | VH262951 |
| e. My students did well because they guessed well on the test. | (4) | (B) | $\bigcirc$ | © | (1) | vH337286 |
| f. My students did well because they are just good at reading. | (4) | © | © | (1) | © | VH337287 |

11. How well has your education and professional training prepared you to teach students with the following attributes? Select one circle in each row.

|  | Not well at all | A little | Somewhat | Quite a bit | Extremely well |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Students lacking prerequisite knowledge or skills | (1) | (B) | © | (1) | (1) | vH812546 |
| b. Students with special needs (e.g., physical disabilities, mental or emotional/ psychological impairment) | (4) | (B) | © | (1) | (e) | VH812547 |
| c. Disruptive students | (4) | (8) | © | (1) | (1) | VH812549 |
| d. Uninterested students | (4) | (B) | $\bigcirc$ | (1) | (1) | VH812550 |
| e. English-language learners (ELLs) | (4) | (B) | © | (1) | (1) | VH812551 |
| f. Gifted and talented students | (4) | (B) | © | (1) | (1) | VH812553 |
| g. Students with different cultural backgrounds (e.g., racial/ethnic, socioeconomic, religious) | (4) | (B) | $\bigcirc$ | (1) | (c) | vH854948 |

Appendix K-2m: Summary of Changes Operational Grade 8 Reading

| Grade 8 Reading Teacher |  |  |  |
| :---: | :---: | :---: | :---: |
| Previous item | 2019 item | $\begin{array}{\|l\|} \hline \text { D/A/ } \\ \text { R/NC+ } \\ \hline \end{array}$ | Rationale |
| 1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading, writing, literature, and related topics. Select one circle. <br> (4) I do not teach English/language arts to this class. Questions 2-12 are not applicable and will be skipped. <br> (1) I teach all or most subjects, including English/language arts. <br> © The only subject I teach is English/language arts. <br> (1) We team teach, and I have primary responsibility for teaching English/language arts. <br> (2017 Grade 8) | 1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading, writing, literature, and related topics. Select one circle. <br> (4) I do not teach English/language arts to this class. <br> (8) I teach all or most subjects, including English/language arts. <br> © The only subject I teach is English/language arts. <br> (1) We team teach, and I have primary responsibility for teaching English/language arts. <br> Issue: Resources for Learning and Instruction | NC | Please note inline directions are different given transition from PBA to DBA. |
| 2. How many students are in this class? Enter the number of students. $\square$ <br> (2017 Grade 8) | 2. How many students are in this class? Enter the number of students. $\square$ $\square$ <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 3. In a typical week, about how much time in total do you spend with one of your eighth-grade English/language arts classes? Enter the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week | 3. In a typical week, about how much time in total do you spend with one of your eighth-grade English/language arts classes? Enter the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 4. Which best describes how English/language arts instruetion is organized for <br> eighth-grade students at this school? Seleet one circle. <br> (1) English/language arts is taught primarily as a discrete subject with little or no integration with instruction in other subjects. <br> (1) Some English/language arts instruction is integrated with other subjects, and some English/language arts instruction is presented as a discrete subject. <br> © English/language arts lessons are primarily integrated with instruction in other subjects. <br> (2017 Grade 8) | 4. Which best describes how English/language arts instruction is organized for eighth-grade students at this school? Select one circle. <br> (1) English/language arts is taught primarily as a discrete subject with little or no integration with instruction in other subjects. <br> (1) Some English/language arts instruction is integrated with other subjects, and some English/language arts instruction is presented as a discrete subject. <br> © English/language arts lessons are primarily integrated with instruction in other subjects. <br> Issue: Organization of Instruction | NC | N/A |



Grade 8 Reading Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. This school year, to what extent have you emphasized the following cognitive processes when teaching informational and literary texts in class? Select one circle in each row. |  |  |  |  |  |  | 7. This school year, to what extent have you emphasized the following cognitive processes when teaching informational and literary texts in class? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\underset{\substack{\text { No } \\ \text { emphasis }}}{\text { a }}$ | $\begin{aligned} & \text { Very little } \\ & \text { emphasis } \end{aligned}$ | $\begin{gathered} \text { Some } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Quite a bit } \\ \text { of emphasis } \end{array} \\ \hline \end{array}$ | $\underset{\text { emphasis }}{\text { A lot of }}$ |  |  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|l\|l} \hline \text { Very little } \\ \text { emphasis } \end{array}$ | Some emphasis | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Quite a bit } \\ \text { of emphasis } \end{array} \\ \hline \end{array}$ | $\begin{aligned} & \text { A lot of } \\ & \text { emphasis } \end{aligned}$ |  |  |  |
| a. Locate and recall (e.g., <br> identify main ideas or <br> focus on specifica <br> elements of a story) | © | ${ }^{\circ}$ | $\odot$ | $\odot$ | ${ }^{\circ}$ |  |  | $\odot$ | $\odot$ | $\odot$ | ${ }^{\circ}$ | $\odot$ | 215 |  |  |
|  | $\oplus$ | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\odot$ | vincas, |  | © | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\odot$ | Hatas |  |  |
|  | © | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\odot$ | veacss |  | ® | $\odot$ | $\odot$ | $\oplus$ | $\odot$ | Luss |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| 2. When you teach English//language arse, how oftun do you use the following surategical Sclett vene circle in cach now. |  |  |  |  |  |  | 8. When you teach English/language arts, how often do you use the following strategies? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | (tar $\begin{aligned} & \text { Nerer or } \\ & \text { hardy ever }\end{aligned}$ | ${ }_{\substack{\text { Once in } \\ \text { wille }}}$ | Sometimes | Ofien | $\begin{gathered} \text { Always or } \\ \text { Almort } \\ \text { always } \end{gathered}$ |  |  | Never or hardly ever | Once in a while | Sometimes | Often | $\begin{gathered} \text { Always or } \\ \text { almost } \\ \text { always } \end{gathered}$ |  |  |  |
| 2. Iteach rading asa $\begin{aligned} & \text { a } \\ & \text { wholeclass ativity. }\end{aligned}$ | ¢ | ${ }^{\circ}$ | - | $\oplus$ | $\infty$ | mox |  <br> a. Iteach readin as as a <br> whole-class activity. <br> c. Icreate student groups | © | $\oplus$ | $\odot$ | $\oplus$ | © | мизая |  |  |
| $\begin{aligned} & \text { b. I cratate student groups } \\ & \text { with the sume } \\ & \text { ichickement level. } \\ & \hline \end{aligned}$ | © | ${ }^{\text {¢ }}$ | $\cdots$ | © | + | $\cdots$ | b. I create student groups with heseme gre achievencent level. | © | $\oplus$ | - | $\oplus$ | $\odot$ | нззsе |  |  |
| $\begin{aligned} & \text { c. I crate studcht groups } \\ & \text { widh ifficrat } \\ & \text { wchicvement fevels. } \end{aligned}$ | - | $\oplus$ | - | ¢ | ¢ | - | c. I reate student groups <br> with different <br> achievement levels. | © | $\odot$ | $\odot$ | $\odot$ | $\odot$ | Stess |  |  |
|  | $\pm$ | ${ }^{\text {¢ }}$ | - | क | $\infty$ | mux | d. I I reate groups by <br> random assignment. <br> cester | $\oplus$ | $\oplus$ | - | $\odot$ | $\odot$ | нияая |  |  |
| c. I allow students to chocse their own groaps. | ¢ | © | $\cdots$ | © | $\infty$ | - | e. I Illow students to <br> choose their own <br> groups. | © | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | ness |  |  |
|  | ¢ | ${ }^{\text {® }}$ | $\bullet$ | ¢ | $\infty$ | - | f. I use differentiated <br> instruction tor reading <br> (i.e., instruction <br> tailored to student <br> ability and learning <br> style). | $\odot$ | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\odot$ |  |  |  |
|  | ¢ | ${ }^{\circ}$ | $\cdots$ | $\Phi$ | $\oplus$ | nower | g. I ask students to work <br> independently on an <br> assignment or task. | $\oplus$ | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | smess |  |  |
|  | $\oplus$ | ${ }^{\text {® }}$ | $\oplus$ | ¢ | ¢ | $\pm \times$ | h. I ask students to work <br> independently on a <br> task they choose <br> themselves. | ${ }^{\circ}$ | ${ }^{\circ}$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ | ${ }^{\text {stam}}$ |  |  |
|  | $\infty$ | Ф | $\odot$ | $\oplus$ | $\oplus$ | $x$ | i. Other strategies (Please specify): | © | ${ }^{\bullet}$ | $\bigcirc$ | ${ }^{\circ}$ | ${ }^{\circ}$ | १56sso |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |


| Grade 8 Reading Teacher |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 9. When you teach English/language arts to your students, how do you use each of the following resources? Select one circle in each row. |  |  |  |  |  |  |  | 9. When you teach English/languag following resources? Select one c$\square$ |  |  | rts to your stud cle in each row | ents, how do | you uss | each of | of the | nnusa | NC | N/A |
|  |  | Not used | Supplement |  | $\begin{aligned} & \text { Basis for } \\ & \text { instruction } \end{aligned}$ |  |  |  |  |  | Not used | Supplement |  | $\begin{aligned} & \text { Basis for } \\ & \text { instruction } \end{aligned}$ |  |  |  |  |
| 2. Hardback textbooks, wo | books, | $\triangle$ | © |  |  | $\odot$ | vиеная |  |  |  | $\oplus$ | $\oplus$ |  |  | $\odot$ | $\square$ |  |  |
| b. Electronic textbooks |  | ${ }_{\square}$ | $\stackrel{\odot}{\odot}$ |  |  |  | vasues | b. Electronic textbooks |  |  | $\odot$ | ${ }_{\square}$ |  |  | $\bigcirc$ | пивана |  |  |
| c. A varicty of books (e.g. | (elts. | $\bullet$ |  |  |  | - | veneme | c. A variety of books (e.g., novels,collections of stories. nonfiction |  |  | $\oplus$ | © |  |  | $\odot$ | vineore |  |  |
| d. Materials from different curricular arcas |  | $\oplus$ | $\odot$ |  |  | $\odot$ | vesues | d. Materials from different |  |  | © | ¢ |  |  | - | vвиния |  |  |
| e. Newspapers and/or mag |  | $\stackrel{\square}{\square}$ | $\stackrel{\oplus}{\oplus}$ |  |  | $\bigcirc$ | $\begin{array}{\|l\|l\|} \hline \text { visases } \\ \hline \text { visesen } \\ \hline \end{array}$ | cures ${ }^{\text {c. } \text { ewspapers and/or magazines }}$ |  |  | $\square^{\circ}$ | ${ }_{\square}$ |  |  | $\bigcirc$ | vinems |  |  |
| f. Reading-related website | apps | $\stackrel{\square}{\square}$ |  |  |  |  |  | $\begin{array}{\|l\|} \hline \text { f. Reading-related websites or apps } \\ \hline \text { g. Reading-clated educational } \\ \text { games } \\ \hline \end{array}$ |  |  | $\odot$ | ${ }_{\square}{ }^{\circ}$ |  |  | $\bigcirc$ | ขпиаен |  |  |
| g. Reading-related educat games |  | $\odot$ | $\odot$ |  |  | $\odot$ |  |  |  |  | © | $\oplus$ |  |  | $\bigcirc$ | vizaser |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |  |  |
| 3. In your eighth-grade English/language arts class this year, how often do your students do each of the following? Select one circle in each row. |  |  |  |  |  |  |  | 10. In your eighth-grade English/language arts class this year, how often do your students do each of the following? Select one circle in each row. |  |  |  |  |  |  |  |  | NC | N/A |
|  | Never | About once <br> or twice a <br> year | About once or twice a mont |  |  | $\begin{array}{\|c} \text { Every day or } \\ \text { allorot } \\ \text { every day } \end{array}$ |  |  |  | Never | About once <br> or twice a <br> year | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|} \hline \text { or twice } \\ \text { month }{ }^{2} \end{array}$ |  |  | $\begin{array}{\|l\|l} \hline \begin{array}{c} \text { Every day or or } \\ \text { every d day } \end{array} \\ \hline \end{array}$ |  |  |  |
| a. Build and practice | $\stackrel{\square}{\circ}$ | $\oplus$ | $\odot$ |  |  | $\oplus$ | "घbure |  | a. Build and practice | © | $\oplus$ | $\odot$ |  |  | © | ${ }^{\text {Hsprase }}$ |  |  |
| b. Build reading fluency | $\oplus$ | $\odot$ | $\bigcirc$ |  |  | $\odot$ |  |  | b. Build reading fluency | ${ }_{\square}$ | $\oplus$ | $\odot$ |  |  | $\odot$ | vairia |  |  |
| c.Build reading <br> comprehension | © | ${ }^{\circ}$ | $\odot$ |  |  | $\odot$ | vumin |  | c. $\begin{array}{c}\text { Build reading } \\ \text { comprehension }\end{array}$ | - | $\oplus$ | $\odot$ |  |  | ${ }^{\circ}$ | Humit |  |  |
| d. Access reading.related | $\oplus$ | $\oplus$ | $\odot$ |  |  | $\odot$ | 5.587 |  | d. Access reading.related | © | $\oplus$ | $\odot$ |  |  | ${ }^{\odot}$ | ${ }^{\text {nsabsel }}$ |  |  |
| $\begin{aligned} & \text { e. Conduct research for } \\ & \text { projects } \end{aligned}$ | - | $\stackrel{\square}{\circ}$ | $\odot$ |  |  | $\stackrel{\square}{ }$ | ${ }^{\text {nesosen }}$ |  | $\begin{aligned} & \text { e. Conduct research for } \\ & \text { projects } \\ & \hline \end{aligned}$ | ¢ | $\oplus$ | $\odot$ |  |  | $\odot$ | NS50\% |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |  |  |

Grade 8 Reading Teacher

| Previous item |  |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11. Suppose your students did very well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  |  | 11. Suppose your students did very well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  |  | Nort lik |  | $\begin{aligned} & \text { Somewhat } \\ & \text { Sakely } \end{aligned}$ | Quite likely | $\begin{aligned} & \text { Extremely } \\ & \substack{\text { likely }} \end{aligned}$ |  |  | $\begin{array}{\|c} \substack{\text { Not at all all } \\ \text { likely }} \end{array}$ | Not li |  | Somewhat likely | Quite likely | Extremely likely |  |  |  |
| $\begin{aligned} & \text { a. My students did well } \\ & \text { because they studicd } \\ & \text { and wcre preparcd. } \end{aligned}$ | © | © |  | - | $\oplus$ | ¢ | noses | a. My students did well because they studied and were prepared. | © | © |  | $\odot$ | $\odot$ | ${ }^{\circ}$ | vnevas |  |  |
|  | © | © |  | ¢ | © | Ф | noem | a. My students did well $\begin{gathered}\text { bease } \\ \text { lothey put in a }\end{gathered}$ lotfort. | © | $\oplus$ |  | $\odot$ | $\oplus$ | $\odot$ | vneses |  |  |
| $\begin{aligned} & \text { c. My studentr did well } \\ & \text { because they alveys } \\ & \text { do well on tests. } \end{aligned}$ | $\oplus$ | $\pm$ |  | $\odot$ | © | Ф | vesem | c. My students did well because they always do well on tests. | $\oplus$ | ${ }^{(1)}$ |  | $\odot$ | $\odot$ | $\odot$ | venesso |  |  |
| $\begin{array}{\|l\|l} \hline \text { d. My students did well } \\ \text { becaucs tuapht he } \\ \text { concepst well } \end{array}$ | $\cdots$ | © |  | $\odot$ | $\oplus$ | Ф | mense | d. My students did well because Itaught the concepts well. | © | $\oplus$ |  | $\odot$ | $\odot$ | $\odot$ | veness |  |  |
| e. My students did well because they guessed well on the test. | © | ${ }^{1}$ |  | - | $\oplus$ | $\oplus$ | mavas | e. My students did well because they guessed well on the test. | $\oplus$ | © |  | $\odot$ | $\odot$ | $\odot$ | пзз729 |  |  |
|  | * | $\oplus$ |  | - | $\cdots$ | © | wrer | well on the test. <br> f. My students did well <br> because they are eust <br> good at reading. | $\odot$ | $\odot$ |  | $\odot$ | $\odot$ | ${ }^{\circ}$ | vизгя |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |  |  |  |
| 12. In your view, to what extent do the following limit how you teach this class? Select one circle in each row. |  |  |  |  |  |  |  | 12. In your view, to what extent do the following limit how you teach this class? Select one circle in each row. |  |  |  |  |  |  |  | NC | N/A |
|  | Not app | milicable | Notal |  | Some | A lot |  |  | Not appli | cable | Nota | at all | Some | A lot |  |  |  |
| $\begin{array}{\|l\|l\|} \hline \text { a. Studentus lacking } \\ \text { prcrequisite knowledge or } \\ \text { skill } \end{array}$ | or |  | $\pm$ |  | $\odot$ | © | \% | a. Students lacking <br> prerequisite knowledge or <br> skills | - |  | $\oplus$ |  | $\odot$ | $\odot$ | 20ass |  |  |
|  | $\omega$ |  | © |  | ${ }^{\circ}$ | , | ${ }^{\text {nouas }}$ | $\begin{aligned} & \text { b. Students with special } \\ & \text { needs (e.f., physical } \\ & \text { disabilities, mental or } \\ & \text { emotional } \\ & \text { impairalpychologogical } \end{aligned}$ | © |  | © | $\bigcirc$ | $\odot$ | $\odot$ | Trucser |  |  |
| \|c. Disuptive students | ${ }^{\text {a }}$ |  | ${ }^{\text {a }}$ |  | $\bigcirc$ | $\oplus$ | nessels | impairment) <br> c. Disruptive students | $\odot$ |  | ${ }^{\circ}$ |  | $\odot$ | $\stackrel{\square}{\circ}$ | vineass |  |  |
|  |  |  |  |  |  |  |  | d. Unintersted students | ${ }_{\square}$ |  | © |  | $\odot$ | $\odot$ | viemeas |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  | Issue: Resources for Learning and Instruction |  |  |  |  |  |  |  |  |  |

## Appendix K-2n: Operational Grade 8 Reading

1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading, writing, literature, and related topics. Select one circle.
(A) I do not teach English/language arts to this class.
(B) I teach all or most subjects, including English/language arts.
© The only subject I teach is English/language arts.
(D) We team teach, and I have primary responsibility for teaching English/language arts.
2. How many students are in this class? Enter the number of students.

3. In a typical week, about how much time in total do you spend with one of your eighth-grade English/language arts classes? Enter the hours and minutes.
hours and $\qquad$ minutes per week
4. Which best describes how English/language arts instruction is organized for eighth-grade students at this school? Select one circle.
(A) English/language arts is taught primarily as a discrete subject with little or no integration with instruction in other subjects.
(B) Some English/language arts instruction is integrated with other subjects, and some English/language arts instruction is presented as a discrete subject.
© English/language arts lessons are primarily integrated with instruction in other subjects.
5. To what extent have you provided instruction in the following in English/language arts class so far this year? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Fiction | (4) | (8) | © | (1) | VH240523 |
| b. Exposition | (4) | (8) | $\bigcirc$ | (1) | vH240526 |
| c. Argumentation and persuasion | (4) | (B) | © | (1) | vH240527 |

6. When reading a story, article, or other passage with your students, how often do you ask your students to do the following? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Summarize the passage | (4) | (B) | © | (1) | (E) | vH334295 |
| b. Interpret the meaning of the passage | (4) | (B) | © | (1) | (1) | vH334296 |
| c. Question the motives or feelings of the characters | (4) | (B) | © | (1) | (E) | VH334299 |
| d. Identify the themes of the passage | (4) | (B) | © | (1) | (1) | vH335901 |
| e. Analyze two or more texts on the same topic | (4) | © | $\bigcirc$ | (1) | © | VH334297 |
| f. Analyze the author's organization of information in a passage | (4) | ® | © | © | (1) | VH334302 |
| g. Critique the author's craft or technique | (4) | (B) | © | (1) | (c) | VH334305 |

7. This school year, to what extent have you emphasized the following cognitive processes when teaching informational and literary texts in class? Select one circle in each row.

|  | No emphasis | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Locate and recall (e.g., identify main ideas or focus on specific elements of a story) | (4) | (B) | © | (1) | (1) | vH261256 |
| b. Integrate and interpret (e.g., make comparisons, explain character motivation, or examine relations of ideas across the text) | (4) | (B) | $\bigcirc$ | © | (1) | vH261257 |
| c. Critique and evaluate (e.g., evaluate text critically from many perspectives or evaluate overall text quality) | (4) | (B) | © | (1) | (1) | vH261258 |

8. When you teach English/language arts, how often do you use the following strategies? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I teach reading as a whole-class activity. | (4) | (B) | © | (1) | (E) | vH334361 |
| b. I create student groups with the same achievement level. | (4) | (B) | $\bigcirc$ | (1) | (8) | vH334362 |
| c. I create student groups with different achievement levels. | (4) | (B) | © | (1) | © | vH548665 |
| d. I create groups by random assignment. | (4) | (B) | © | (1) | (8) | vH334363 |
| e. I allow students to choose their own groups. | (4) | (B) | $\bigcirc$ | (1) | © | vH334368 |
| f. I use differentiated instruction for reading (i.e., instruction tailored to student ability and learning style). | (4) | (B) | $\bigcirc$ | (1) | © | vH562894 |
| g. I ask students to work independently on an assignment or task. | (4) | (B) | © | (1) | (1) | vH548666 |
| h. I ask students to work independently on a task they choose themselves. | (4) | (B) | © | (1) | © | vH54867 |
| i. Other strategies (Please specify): | (4) | (B) | © | (1) | (1) | VH562900 |

9. When you teach English/language arts to your students, how do you use each of the following resources? Select one circle in each row.

|  | Not used | Supplement | Basis for instruction |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Hardback textbooks, workbooks, or worksheets | (4) | (B) | © | vH33488 |
| b. Electronic textbooks | (4) | (B) | © | vH334486 |
| c. A variety of books (e.g., novels, collections of stories, nonfiction) | (4) | (B) | © | VH262702 |
| d. Materials from different curricular areas | (4) | (B) | $\bigcirc$ | VH33498 |
| e. Newspapers and/or magazines | (4) | (B) | $\bigcirc$ | VH262705 |
| f. Reading-related websites or apps | (4) | © | $\bigcirc$ | VH334995 |
| g. Reading-related educational games | (4) | (B) | © | vн334991 |

10. In your eighth-grade English/language arts class this year, how often do your students do each of the following? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Build and practice vocabulary | (4) | (B) | © | (1) | (E) | vH547868 |
| b. Build reading fluency | (4) | (B) | © | (1) | (1) | VH617114 |
| c. Build reading comprehension | (4) | (B) | © | (1) | (c) | VH617116 |
| d. Access reading-related websites | (4) | (B) | © | (1) | (c) | VH547871 |
| e. Conduct research for projects | (4) | (B) | $\bigcirc$ | (1) | (e) | VH547872 |

11. Suppose your students did very well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (4) | (B) | © | (1) | (1) | VH262948 |
| b. My students did well because they put in a lot of effort. | (1) | (B) | © | (1) | (1) | VH262949 |
| c. My students did well because they always do well on tests. | (4) | (B) | © | (1) | (e) | vH262950 |
| d. My students did well because I taught the concepts well. | (4) | (B) | © | (1) | (1) | vH262951 |
| e. My students did well because they guessed well on the test. | (4) | (B) | © | (1) | (1) | vH337286 |
| f. My students did well because they are just good at reading. | (4) | (B) | $\bigcirc$ | (1) | (1) | vH337287 |

12. In your view, to what extent do the following limit how you teach this class? Select one circle in each row.

|  | Not applicable | Not at all | Some | A lot |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Students lacking prerequisite knowledge or skills | (4) | (B) | $\bigcirc$ | (1) | VH262636 |
| b. Students with special needs (e.g., physical disabilities, mental or emotional/psychological impairment) | (4) | (B) | $\bigcirc$ | (1) | vH262637 |
| c. Disruptive students | (4) | (8) | © | (1) | VH262638 |
| d. Uninterested students | (4) | (8) | © | (1) | VH226239 |

## Appendix K-20: Summary of Changes Pilot Grade 8 Reading

## 2019 Pilot Grade 8 Reading Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading. writing. literature, and related topics. Select one circle. <br> (4) I do not teach English/language arts to this class. Questions 2-12 are not applicable and will be skipped. <br> (1) I teach all or most subjects, including English/language arts. <br> © The only subject I teach is English/language arts. <br> (1) We team teach, and I have primary responsibility for teaching English/language arts. | 1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading, writing, literature, and related topics using print and digital texts. Select one circle. <br> (2) I do not teach English/language arts to this class. <br> (1) I teach all or most subjects, including English/language arts. <br> © The only subiect I teach is English/language arts. <br> (1) We team teach, and I have primary responsibility for teaching English/language arts. <br> Issue: Resources for Learning and Instruction | R | The phrase "using print and digital texts" was added. <br> Please note inline directions are different given transition from PBA to DBA. |
| 2. How many students are in this class? Enter the number of students. $\square$ <br> (2017 Grade 8) | 2. How many students are in this class? Enter the number of students. $\square$ <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 3. In a typical week, about how much time in total do you spend with one of your eighth-grade English/language arts classes? Enter the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week <br> (2017 Grade 8) | 3. In a typical week, about how much time in total do you spend with one of your eighth-grade English/language arts classes? Enter the hours and minutes and include in-class time only. $\qquad$ hours and $\qquad$ minutes per week <br> Issue: Resources for Learning and Instruction | R | The phrase "and include in-class time only" was added. |
| 4. Which best describes how English/language arts instruction is organized for eighth-grade students at this school? Select one circle. <br> (1) English/language arts is taught primarily as a discrete subject with little or no integration with instruction in other subjects. <br> (1) Some English/language arts instruction is integrated with other subjects, and some English/language arts instruction is presented as a discrete subject. <br> © English/language arts lessons are primarily integrated with instruction in other subjects. <br> (2017 Grade 8) | 4. Which best describes how English/language arts instruction is organized for eighth-grade students at this school? Select one circle. English/language arts is taught primarily as a discrete subject with little or no integration with instruction in other subjects. Some English/language arts instruction is integrated with other subjects, and some English/language arts instruction is presented as a discrete subject. <br> © English/language arts lessons are primarily integrated with instruction in other subjects. <br> Issue: Organization of Instruction | NC | N/A |



2019 Pilot Grade 8 Reading Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. This school yeat, to what extent have you emphasized the following cognitive processes when teaching informational and literary texts in class? Select one circle in cach row. |  |  |  |  |  |  | 7. This school year, to what extent have you emphasized the following tasks when teaching informational and literary texts in class? Select one circle in each row. |  |  |  |  |  |  | R | In the stem, "cognitive processes" was replaced with "tasks". |
|  | $\begin{gathered} \text { No } \\ \text { emplasis } \end{gathered}$ | Very litule emphasis | $\begin{gathered} \text { Some } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|l\|l} \text { Quitea bit } \\ \text { of emphasis } \end{array}$ | $\begin{gathered} \text { A lot of } \\ \text { emphasis } \end{gathered}$ |  |  | $\begin{gathered} \mathrm{No} \\ \text { emphasis } \end{gathered}$ | Very little emphasis | $\begin{aligned} & \text { Some } \\ & \text { emphasis } \end{aligned}$ | $\begin{array}{\|c} \text { Quite a bit } \\ \text { of emphasis } \end{array}$ | $\begin{gathered} \text { A lot of } \\ \text { emphasis } \end{gathered}$ |  |  |  |
| a. Locate and recall (e.g. <br> identify main idcas or <br> focus on specific <br> ecements of a story) <br> b. | © | $\oplus$ | ¢ | ¢ | ${ }_{\square}$ | N24 |  | (1) | ${ }^{(1)}$ | $\bigcirc$ | $\oplus$ | © | vuloa |  |  |
| b. Integratc and interpret (e.g. make comparisons. explain character motivation. or examine relarions of of eas across the text) c. | © | © | $\bigcirc$ | $\oplus$ | $\oplus$ | n¢aty | b. Integrate and interpret <br> (e.g.make <br> comparisons, explain <br> character motivation. <br> or examine relations of <br> oideas across the text) | © | © | co | $\cdots$ | © | sisat |  |  |
| c. Critique and evaluate <br> (e.t., cyaluate text <br> critactly from many <br> perspective or <br> evaluatio overall text <br> equality) | $\oplus$ | © | $\bigcirc$ | $\oplus$ | ${ }^{\circ}$ | mas | c. Critique and evaluate <br> (c., cvaluate text <br> critically from many <br> perspectives or <br> evaluate overall text <br> quality) | $\omega$ | © | $\bullet$ | © | ${ }^{\circ}$ | \% 129 |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |

2019 Pilot Grade 8 Reading Teacher


| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \\ & \hline R \end{aligned}$ | Rationale <br> Two subitems were added. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9. When you teach English/language arts to your students, how do you use cach of the following resources? Select one circle in each row. |  |  |  |  |  |  | 9. When you teach English/language arts to your students, how do you use each of the following resourcesi Select one circle in each row. |  |  |  |  |  |  |  | $\mathrm{R}$ | Two subitems were added. |
|  |  | Not used | Supplement |  | $\begin{gathered} \text { Basis for } \\ \text { instruction } \end{gathered}$ |  |  |  | Not used | Supplement |  | $\begin{aligned} & \text { Basis for } \\ & \text { instruction } \end{aligned}$ |  |  |  |  |
| a. Hardback textbooks, workbooks. |  | © | $\oplus$ |  | $\odot$ | noume |  |  | ${ }^{*}$ | © |  | $\bigcirc$ |  | nuscer |  |  |
| $\begin{aligned} & \text { b. Electronic textbooks } \\ & \hline \text { c. A variety of books (e.g. } \\ & \hline \end{aligned}$ | vels. | $\stackrel{\square}{\circ}$ | © |  | $\bigcirc$ | , nowers | b. Electronic textbooks, workbooks |  | © | © |  | $\bigcirc$ |  | nesas |  |  |
| d. Materials from differen <br> curricular areas |  | $\oplus$ | ${ }^{\circ}$ |  | $\odot$ | numer | c. Books (e.g.. novels, collections of <br> stories, nonfiction, graphic <br> novels) <br> . |  | (1) | ${ }^{(1)}$ |  | $\odot$ |  | Iossom |  |  |
| e. Newspapers and/or ma |  | © | ${ }^{(1)}$ |  | $\bigcirc$ | Mrasto |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l\|} \hline \text { f. Reading-related websit } \\ \text { 8. Reading-related educat } \\ \hline \end{array}$ | rapps | $\stackrel{\square}{\oplus}$ | $\stackrel{\square}{\oplus}$ |  | $\odot$ | , пnver | d. Matenials from different subiectareas (e.g., articles from science,passages from history. etc.) |  | $\oplus$ | ${ }^{(1)}$ |  | $\odot$ |  | "neser |  |  |
|  |  |  |  |  |  |  | e. Newspapers and/or magazines |  | (1) | $\oplus$ |  | $\stackrel{\odot}{\circ}$ |  | nassox |  |  |
|  |  |  |  |  |  |  | f. Reading-related websites or apps <br> g. Reading-related educational <br> ${ }^{8 .}$ games |  | ¢ | ${ }^{1}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | $\otimes$ | ${ }^{(1)}$ |  | $\bigcirc$ - maxm |  |  |  |  |
|  |  |  |  |  |  |  | h. Materials found on the Intemet <br> i. Multimedia or non-print texts <br> (e.,., texts including images. <br> infographics, or animations) infographics, or animations) |  | © | © |  | $\bigcirc$ |  | \%ascom |  |  |
|  |  |  |  |  |  |  |  |  | $\odot$ | ${ }_{\square}$ |  | - |  |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |  |
| 10. In your eighth-grade English/language arts class this year. how often do your students use a computer or other digital device to do each of the following? Select one circle in each row. |  |  |  |  |  |  | 10. In your eighth-grade English/language arts class this year. how often do your students do each of the following activities? Select one circle in each row. |  |  |  |  |  |  |  | R | The phrase "use a computer or digital device to" was removed to align with grade 8 development and two subitems were added. |
|  | Never | $\begin{array}{\|c\|} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array}$ | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { month } \end{gathered}$ | About once or twice a week | $\left\lvert\, \begin{gathered} \text { Every day or } \\ \text { almos } \\ \text { every day } \end{gathered}\right.$ |  |  | Never | $\begin{array}{\|c} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array} \\ \hline \end{array}$ | About once or twice a month |  |  | $\begin{gathered} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{gathered}$ |  |  |  |
| $\begin{array}{\|l\|} \hline \text { a. Build and practice } \\ \text { vocabulary } \\ \hline \end{array}$ | ${ }^{\circ}$ | (1) | $\bigcirc$ | © |  | noser | a. Build and practice <br> vocalulary <br> b. Build readins fluency | © | (1) | O |  |  | ${ }_{\square}{ }^{\circ}$ | ${ }^{\text {Mnezasi }}$ |  |  |
| b. Build reading fuency | © | $\oplus$ | $\odot$ | ${ }^{\circ}$ | ${ }^{\circ}$ | ) wires | b. Build reading fluency | ${ }^{\circ}$ | ${ }^{(1)}$ | $\bigcirc$ |  |  | ${ }^{\circ}$ | \%abse |  |  |
|  | $\oplus$ | ${ }^{\circ}$ | $\odot$ | © | $\oplus$ | numm | c. comprehension | © | © | $\odot$ |  |  | O | weuss |  |  |
| d. Access reading-related websites | © | ${ }_{\square}$ | $\odot$ | ¢ | ${ }^{\circ}$ | nnoss | d. Access reading-related websites | (1) | © | - |  |  | $\oplus$ |  |  |  |
| c. Conduct rescarch for reading proiccts | © | $\oplus$ | ¢ | © | © | ) | c. Conduct rescarch for reading proiects | © | $\pm$ | $\bigcirc$ |  |  | ¢ | Menais |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | f. Read something they have chosen themselves | © | © | $\odot$ |  |  | $\oplus$ | "101324 |  |  |
|  |  |  |  |  |  |  | g. Work in pairs or small <br> sompstoll kbout <br> something they have <br> read | © | ${ }^{(1)}$ | $\odot$ |  |  | ${ }^{\circ}$ |  |  |  |
|  |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |  |


| Previous item |  |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11. Suppose your students did yery well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in cach row. |  |  |  |  |  |  |  | 11. Suppose your students did very well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{gathered} \text { Not at all } \\ \text { likely } \end{gathered}$ | Not lik |  | $\begin{array}{\|c} \text { Somewhat } \\ \text { likely } \end{array}$ | Quite likely | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|l\|} \hline \text { Extemely } \\ \text { like y } \end{array}$ |  |  | $\begin{gathered} \text { Not at all all } \\ \text { likely } \end{gathered}$ | Not likely | Somewhat likely | Quite likely | Extremely <br> likely |  |  |  |
| $\begin{aligned} & \text { a. My students did well } \\ & \text { because they studided } \\ & \text { and were prepared. } \end{aligned}$ | © | © |  | $\bigcirc$ | © | $\odot$ | vnesem | 3. My students did well because they studied and were prepared. | © | (1) | $\cdots$ | $\oplus$ | © | Mrases |  |  |
| $\begin{array}{\|l\|} \hline \text { b. My students did well } \\ \text { becase ehtey put in a } \\ \text { lot of effort. } \end{array}$ | © | (1) |  | $\odot$ | © | ${ }^{\circ}$ | nomem | b. My students did well because they put in a lot of effort. | © | (1) | $\odot$ | ¢ | $\oplus$ | nosam |  |  |
| $\begin{aligned} & \text { c. My students did well } \\ & \text { because they always } \\ & \text { do well on tests. } \end{aligned}$ | © | ${ }^{\circ}$ |  | $\odot$ | $\oplus$ | ${ }^{\circ}$ | viowes | c. My studente did well because they always do well on tests. | © | ${ }^{(1)}$ | ¢ | $\odot$ | ${ }^{\oplus}$ | 480 |  |  |
| $\begin{aligned} & \text { d. My students did well } \\ & \text { because I taught the } \\ & \text { concepts well. } \end{aligned}$ | © | ¢ |  | - | $\oplus$ | © | neasm | d. My students did well because 1 taught the because taugh | (1) | (1) | $\odot$ | ${ }^{\text {® }}$ | © | - |  |  |
| e. My students did well becallse they guessed well on the test. | © | $\oplus$ |  | $\bigcirc$ | $\oplus$ | $\oplus$ | numse | c. My students did well because they gucssed | $\oplus$ | $\oplus$ | $\odot$ | $\oplus$ | Ф | narsm |  |  |
| $\begin{array}{\|l\|} \hline \text { My students did well } \\ \text { because they are just } \\ \text { good at reading. } \end{array}$ | © | $\oplus$ |  | $\odot$ | $\oplus$ | © | $\cdots$ | $\begin{array}{\|l} \text { well on the test. } \\ \text { f. My students did well } \\ \text { because they are iust } \\ \text { good at reading. } \\ \hline \end{array}$ | © | (1) | $\odot$ | $\oplus$ | $\oplus$ | 20 |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  | Issue: |  |  |  |  |  |  |  |  |
| 12. In your view, to what extent do the following limit how you teach this class! Select one circle in each row. |  |  |  |  |  |  |  | 12. How well has your education and professional training prepared you to teach students with the following attributes? Select one circle in cach row. |  |  |  |  |  |  | R | The entire stem was revised and three subitems were added. |
|  | Not applicable |  | Not at all |  | Some | A lot |  |  | $\begin{gathered} \text { Not well at } \\ \text { all } \end{gathered}$ | A little | Somewhat | Quite a bit | $\begin{gathered} \text { Extremely } \\ \text { well } \end{gathered}$ | $\square$ |  |  |
| a. Students lacking prerequisite knowledge or skills | $\oplus$ |  | ${ }^{\text {® }}$ |  | - | $\oplus$ | neeses |  | $\oplus$ | $\oplus$ | $\bigcirc$ | © | $\oplus$ | vanse |  |  |
|  | © |  | $\oplus$ |  | $\bigcirc$ | $\oplus$ |  |  | © | © | $\odot$ | $\oplus$ | © | nomee |  |  |
| d. Uninterested students | ${ }_{\square}$ © |  |  | ${ }_{\square}$ | $\stackrel{\circ}{\odot}$ | $\stackrel{\oplus}{\oplus}$ |  |  |  |  |  |  |  |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  | c. Disruptive students | © | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | 7nizem |  |  |
|  |  |  |  |  |  |  |  | d. Uninterested students | © | $\Phi$ | $\bigcirc$ | ${ }^{\circ}$ | $\oplus$ | \%101320 |  |  |
|  |  |  |  |  |  |  |  | (e. English. language | © | $\pm$ | $\odot$ | $\oplus$ | © | numsen |  |  |
|  |  |  |  |  |  |  |  | f. Gifted and talented students | © | (1) | © | ¢ | Ф | \%10123 |  |  |
|  |  |  |  |  |  |  |  | g. Students with <br> different cultural <br> backerounds (e.g., <br> racil./thnic. <br> sociocconomic. <br> religious) | (1) | © | $\odot$ | $\oplus$ | © | 4* |  |  |
|  |  |  |  |  |  |  |  | Issue: |  |  |  |  |  |  |  |  |

## Appendix K-2p: Pilot Grade 8 Reading

1. Which best describes your role in teaching English/language arts to this class? Language arts refers to reading, writing, literature, and related topics using print and digital texts. Select one circle.
(A) I do not teach English/language arts to this class.
(B) I teach all or most subjects, including English/language arts.
© The only subject I teach is English/language arts.
(D) We team teach, and I have primary responsibility for teaching English/language arts.
2. How many students are in this class? Enter the number of students.

3. In a typical week, about how much time in total do you spend with one of your eighth-grade English/language arts classes? Enter the hours and minutes and include in-class time only.
$\qquad$ hours and $\qquad$ minutes per week
4. Which best describes how English/language arts instruction is organized for eighth-grade students at this school? Select one circle.
(A) English/language arts is taught primarily as a discrete subject with little or no integration with instruction in other subjects.
(B) Some English/language arts instruction is integrated with other subjects, and some English/language arts instruction is presented as a discrete subject.
© English/language arts lessons are primarily integrated with instruction in other subjects.
5. To what extent have you provided instruction in the following types of text in English/language arts class so far this year? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Fiction | (4) | (8) | © | (1) | VH855052 |
| b. Exposition (i.e., text that aims to explain, inform, or describe, like newspaper or magazine articles, textbooks, or informational essays) | (4) | (B) | © | (1) | vH855058 |
| c. Argumentation and persuasion | (4) | (B) | © | (1) | vH855056 |
| d. Multimedia or non-print text (e.g., texts including images, infographics, or animations) | (4) | (B) | $\bigcirc$ | (1) | vH85055 |

6. When reading a story, article, or other passage with your students, how often do you ask your students to do the following activities? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Summarize the passage | (1) | (B) | © | (1) | (E) | vH81995 |
| b. Interpret the meaning of the passage | (1) | (B) | © | (1) | (1) | vH81997 |
| c. Question the motives or feelings of the characters | (4) | (8) | © | (1) | (1) | vH811998 |
| d. Identify the themes of the passage | (4) | (B) | © | (1) | (1) | vH812001 |
| e. Analyze two or more texts on the same topic | (4) | (B) | © | (1) | (1) | vH812005 |
| f. Analyze the author's organization of information in a passage | (4) | (B) | © | (1) | (®) | vH812009 |
| g. Critique the author's craft or technique | (4) | (B) | $\bigcirc$ | (1) | (1) | vH812011 |
| h. Analyze the author's use of multimedia or non-print text (e.g., texts including images, infographics, or animations) | (4) | (B) | $\bigcirc$ | (1) | (1) | vH855005 |

7. This school year, to what extent have you emphasized the following tasks when teaching informational and literary texts in class? Select one circle in each row.

|  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Locate and recall (e.g., identify main ideas or focus on specific elements of a story) | (4) | (B) | © | (1) | (E) | vH812042 |
| b. Integrate and interpret (e.g., make comparisons, explain character motivation, or examine relations of ideas across the text) | (4) | (B) | © | (1) | (1) | vH812044 |
| c. Critique and evaluate (e.g., evaluate text critically from many perspectives or evaluate overall text quality) | (4) | (B) | © | (1) | (c) | vH812047 |

8. When you teach English/language arts, how often do you use the following teaching strategies? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I teach reading as a whole-class activity. | (4) | (B) | © | (1) | (E) | vH855024 |
| b. I create student groups with the same achievement level. | (4) | (B) | © | (1) | (1) | vH855025 |
| c. I create student groups with mixed achievement levels. | (4) | (B) | © | (1) | (1) | vH855026 |
| d. I create groups by random assignment. | (4) | (B) | © | (1) | (1) | vH855027 |
| e. I allow students to choose their own groups. | (4) | (B) | $\bigcirc$ | (1) | ( ${ }^{\text {c }}$ | vH855028 |
| f. I use individualized instruction for reading. | (4) | (B) | © | (1) | (1) | vH855034 |
| g. Students work independently on an assigned plan or goal. | (4) | (B) | © | (1) | (®) | vH855030 |
| h. Students work independently on a goal they choose themselves. | (4) | (B) | $\bigcirc$ | (1) | (1) | vH855031 |
| i. Students use self-paced reading programs or apps. | (4) | (B) | $\bigcirc$ | (1) | (1) | vH855032 |
| j. I create opportunities for students to participate in (online or in-person) book clubs. | (4) | (B) | © | (1) | (1) | vH855033 |
| k. Students collaborate with peers and experts through the Internet or other digital connections. | (4) | (B) | $\bigcirc$ | (1) | (1) | vH855029 |

9. When you teach English/language arts to your students, how do you use each of the following resources? Select one circle in each row.

|  | Not used | Supplement | Basis for instruction |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Hardback or soft cover/paperback textbooks, workbooks, or worksheets | (1) | (B) | © | vH855084 |
| b. Electronic textbooks, workbooks or worksheets | (4) | (B) | © | VH855085 |
| c. Books (e.g., novels, collections of stories, nonfiction, graphic novels) | (1) | (B) | © | vH855094 |
| d. Materials from different subject areas (e.g., articles from science, passages from history, etc.) | (4) | (B) | © | vH855087 |
| e. Newspapers and/or magazines | (4) | (B) | $\bigcirc$ | vH855096 |
| f. Reading-related websites or apps | (8) | (B) | © | VH855089 |
| g. Reading-related educational games | (4) | (8) | © | VH855090 |
| h. Materials found on the Internet | (4) | (B) | © | VH855091 |
| i. Multimedia or non-print texts (e.g., texts including images, infographics, or animations) | (4) | © | © | vH855088 |

10. In your eighth-grade English/language arts class this year, how often do your students do each of the following activities? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Build and practice vocabulary | (4) | (B) | © | (1) | (E) | vH812511 |
| b. Build reading fluency | (4) | (8) | $\bigcirc$ | (1) | © | VH812512 |
| c. Build reading comprehension | (4) | (B) | © | (1) | (E) | VH812515 |
| d. Access reading-related websites | (4) | (B) | © | (1) | (1) | VH812518 |
| e. Conduct research for reading projects | (4) | (B) | © | (1) | (E) | VH812519 |
| f. Read something they have chosen themselves | (4) | (B) | © | (1) | (E) | vH812521 |
| g. Work in pairs or small groups to talk about something they have read | (4) | (B) | © | (1) | (c) | vH812522 |

11. Suppose your students did very well on their last English/language arts test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (1) | (B) | © | (1) | (E) | VH262948 |
| b. My students did well because they put in a lot of effort. | (4) | (B) | © | (1) | (1) | VH262949 |
| c. My students did well because they always do well on tests. | (4) | (B) | © | © | (1) | VH262950 |
| d. My students did well because I taught the concepts well. | (4) | ® | © | (1) | (1) | VH262951 |
| e. My students did well because they guessed well on the test. | (1) | © | © | (1) | © | VH337286 |
| f. My students did well because they are just good at reading. | (4) | © | © | (1) | (1) | VH337287 |

12. How well has your education and professional training prepared you to teach students with the following attributes? Select one circle in each row.

|  | Not well at all | A little | Somewhat | Quite a bit | Extremely well |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Students lacking prerequisite knowledge or skills | (1) | (B) | © | (1) | (1) | vH812546 |
| b. Students with special needs (e.g., physical disabilities, mental or emotional/ psychological impairment) | (4) | (B) | © | (1) | (1) | vH812547 |
| c. Disruptive students | (4) | (8) | $\bigcirc$ | (1) | © | VH812549 |
| d. Uninterested students | (1) | (B) | © | (1) | (1) | VH812550 |
| e. English-language learners (ELLs) | (4) | (B) | © | (1) | (E) | vH812551 |
| f. Gifted and talented students | (4) | (B) | © | (1) | (c) | vH81253 |
| g. Students with different cultural backgrounds (e.g., racial/ethnic, socioeconomic, religious) | (4) | (B) | © | (1) | (e) | vH854948 |

Appendix K-2q: Summary of Changes Operational Grade 4 Mathematics

2019 Operational Grade 4 Mathematics Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 1. Which best describes your role in teaching mathematics to this class? <br> (4) I do not teach mathematics to this class. Questions 2-20 are not applicable and will be skipped. <br> (B) I teach all or most subjects, including mathematics. <br> © The only subject I teach is mathematics. <br> (1) We team teach, and I have primary responsibility for teaching mathematics. <br> (2017 Grade 4) | 1. Which best describes your role in teaching mathematics to this class? <br> (4) I do not teach mathematics to this class. <br> (B) I teach all or most subjects, including mathematics. <br> © The only subject I teach is mathematics. <br> (1) We team teach, and I have primary responsibility for teaching mathematics. <br> Issue: Resources for Learning and Instruction | NC | Please note <br> that no content changes were made to the item but the skip pattern text was removed from the item given the transition from PBA to DBA. |
| 2. How many students are in this class? Enter the number of students. $\square$ <br> (2017 Grade 4) | 2. How many students are in this class? Enter the number of students. $\square$ $\square$ <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week | 3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes and include in-class time only. $\qquad$ hours and $\qquad$ minutes per week <br> Issue: Resources for Learning and Instruction | R | As per the Standing Committee recommendati on, the text "and include in-class time only" was added to the inline directions to clarify mathematics instruction as the time spent |

[^0]2019 Operational Grade 4 Mathematics Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
|  |  |  | instructing in class. |
| 4. Are students assigned to this class by achicvement level? <br> (ब) Ycs <br> ( ${ }^{(1)} \mathrm{No}$ <br> (2017 Grade 4) | N/A | D | This item was dropped to reduce burden. |
| 5. Do you create groups within this class for mathematics instruction on the basis of achievement level? <br> (4) Yes <br> (1) No <br> (2017 Grade 4) | N/A | D | This item was dropped to reduce burden. |
| 6. What kind of calculator do your students usually use during mathematics lessons? <br> (4) None <br> (1) Basic four-function (addition, subtraction, multiplication, division) <br> © Scientific (not graphing) <br> (1) Graphing <br> (2017 Grade 4) | 6. What kind of calculator do your students usually use during mathematics lessons? <br> (4) None <br> (B) Basic four-function (addition, subtraction, multiplication, division) <br> © Scientific (not graphing) <br> (1) Graphing <br> Issue: Resources for learning and instruction | NC | N/A |
| 7. Approximately how much mathematics homework do you assign to students in this class each day? <br> (4) None <br> (D) 15 minutes <br> Q 30 minutes <br> (1) 45 minutes <br> (1) Onc hour <br> (1) More than one hour <br> (2017 Grade 4) | 4. Approximately how much mathematics homework do you assign to students in this class each day? <br> (4) None 15 minutes 30 minutes 45 minutes One hour <br> (1) More than one hour <br> Issue: Organization of Instruction | NC | N/A |
| 8. To what extent are students permitted to use calculators during mathematics lessons? <br> (A) Unrestricted use <br> (B) Restricted use <br> © Calculators are not permitted. <br> (2017 Grade 4) | 5. To what extent are students permitted to use calculators during mathematics lessons? <br> (4) Unrestricted use <br> (B) Restricted use <br> © Calculators are not permitted. <br> Issue: Organization of Instruction | NC | N/A |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Operational Grade 4 Mathematics Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9. When you give students a mathematics test or quiz, how often do they use a <br> calculator? <br> (4) Never <br> (1) Sometimes <br> © Always <br> (2017 Grade 4) |  |  |  |  |  |  | 7. When you give students a mathematics test or quiz, how often do they use a calculator? <br> (4) Never <br> (B) Sometimes <br> © Always <br> Issue: Organization of Instruction |  |  |  |  |  |  | NC | N/A |
| 10. In your mathematics class this year, how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in each row. |  |  |  |  |  |  | 8. In your mathematics class this year, how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | Never | About once <br> or twice <br> year | $\begin{gathered} \text { About once } \\ \text { or twice } \\ \text { month } \end{gathered}$ | $\begin{gathered} \text { About once } \\ \text { or wice a } \\ \text { week } \end{gathered}$ | $\begin{array}{\|c} \hline \begin{array}{c} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array} \\ \hline \end{array}$ |  |  | Never | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \hline \text { or tice a } \\ \text { year } \end{array}$ | $\begin{array}{\|c} \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { month } \end{array} \\ \hline \hline \end{array}$ | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \substack{\text { ont wiece } \\ \text { week } \\ \hline} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}$ |  |  |  |
| (2. Practice or review | © | $\odot$ | $\odot$ | $\odot$ | $\bigcirc$ | meomz | a. Practice or review <br> mathematics topics | © | $\bullet$ | $\odot$ | $\odot$ | - | vreom |  |  |
| b. Extend mathematics learning with enrichment activities | © | $\oplus$ | $\odot$ | $\odot$ | © | vyeoms | $\begin{aligned} & \text { b. Extend mathematics } \\ & \text { leaning with } \\ & \text { enrichment activities } \end{aligned}$ | © | © | $\odot$ | $\oplus$ | $\odot$ | virems |  |  |
| c. Research mathematics topics on the Internet | © | © | $\odot$ | $\odot$ | ${ }^{\circ}$ | Sens | $\begin{aligned} & \text { c. Research mathematics } \\ & \text { topics on the Internet } \end{aligned}$ |  | ${ }^{\circ}$ | $\odot$ | $\bullet$ | ${ }^{\circ}$ | 20ens |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| 11. In your mathematics class this year, how often do you use assessment results to do each of the following? Select one circle in each row. |  |  |  |  |  |  | N/A |  |  |  |  |  |  | D | This item was |
|  | Never | $\begin{aligned} & \text { About once } \\ & \text { or twice a } \\ & \text { year } \end{aligned}$ | $\begin{array}{\|c} \substack{\text { About once } \\ \text { or wive a } \\ \text { month a }} \end{array}$ | $\begin{array}{\|c} \text { About once } \\ \text { or wice a } \\ \text { week } \end{array}$ | $\begin{array}{\|c\|} \hline \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}$ |  |  |  |  |  |  |  |  |  | dropped to reduce |
| a. Discuss the progress <br> your students have <br> made toward <br> individually set goals | © | $\odot$ | $\odot$ | $\odot$ | ${ }^{\circ}$ | vunese |  |  |  |  |  |  |  |  | burden. |
| b. Adjust your teaching <br> strategies to meet the <br> current learning needs <br> of individual students | $\odot$ | $\oplus$ | $\odot$ | $\odot$ | ${ }^{\circ}$ | nneses |  |  |  |  |  |  |  |  |  |
| c. Adjust your teaching <br> strategies to reflect <br> your instructional <br> obictives for the <br> classroom | © | ${ }^{\circ}$ | $\odot$ | $\oplus$ | © | vuems |  |  |  |  |  |  |  |  |  |
| d. Discuss class progress with school administrators | $\odot$ | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | vueses |  |  |  |  |  |  |  |  |  |
| e. Discuss class progress with other colleagues | $\oplus$ | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | vinest |  |  |  |  |  |  |  |  |  |
| (2017 Grade 4) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Operational Grade 4 Mathematics Teacher

| Previous item |  |  |  | 2019 item |  |  |  |  | D/A/ <br> R/NC+ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12. In your mathematics class this year, do you use any of the following instructionalmaterials Selct |  |  |  | 9. In your mathematics class this year, do you use any of the following instructional materials? Select one circle in each row. |  |  |  |  | R | The data captured by the "other please specify" option informed subitems to be added. Previous subitems "c" was dropped since 95\% responded "Yes". Based on the grade 8 piloted version of this item, sub-items "d", "e", "f", and " $g$ " were added. |
|  | Yes | No |  |  |  | No, I do not | No. this resource |  |  |  |
| - Textlouks provided by your district or | $\infty$ | © | numan |  | Yes | prefer to use this resource. | $\begin{gathered} \text { is not turaiserailice to } \\ \text { me. } \end{gathered}$ |  |  |  |
| b. Other materials provided by your district or | $\oplus$ | $\oplus$ | wames | a. Textbooks provided by your | © | $\oplus$ | $\odot$ | verses |  |  |
| c. Materials found on the Internet | © | ${ }_{\square}$ | notus | b. Other materials provided by your | © | $\oplus$ | $\odot$ | \%se4 |  |  |
| d. Mattrials you have crrated | $\infty$ | ${ }^{\circ}$ | nuway | c. Mastretrials syou have created | © | $\oplus$ | $\odot$ | vessaz |  |  |
|  | © | ${ }^{\circ}$ | nower | d. Printed workbooks | $\stackrel{\square}{\odot}$ | ${ }_{\square}{ }^{\circ}$ | $\stackrel{\circ}{\circ}$ | visseal |  |  |
| (2017 Grade 4) |  |  |  |  | $\odot$ | $\odot$ | - | vizaser |  |  |
|  |  |  |  | f. Digital games | $\oplus$ | ${ }^{\circ}$ | $\odot$ | vassem |  |  |
|  |  |  |  | g. Interactive whiteboard | $\oplus$ | ${ }^{\circ}$ | - | virssem |  |  |
|  |  |  |  | Issue: Resources for Learning and Instruction |  |  |  |  |  |  |
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+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## Grade 4 Mathematics Teacher

| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15. When you teach mathematics to your fourth-grade class. do you do any of the following? Select one circle in each row. |  |  |  |  |  | 12. When you teach mathematics to your fourth-grade class, do you do any of the following? Select one circle in each row. |  |  |  |  |  | NC | N/A |
|  | Not at all | Small extent | $\begin{gathered} \text { Moderate } \\ \text { extent } \\ \hline \hline \end{gathered}$ | Large extent |  |  | Not at all | Small extent | Moderate extent | Large extent |  |  |  |
| $\begin{array}{\|l\|} \hline \text { a. Sel different a chivevenentr } \\ \text { standard for some } \\ \text { students } \end{array}$ | © | ¢ | $\cdots$ | © | noma | a. Set different achievement students | © | (1) | $\odot$ | $\odot$ | 2ens |  |  |
|  | * | (1) | $\bigcirc$ | ${ }^{\circ}$ | mas | $\begin{array}{\|l\|} \hline \text { b. Supplement the regular } \\ \text { course curriculum with } \\ \text { additional material for } \\ \text { some students } \end{array}$ | © | ${ }^{(1)}$ | $\odot$ | ${ }^{\circ}$ | Lame |  |  |
| c. Have some students engage <br> in difterent classroom <br> activitics$\|$d. Use a different set of | © | © | $\cdots$ | © | m | some students <br> c. Have some students engage <br> in different classroom <br> activities | © | © | $\odot$ | $\oplus$ | vinams |  |  |
| d. Use a different set of <br> methods in teaching some <br> strudents | $\infty$ | ${ }^{\circ}$ | $\odot$ | $\infty$ | m" | activities <br> d. Use a different set of <br> methods in teaching some <br> students <br> e. | © | $\oplus$ | $\odot$ | $\odot$ | vizamer |  |  |
| differently for some | © | ${ }^{(1)}$ | - | $\oplus$ | nuexs | e. Pace my teaching <br> differently for some <br> students | © | © | $\odot$ | $\oplus$ |  |  |  |
| (2017 Grade 4) |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |
| 16. How often do you use each of the following to assess student progress in mathematics? Select one circle in each row. |  |  |  |  |  | N/A |  |  |  |  |  | D | This item was dropped to reduce burden. |
|  | $\begin{aligned} & \text { Never of } \\ & \text { hardily ever } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { Once or wisce } \\ \text { a yeat } \end{gathered}\right.$ | Once or twice a month | Once on wise |  |  |  |  |  |  |  |  |  |
| a. Mulipiple-choice tests | © | $\pm$ | - | ¢ | - |  |  |  |  |  |  |  |  |
| b. $\begin{gathered}\text { bmall } \text { mpoicet hased } \\ \text { assignments }\end{gathered}$ | © | ¢ | - | $\oplus$ | - |  |  |  |  |  |  |  |  |
| c. Individual students colliahorating on group assignments | $\omega$ | $\oplus$ | - | $\oplus$ | * |  |  |  |  |  |  |  |  |
| (2017 Grade 4) |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^1]
## Grade 4 Mathematics Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17. In your mathematics class this year, how often do you do each of the following with individual students to assess their progress in mathematics? Select one circle in each row. |  |  |  |  |  |  | 13. In your mathematics class this year, how often do you do each of the following with individual students to assess their progress in mathematics? Select one circle in each row. |  |  |  |  |  |  | R | Sub-item "a" <br> was revised <br> to remove <br> the word <br> "Regularly" <br> for <br> clarification <br> with the <br> response options. |
|  | Never | $\begin{gathered} \text { About once } \\ \text { or wive a } \\ \text { owear } \end{gathered}$ | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { month } \end{gathered}$ |  | $\begin{gathered} \text { Every day or } \\ \text { every tay } \\ \text { ever da } \end{gathered}$ |  |  | Never | $\begin{gathered} \text { About once } \\ \text { or rwice } \\ \text { year } \end{gathered}$ | About once month | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice } \\ \text { week } \end{array} \\ \text { wit } \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Every day or or } \\ \text { every stay } \end{array} \\ \text { every day } \end{array}$ |  |  |  |
| a. Regularly discuss each <br> student's current level <br> of performance with <br> them | © | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\oplus$ | mbs | a. Discuss each student's current level of performance with them | © | $\odot$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ | vinssr |  |  |
| b. Set goals for specific progres the student would like to make | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | $\odot$ | Sess | b. Set goals for specific progress the student would like to make | © | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\odot$ | vreons |  |  |
| c. Discuss progress the <br> student has made <br> toward goals <br> previously set <br> atict | $\oplus$ | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | Seso | c. Discuss progress the <br> student has made <br> toward goals <br> previously set | © | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | 26se |  |  |
| $\begin{aligned} & \text { d. Determine how to } \\ & \text { adiust your teaching } \\ & \text { strategies to ceet the } \\ & \text { student's current } \\ & \text { learning needs } \end{aligned}$ | © | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | vruses |  | © | ${ }^{1}$ | $\odot$ | $\oplus$ | $\odot$ | nteess |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| 18. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  | 14. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | ( $\begin{gathered}\text { Notatall } \\ \text { likely }\end{gathered}$ | Not likely | $\begin{aligned} & \text { Somewhat } \\ & \text { likely } \end{aligned}$ | Quite likely | $\begin{array}{\|c} \substack{\text { Extremely } \\ \text { likely }} \\ \hline \end{array}$ |  |  | Not at all likely | Not likely | $\begin{aligned} & \text { Somewhat } \\ & \text { likely } \end{aligned}$ | Quite likely | $\begin{gathered} \text { Extremely } \\ \text { likely } \\ \hline \end{gathered}$ |  |  |  |
|  | © | $\oplus$ | $\odot$ | $\Phi$ | Ф | mom | a. My students did well because they studied and were prepared. | © | © | $\bigcirc$ | $\odot$ | © | нрмпи |  |  |
|  | © | © | $\odot$ | $\Phi$ | $\pm$ | venw | b. My students did well lot of effort. | © | $\oplus$ | $\odot$ | $\odot$ | $\oplus$ | ntrase |  |  |
|  | © | $\oplus$ | $\odot$ | ¢ | $\oplus$ |  | lot of effort. <br> c.My students did well <br> because they always | © | $\oplus$ | $\bigcirc$ | © | © | verroses |  |  |
| $\begin{array}{\|l} \text { d. My students did well } \\ \text { because tauyht the } \\ \text { conccppts wcll. } \end{array}$ | c | $\oplus$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ |  | do well on tests. | - |  |  |  |  |  |  |  |
| e. My students did well becuse hhy guessed wcll on the test. | $\infty$ | ${ }^{\circ}$ | $\bigcirc$ | $\omega$ | © | nuwic | $\begin{array}{\|l} \begin{array}{l} \text { because I taught the } \\ \text { concepts well. } \end{array} \\ \hline \text { e. My students did well } \end{array}$ | © | © | $\odot$ | $\odot$ | $\odot$ |  |  |  |
| f. My students did well because they are just | $\oplus$ | ${ }^{\circ}$ | $\cdots$ | $\oplus$ | $\oplus$ | w | e. My students did well because thy guessed well on the test. | © | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\odot$ | verras |  |  |
|  |  |  |  |  |  |  | $\begin{array}{\|l\|} \hline \text { f. My students did well } \\ \text { because they are just } \\ \text { good at math. } \end{array}$ | © | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | \%20¢3 |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Teacher Pr | Issue: Teacher Preparation |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| Grade 4 Mathematics Teacher |  |  |  |
| :---: | :---: | :---: | :---: |
| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 19. In your mathematics classes this year, how often did you encourage your students <br> to participate in mathematics activities outside of school? <br> (4) Never <br> (B) About once or twice a year <br> © About once or twice a month <br> (1) About once or twice a week <br> (1) Every day or almost every day <br> (2017 Grade 4) | 15. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school? <br> (4) Never <br> (B) About once or twice a year <br> © About once or twice a month <br> (1) About once or twice a week <br> (1) Every day or almost every day <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 20. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school? <br> (4) Never <br> (8) Once <br> © Two or three times <br> (1) Four or five times <br> (2) More than five times <br> (2017 Grade 4) | 16. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school? <br> (4) Never <br> (B) Once <br> © Two or three times <br> (1) Four or five times <br> (b) More than five times <br> Issue: Resources for Learning and Instruction | NC | N/A |

[^2]
## Appendix K-2r: Operational Grade 4 Mathematics

1. Which best describes your role in teaching mathematics to this class?
(A) I do not teach mathematics to this class.
(B) I teach all or most subjects, including mathematics.
© The only subject I teach is mathematics.
(D) We team teach, and I have primary responsibility for teaching mathematics.
2. How many students are in this class? Enter the number of students.

3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes and include in-class time only.
$\qquad$ hours and $\qquad$ minutes per week
4. Approximately how much mathematics homework do you assign to students in this class each day?
(A) None
(B) 15 minutes
© 30 minutes
(D) 45 minutes
(E) One hour
() More than one hour
5. To what extent are students permitted to use calculators during mathematics lessons?
(A) Unrestricted use
(B) Restricted use
© Calculators are not permitted.
6. What kind of calculator do your students usually use during mathematics lessons?
(A) None
© Basic four-function (addition, subtraction, multiplication, division)
© Scientific (not graphing)
(D) Graphing
7. When you give students a mathematics test or quiz, how often do they use a calculator?
(4) Never
(B) Sometimes
© Always
8. In your mathematics class this year, how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Practice or review mathematics topics | (4) | (B) | © | (1) | (1) | VH269922 |
| b. Extend mathematics learning with enrichment activities | (4) | (B) | © | (1) | (1) | VH269923 |
| c. Research mathematics topics on the Internet | (4) | (B) | © | (1) | (1) | vH269924 |

9. In your mathematics class this year, do you use any of the following instructional materials? Select one circle in each row.

|  | Yes | No, I do not prefer to use this resource. | No, this resource is not available to me. |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Textbooks provided by your district or school | (4) | (B) | © | VH845833 |
| b. Other materials provided by your district or school | (4) | (B) | © | VH845834 |
| c. Materials you have created | (4) | (B) | © | VH845842 |
| d. Printed workbooks | (4) | (B) | © | vH845840 |
| e. Physical and/or digital manipulatives | (4) | (B) | © | vH845837 |
| f. Digital games | (4) | (8) | © | VH845841 |
| g. Interactive whiteboard | (4) | (B) | © | vH845844 |

10. Thinking about your fourth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the following? Select one circle in each row.

|  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Use alternate methods to solve problems when the first method does not work | (4) | (B) | © | © | (1) | vH270274 |
| b. Explain one's thinking and make connections between models and equations | (4) | (B) | © | (1) | (1) | vH270275 |
| c. Make assumptions | (4) | (8) | $\bigcirc$ | (1) | © | vH617226 |
| d. Make approximations | (4) | (8) | © | (1) | © | vH617227 |
| e. Represent a problem situation with numbers, words, pictures, or charts | (4) | (B) | © | (1) | (e) | vH270277 |
| f. Understand tools for problem solving and limitations of use | (4) | (B) | © | (1) | (1) | vH270278 |
| g. Use clear and precise language to discuss problem solving and reasoning | (4) | (B) | © | (1) | (1) | vH847655 |

11. Think about your plans for this mathematics class for the entire year. How much emphasis did you or will you give each of the following? Select one circle in each row.

|  | Little or no emphasis | Moderate emphasis | Heavy emphasis |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Numbers and operations | (4) | (8) | © | vH240851 |
| b. Measurement | (4) | (B) | $\bigcirc$ | VH240852 |
| c. Geometry | (4) | (B) | © | vH240853 |
| d. Data analysis, statistics, and probability | (4) | (8) | © | vH240856 |
| e. Algebra and functions | (4) | (B) | © | VH240854 |

12. When you teach mathematics to your fourth-grade class, do you do any of the following? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Set different achievement standards for some students | (4) | (8) | © | (1) | VH240874 |
| b. Supplement the regular course curriculum with additional material for some students | (4) | (B) | © | (1) | VH240875 |
| c. Have some students engage in different classroom activities | (4) | (B) | © | (1) | vH240878 |
| d. Use a different set of methods in teaching some students | (1) | (B) | $\bigcirc$ | (1) | vH24087 |
| e. Pace my teaching differently for some students | (1) | (B) | © | (1) | VH240876 |

13. In your mathematics class this year, how often do you do each of the following with individual students to assess their progress in mathematics? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Discuss each student's current level of performance with them | (4) | (B) | © | (1) | (e) | vH845878 |
| b. Set goals for specific progress the student would like to make | (1) | (B) | © | (1) | (1) | vH269928 |
| c. Discuss progress the student has made toward goals previously set | (4) | (B) | © | (1) | (®) | VH269930 |
| d. Determine how to adjust your teaching strategies to meet the student's current learning needs | (4) | (B) | © | (1) | (1) | vH269931 |

14. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (4) | (B) | © | (1) | (1) | VH270306 |
| b. My students did well because they put in a lot of effort. | (4) | (B) | $\bigcirc$ | (1) | (1) | VH270307 |
| c. My students did well because they always do well on tests. | (4) | (B) | © | (1) | (E) | VH270308 |
| d. My students did well because I taught the concepts well. | (4) | (B) | © | (1) | (E) | VH270309 |
| e. My students did well because they guessed well on the test. | (4) | (B) | © | (1) | (E) | VH270311 |
| f. My students did well because they are just good at math. | (4) | (B) | © | (1) | (1) | VH270313 |

15. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school?
(4) Never
(B) About once or twice a year
© About once or twice a month
(1) About once or twice a week
(E) Every day or almost every day
16. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school?
(A) Never
(B) Once
© Two or three times
(D) Four or five times
(E) More than five times

Appendix K-2s: Summary of Changes Pilot Grade 4 Mathematics

2019 Pilot Grade 4 Mathematics Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 1. Which best describes your role in teaching mathematics to this class? <br> (2) I do not teach mathematics to this class. Questions 2-20 are not applicable and will be skipped. <br> (1) I teach all or most subjects, including mathematics. <br> © The only subject I teach is mathematics. <br> (1) We team teach. and I have primary responsibility for teaching mathematics. <br> (2017 Grade 4) | 1. Which best describes your role in teaching mathematics to this class? <br> (2) I do not teach mathematics to this class, <br> (D) I teach all or most subjects, including mathematics. <br> (2) The only subject I teach is mathematics. <br> (1) We team teach, and I have primary responsibility for teaching mathematics. <br> Issue: Resources for Learning and Instruction | NC | Please note that no content changes were made to the item but the skip pattern text was removed from the item given the transition from PBA to DBA. |
| 2. How many students are in this class? Enter the number of students. $\square$ <br> (2017 Grade 4) | 2. How many students are in this class? Enter the number of students. $\square$ <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week | 3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes and include in-class time only. $\qquad$ hours and $\qquad$ minutes per week | R | As per the Standing <br> Committee recommendat ion, the text "and include in-class time only" was added to the inline directions to clarify mathematics instruction as the time spent |

[^3]2019 Pilot Grade 4 Mathematics Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| (2017 Grade 4) | Issue: Resources for Learning and Instruction |  | instructing in class. |
| 4. Are students assigned to this class by achievement level? <br> (D) Yes <br> (D) No <br> (2017 Grade 4) | N/A | D | This item was dropped to reduce burden. |
| 5. Do you create groups within this class for mathematics instruction on the basis of achievement level? <br> (a) Yes <br> (1) No <br> (2017 Grade 4) | N/A | D | This item was dropped to reduce burden. |
| 6. What kind of calculator do your students usually use during mathematics lessons? None Basic four-function (addition, subtraction, multiplication, division) Scientific (not graphing) Graphing <br> (2017 Grade 4) | 11. What kind of calculator do your students usually use during mathematics lessons? None Basic four-function (addition, subtraction, multiplication, division) Scientific (not graphing) Graphing <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 7. Approximately how much mathematics homework do you assign to students in this class each day? <br> (D) None <br> (1) 15 minutes <br> © 30 minutes <br> (1) 45 minutes <br> (1) One hour <br> (1) More than one hour <br> (2017 Grade 4) | 9. Approximately how much mathematics homework do you assign to students in this class each day? None 15 minutes 30 minutes 45 minutes One hour More than one hour <br> Issue: Organization of instruction | NC | N/A |
| 8. To what extent are students permitted to use calculators during mathematics lessons? <br> (4) Unrestricted use <br> (1) Restricted use <br> © Calculators are not permitted. <br> (2017 Grade 4) | 10. To what extent are students permitted to use calculators during mathematics lessons? <br> (4) Unrestricted use <br> (1) Restricted usc <br> © Calculators are not permitted. | NC | N/A |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Issue: Organization of instruction |  |  |  |  |  |  |  |  |
| 9. When you give students a mathematics test or quiz, how often do they use a calculator? <br> (2) Never <br> (b) Sometimes <br> (0) Always <br> (2017 Grade 4) |  |  |  |  |  |  | 12. When you give students a mathematics test or quiz. how often do they use a calculator? Never Sometimes Always <br> Issue: Organization of instruction |  |  |  |  |  |  | NC | N/A |
| 10. In your mathematics class this year. how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following! Select one circle in each row. |  |  |  |  |  |  | 7. In your mathematics class this year. how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | Never | $\begin{array}{\|c\|} \hline \text { About once } \\ \text { or twice a } \\ \text { year } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { About once } \\ \text { or twice a } \\ \text { month } \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { week } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array} \\ \hline \end{array}$ |  |  | Never | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { year } \end{gathered}$ | About once or twice a month | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { week } \end{array} \\ \hline \end{array}$ | Every day or almost almost every day |  |  |  |
| a. Practice or review mathematics topics ares | $\oplus$ | © | $\odot$ | $\oplus$ | ¢ | noma | a. Practice or review mathematics topics | © | $\oplus$ | $\bigcirc$ | $\bullet$ | $\Phi$ | m |  |  |
|  | © | © | - | © | © | ${ }^{\text {now }}$ | b. Extend mathematics | © | © | $\bigcirc$ | © | © | ma |  |  |
| $\begin{aligned} & \text { c. Rescarch mathematics } \\ & \text { topics on the Intennet } \end{aligned}$ | © | © | $\odot$ | ${ }^{\circ}$ | $\oplus$ | $\pm$ | $\begin{array}{\|l\|l} \text { enrichment activities } \\ \hline \text { c. Research mathematics } \\ \text { topics on the Internet } \\ \hline \end{array}$ | © | © | $\bigcirc$ | $\odot$ | ${ }^{\circ}$ |  |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Organization of instruction |  |  |  |  |  |  |  |  |
| 11. In your mathematics class this year, how often do you use assessment results to do each of the following? Select one circle in each row. |  |  |  |  |  |  | N/A |  |  |  |  |  |  | D | This item was dropped to reduce burden. |
|  | Never | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { year } \end{gathered}$ |  | $\begin{array}{\|l\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { week } \end{array} \\ \hline \end{array}$ | $\left\|\begin{array}{c} \text { Every day or } \\ \text { almose } \\ \text { every day } \end{array}\right\|$ |  |  |  |  |  |  |  |  |  |  |
| a. Discuss the progress <br> your students have <br> made toward <br> individually set goals <br> bider | © | $\oplus$ | $\odot$ | $\oplus$ | ¢ | nuems |  |  |  |  |  |  |  |  |  |
| b. Adiust your teaching <br> strategies to meet the <br> current leaming needs <br> of individual students | © | $\oplus$ | - | $\oplus$ | $\oplus$ | 븐 |  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l\|} \hline \text { c. Adiust your teaching } \\ \text { strategies to reflect } \\ \text { your instructional } \\ \text { obivectives for the } \\ \text { classroom } \\ \hline \end{array}$ | © | © | $\odot$ | $\oplus$ | $\oplus$ | asa |  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l\|} \hline \text { d. Discuss class progress } \\ \text { with school } \\ \text { administrators } \\ \hline \end{array}$ | © | © | $\odot$ | ¢ | ${ }^{\circ}$ | $\cdots$ |  |  |  |  |  |  |  |  |  |
| e. Discuss class progress | $\odot$ | ${ }^{\circ}$ | $\bigcirc$ | $\stackrel{\square}{\circ}$ | ${ }^{\circ}$ | numer |  |  |  |  |  |  |  |  |  |
| (2017 Grade 4) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^4]

[^5]

[^6]| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15. When you teach mathematics to your fourth-grade class, do you do any of the following? Select one circle in each row. |  |  |  |  |  | 14. When you teach mathematics to your fourth-grade class, do you do any of the following: Select one circle in cach row. |  |  |  |  |  | R | Sub-item " f " is new. It was created to address the ADC's comment on including an item that captured a UDL-oriented approach. |
|  | Notatall | Small extent | $\begin{gathered} \text { Moderate } \\ \text { extent } \\ \hline \end{gathered}$ | Large extent |  |  | Not at all | Small extent | Moderate extent | Large extent |  |  |  |
| a. Sct different a ahiciecment <br> standard for some <br> sutudents | © | $\oplus$ | © | $\oplus$ | nemes | $\begin{aligned} & \text { a. Set different achievement } \\ & \text { standards for some } \\ & \text { students } \end{aligned}$ | © | $\oplus$ | $\bigcirc$ | © |  |  |  |
| $\begin{array}{\|l} \text { b. Supplement the regular } \\ \text { coorse curriculum with } \\ \text { additional material for } \\ \text { some students } \end{array}$ | © | $\oplus$ | $\odot$ | © | ass | b. Supplement the regular <br> course curriculum with <br> additional material for <br> some sudents | © | © | $\odot$ | © | neams |  |  |
| c. Have some students engage in differcnt classoom activitics | © | $\oplus$ | $\odot$ | $\oplus$ | ars | $\begin{aligned} & \text { c. Have some students engage } \\ & \text { in different classroom } \\ & \text { activitics } \end{aligned}$ | © | © | $\odot$ | $\oplus$ | Itasis |  |  |
|  | $\oplus$ | © | $\odot$ | $\oplus$ | noear | $\begin{array}{\|l\|} \hline \text { activitics } \\ \hline \text { d. Use a different set of } \\ \text { methods in teaching some } \\ \text { students } \end{array}$ | © | ${ }^{1}$ | $\odot$ | © |  |  |  |
| $\begin{array}{\|l\|} \hline \text { e. Pace my teaching } \\ \text { differently for some } \\ \text { students } \end{array}$ | © | $\oplus$ | $\odot$ | © | moss | studcuts <br> e. Pace my teaching <br> diffrently <br> students for some <br> . | $\oplus$ | © | $\cdots$ | $\oplus$ | Hound |  |  |
|  |  |  |  |  |  | Provide multiple <br> represcrations of concepts <br> and guide students to <br> express what the know <br> using various formats | © | ${ }^{\text {® }}$ | $\odot$ | © | ${ }^{*}$ |  |  |
| (2017 Grade 4) |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |
| 16. How often do you use each of the following to assess student progress in mathematics? Select one circle in each row. |  |  |  |  |  | N/A |  |  |  |  |  | D | This item was dropped to reduce burden. |
|  | Never or hardly ever | Once or twice a year | Once or twice a month | Once or twice a week |  |  |  |  |  |  |  |  |  |
| 2. Multiple-chaice tests | © | © | $\bigcirc$ | © | 2masis |  |  |  |  |  |  |  |  |
| b. Small project-based | © | ${ }^{\square}$ | © | © | mpams |  |  |  |  |  |  |  |  |
| c. Individual students collaborating on group assignments | © | (1) | $\bigcirc$ | $\odot$ | numss |  |  |  |  |  |  |  |  |
| (2017 Grade 4) |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^7]2019 Pilot Grade 4 Mathematics Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17. In your mathematics class this year, how often do you do each of the following with individual students to assess their progress in mathematics? Select one circle in each row. |  |  |  |  |  |  | 5. In your mathematics class this year, how offen do you do each of the following with individual students to assess their progress in mathematics? Select one circle in each row. |  |  |  |  |  |  | R | Sub-item "a" was revised to remove the word "Regularly" for clarification with the response options. |
|  | Never | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { year } \end{gathered}$ | $\begin{array}{\|c} \text { About once } \\ \text { or rwice a } \\ \text { month } \end{array}$ | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \hline \text { or twiek } \\ \text { oreek a } \end{array}$ | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \hline \text { avery day } \\ \text { ever } \end{array}$ |  |  | Never | $\begin{array}{\|c} \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array} \\ \hline \end{array}$ | About once or twice a month | $\begin{aligned} & \text { About once } \\ & \text { or twice a } \\ & \text { week } \end{aligned}$ | $\begin{array}{\|c} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}$ |  |  |  |
|  | ${ }^{\text {® }}$ | ${ }^{\circ}$ | © | ${ }^{\circ}$ | $\pm$ | nuens | a. Discuss cach student's current level of performance with them | © | © | $\bigcirc$ | $\oplus$ | ${ }^{\circ}$ | - |  |  |
| $\begin{aligned} & \text { b. Set goals for specitic } \\ & \text { ppoggess the sudent } \\ & \text { would like to make } \end{aligned}$ | ${ }^{\circ}$ | ${ }^{\circ}$ | $\odot$ | $\oplus$ | Ф | max | b. Set goals for spccific progress the student would like to make | © | $\oplus$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ | mbeses |  |  |
| $\begin{array}{\|l\|} \hline \text { c. Discuss progress the } \\ \begin{array}{c} \text { Dutudnt has mate } \\ \text { soward gals } \\ \text { previously set } \end{array} \\ \hline \end{array}$ | (1) | © | $\odot$ | $\oplus$ | $\odot$ | m | $\begin{aligned} & \text { c. Discuss progress the } \\ & \text { student thas made } \\ & \text { toward goals } \\ & \text { previously set } \\ & \hline \end{aligned}$ | © | © | $\cdots$ | $\oplus$ | Ф | nemen |  |  |
| $\begin{aligned} & \text { d. Deternine how to } \begin{array}{l} \text { ddiust your teaching } \\ \text { strateges to meet the } \\ \text { students current } \\ \text { searning needs } \end{array} \\ & \hline \end{aligned}$ | © | ${ }^{(1)}$ | © | $\odot$ | $\oplus$ | sas |  | © | ${ }^{\circ}$ | $\odot$ | © | Ф | mas |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| 18. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  | 15. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in cach row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{gathered} \text { Not at all } \\ \text { likely } \end{gathered}$ | Not likely | $\substack{\text { Somewhat } \\ \text { likely }}$ | Quite likely | $\begin{gathered} \hline \begin{array}{c} \text { Extremely } \\ \text { likely } \end{array} \\ \hline \hline \end{gathered}$ |  |  | $\begin{gathered} \text { Not at all } \\ \text { likely } \end{gathered}$ | Not likely | $\begin{aligned} & \text { Somewhat } \\ & \text { likely } \end{aligned}$ | Quite likely | $\begin{gathered} \text { Extremely } \\ \text { likely } \end{gathered}$ |  |  |  |
| a. My sudents did well <br> because they studied <br> and were prepared. | $\oplus$ | © | $\odot$ | $\oplus$ | $\oplus$ | nmax | a. My students did well because they sudied and were prepared. | © | ${ }^{(1)}$ | $\odot$ | $\oplus$ | © | nemmex |  |  |
| $\begin{array}{\|l} \hline \text { b. My sudents did well } \\ \text { becausc they put in a } \\ \text { lot of effort. } \end{array}$ | ${ }^{\circ}$ | ${ }^{(1)}$ | $\odot$ | © | $\oplus$ | amm | b. My students did well because they put in a lot of effort. | (1) | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | nerow |  |  |
| $\begin{aligned} & \text { c. My students did well } \\ & \text { because they always } \\ & \text { do well on tests. } \\ & \hline \end{aligned}$ | ® | Ф | $\cdots$ | $\oplus$ | $\oplus$ | nevom | c. My sudcnts did well <br> because they always <br> do well on tests. <br> d. | © | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | nurowes |  |  |
|  | - | ${ }^{\circ}$ | $\odot$ | $\odot$ | Ф | \%anmm | $\begin{aligned} & \text { d. My Msudents did well } \\ & \text { because I taught the } \\ & \text { concepts well. } \\ & \hline \end{aligned}$ | © | © | $\cdots$ | $\oplus$ | © | vnvum |  |  |
| $\begin{array}{\|l\|l\|} \hline \text { c. My students did well } \\ \text { because hhy guessed } \\ \text { well on the test. } \end{array}$ | - | © | $\odot$ | © | © | nparim | e. My students did well because hey gucssed well on the test. | © | $\oplus$ | $\odot$ | © | © | \%120m |  |  |
| $\begin{array}{\|l} \text { f. My students did well } \\ \text { becouse they are just } \\ \text { good at math. } \end{array}$ | © | ${ }^{( }$ | $\odot$ | © | © | 13 | $\begin{array}{\|l\|} \hline \text { f. My students did well } \\ \text { becease they are just } \\ \text { good at math. } \\ \hline \end{array}$ | (1) | $\pm$ | $\odot$ | © | $\oplus$ | \%12003 |  |  |
| (2017 Grade 4) |  |  |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |  |  |

[^8]
## 2019 Pilot Grade 4 Mathematics Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 19. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school? <br> (4) Never <br> (1) About once or twice a year <br> (6) About once or twice a month <br> (1) About once or twice a week <br> (1) Every day or almost every day <br> (2017 Grade 4) | 16. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school? <br> (4) Never <br> (1) About once or twice a year <br> (c) About once or twice a month <br> (1) About once or twice a week <br> (c) Every day or almost every day <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 20. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school? <br> (4) Never <br> (1) Once <br> © Two or three times <br> (1) Four or five times <br> (L) More than five times <br> (2017 Grade 4) | 17. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school? <br> (4) Never <br> (1) Once <br> © Two or three times <br> (D) Four or five times <br> (1) More than five times <br> Issue: Resources for Learning and Instruction | NC | N/A |
| N/A | 6. How often do you use long written responses (e.g., several sentences or paragraphs) to assess student progress in mathematics? <br> (4) Never or hardly ever <br> (1) Once or twice a year <br> (6) Once or twice a month <br> (1) Once or twice a week <br> Issue: Organization of instruction | A | This item was part of a matrix. The other subitems in the matrix were dropped and this item was revised to a discrete item. |

[^9]2019 Pilot Grade 4 Mathematics Teacher

| Previous item | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N/A | 18. How well has your education and professional training prepared you to teach students with the following attributes? Select one circle in each row. |  |  |  |  |  |  | A | This item is new and was added to math based on it being part of coglabs for the 2019 Reading pilot. |
|  |  | $\begin{array}{\|c\|c\|} \hline \text { Not well at } \\ \text { ail } \end{array}$ | A little | Somewhat | Quite a bit | $\begin{gathered} \text { Extremely } \\ \text { well } \end{gathered}$ |  |  |  |
|  | a. Students lacking prerequisite knowledge or skills | © | (1) | - | © | © | mas |  |  |
|  |  | © | ${ }^{(1)}$ | $\odot$ | ${ }^{\circ}$ | $\oplus$ | mose |  |  |
|  | c. Distuptive students | ¢ | © | $\bullet$ | $\oplus$ | $\oplus$ | versees |  |  |
|  | d. Uninterested students | $\stackrel{\square}{\circ}$ | $\oplus$ | $\bigcirc$ | $\stackrel{\square}{\circ}$ | $\stackrel{\square}{\circ}$ | ynem |  |  |
|  | e. Enylish-language | ${ }^{\circ}$ | © | $\odot$ | ${ }^{\circ}$ | ${ }^{\circ}$ | nemon |  |  |
|  |  | © | © | © | ${ }^{\circ}$ | Ф | momb |  |  |
|  | (e) Students with | © | ${ }^{(1)}$ | $\odot$ | ${ }^{(1)}$ | ${ }^{\circ}$ | Nr |  |  |
|  | Issue: Resources for learning and instruction |  |  |  |  |  |  |  |  |

## Appendix K-2t: Pilot Grade 4 Mathematics

1. Which best describes your role in teaching mathematics to this class?
(A) I do not teach mathematics to this class.
(B) I teach all or most subjects, including mathematics.
(C) The only subject I teach is mathematics.
(D) We team teach, and I have primary responsibility for teaching mathematics.
2. How many students are in this class? Enter the number of students.

3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes and include in-class time only.
$\qquad$
4. In your mathematics class this year, do you use any of the following instructional materials? Select one circle in each row.

|  | Yes | No |  |
| :---: | :---: | :---: | :---: |
| a. Textbooks (print or digital) provided by your district or school | (1) | (8) | vH811602 |
| b. Printed workbooks | (1) | (8) | vH854173 |
| c. Physical and/or digital manipulatives | (A) | (8) | vH854175 |
| d. Digital games | (4) | (B) | vH854178 |
| e. Interactive panel (e.g., SMART board, Promethean ActivPanel) | (1) | (8) | vH854179 |
| f. Materials you have created | (4) | (B) | vH854180 |
| g. Math software and/or apps | (4) | (8) | vH854182 |
| h. Other materials provided by your district or school (e.g., math board games, math puzzles) | (1) | (B) | vH811624 |

5. In your mathematics class this year, how often do you do each of the following with individual students to assess their progress in mathematics? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Discuss each student's current level of performance with them | (4) | (B) | © | (1) | (E) | VH845878 |
| b. Set goals for specific progress the student would like to make | (4) | (B) | © | (1) | (c) | VH269928 |
| c. Discuss progress the student has made toward goals previously set | (4) | (B) | © | (1) | (E) | VH269930 |
| d. Determine how to adjust your teaching strategies to meet the student's current learning needs | (4) | (B) | © | (1) | (c) | VH269931 |

6. How often do you use long written responses (e.g., several sentences or paragraphs) to assess student progress in mathematics?
(A) Never or hardly ever
(B) Once or twice a year
© Once or twice a month
(D) Once or twice a week
7. In your mathematics class this year, how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Practice or review mathematics topics | (4) | (B) | © | (1) | © | VH269922 |
| b. Extend mathematics learning with enrichment activities | (4) | (B) | © | (1) | © | VH269923 |
| c. Research mathematics topics on the Internet | (4) | (B) | © | (1) | © | VH269924 |

8. Thinking about your fourth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the following? Select one circle in each row.

|  | No emphasis | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Use alternate methods to solve problems when the first method does not work | (4) | (B) | © | (1) | (1) | VH270274 |
| b. Explain one's thinking | (4) | (B) | © | (1) | (1) | VH888064 |
| c. Make connections between models and equations | (1) | (B) | © | (1) | (1) | VH888065 |
| d. Make assumptions using mathematical knowledge to solve a problem | (4) | (B) | © | (1) | (1) | VH812846 |
| e. Make approximations | (4) | (8) | © | (1) | (1) | vH617227 |
| f. Represent a problem situation with numbers, words, pictures, or charts | (4) | (B) | © | (1) | (1) | vH270277 |
| g. Understand tools for problem solving and limitations of use | (4) | (8) | © | (1) | (1) | vH270278 |
| h. Use clear and precise language when students are discussing their problem solving and reasoning | (4) | (B) | © | (1) | (1) | vH270279 |

9. Approximately how much mathematics homework do you assign to students in this class each day?
(A) None
(B) 15 minutes
© 30 minutes
(D) 45 minutes
(E) One hour
() More than one hour
10. To what extent are students permitted to use calculators during mathematics lessons?
(A) Unrestricted use
(B) Restricted use
© Calculators are not permitted.
11. What kind of calculator do your students usually use during mathematics lessons?
(A) None
© Basic four-function (addition, subtraction, multiplication, division)
© Scientific (not graphing)
(D) Graphing
12. When you give students a mathematics test or quiz, how often do they use a calculator?
(4) Never
(B) Sometimes
© Always
13. Think about your plans for this mathematics class for the entire year. How much emphasis did you or will you give each of the following? Select one circle in each row.

|  | Little or no emphasis | Moderate emphasis | Heavy emphasis |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Numbers and operations | (4) | (8) | © | vH240851 |
| b. Measurement | (4) | (B) | $\bigcirc$ | VH240852 |
| c. Geometry | (4) | (B) | © | vH240853 |
| d. Data analysis, statistics, and probability | (4) | (8) | © | vH240856 |
| e. Algebra and functions | (4) | (B) | © | VH240854 |

14. When you teach mathematics to your fourth-grade class, do you do any of the following? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Set different achievement standards for some students | (4) | (B) | $\bigcirc$ | (1) | vH200874 |
| b. Supplement the regular course curriculum with additional material for some students | (1) | (B) | $\bigcirc$ | (1) | vH240875 |
| c. Have some students engage in different classroom activities | (1) | (B) | © | (1) | VH240878 |
| d. Use a different set of methods in teaching some students | (4) | (B) | © | (1) | vH20087 |
| e. Pace my teaching differently for some students | (4) | (B) | © | (1) | vH200876 |
| f. Provide multiple representations of concepts and guide students to express what they know using various formats | (1) | (B) | © | (1) | vH811643 |

15. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (4) | (B) | © | (1) | (1) | VH270306 |
| b. My students did well because they put in a lot of effort. | (4) | (B) | $\bigcirc$ | (1) | (1) | VH270307 |
| c. My students did well because they always do well on tests. | (4) | (B) | © | (1) | (E) | VH270308 |
| d. My students did well because I taught the concepts well. | (4) | (B) | © | (1) | (E) | VH270309 |
| e. My students did well because they guessed well on the test. | (4) | (B) | © | (1) | (E) | VH270311 |
| f. My students did well because they are just good at math. | (4) | (B) | © | (1) | (1) | VH270313 |

16. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school?
(4) Never
(B) About once or twice a year
© About once or twice a month
(1) About once or twice a week
(E) Every day or almost every day
17. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school?
(4) Never
(B) Once
© Two or three times
(D) Four or five times
(E) More than five times
18. How well has your education and professional training prepared you to teach students with the following attributes? Select one circle in each row.

|  | Not well at all | A little | Somewhat | Quite a bit | Extremely well |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Students lacking prerequisite knowledge or skills | (4) | (B) | © | (1) | (1) | vH888067 |
| b. Students with special needs (e.g., physical disabilities, mental or emotional/ psychological impairment) | (1) | (B) | © | © | (1) | vH888068 |
| c. Disruptive students | (1) | (8) | © | (1) | (1) | vH888069 |
| d. Uninterested students | (4) | (B) | $\bigcirc$ | © | (1) | VH888070 |
| e. English-language learners (ELLs) | (4) | (B) | © | (1) | (e) | vH888071 |
| f. Gifted and talented students | (4) | (B) | © | (1) | (e) | VH888072 |
| g. Students with different cultural backgrounds (e.g., racial/ethnic, socioeconomic, religious) | (1) | (B) | © | (1) | (1) | vH888073 |

## Appendix K-2u: Summary of Changes Operational Grade 8

 Mathematics2019 Operational Grade 8 Mathematics Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 1. Which best describes your role in teaching mathematics to this class? <br> (1) I do not teach mathematics to this class. Questions 2-19 are not applicable and will be skipped. <br> (B) I teach all or most subjects, including mathematics. <br> © The only subject I teach is mathematics. <br> (1) We team teach, and I have primary responsibility for teaching mathematics. <br> (2017 Grade 8) | 1. Which best describes your role in teaching mathematics to this class? <br> (4) I do not teach mathematics to this class. <br> (8) I teach all or most subjects, including mathematics. <br> © The only subject I teach is mathematics. <br> (1) We team teach, and I have primary responsibility for teaching mathematics. <br> Issue: Resources for Learning and Instruction | NC | Please note that no content changes were made to the item but the skip pattern text was removed from the item given the transition from PBA to DBA. |
| 2. How many students are in this class? Enter the number of students. $\square$ <br> (2017 Grade 8) | 2. How many students are in this class? Enter the number of students. $\square$ $\square$ <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week <br> (2017 Grade 8) | 3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes and include in-class time only. $\qquad$ hours and $\qquad$ minutes per week <br> Issue: Resources for Learning and Instruction | R | As per the Standing Committee recommendat ion, the text "and include in-class time only" was added to the inline directions to clarify mathematics instruction as the time |

[^10]2019 Operational Grade 8 Mathematics Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
|  |  |  | spent instructing in class. |
| 4. Are students assigned to this class by achievement level? <br> (A) Yes <br> (B) No <br> (2017 Grade 8) | N/A | D | This item was dropped to reduce burden. |
| 5. What kind of calculator do your students usually use during mathematics lessons? <br> (4) None <br> (®) Basic four-function (addition, subtraction, multiplication, division) <br> © Scientific (not graphing) <br> (1) Graphing <br> (2017 Grade 8) | 6. What kind of calculator do your students usually use during mathematics lessons? <br> (4) None <br> (B) Basic four-function (addition, subtraction, multiplication, division) <br> © Scientific (not graphing) <br> (1) Graphing <br> Issue: Resources for Learning and Instruction | NC | N/A |

## 2019 Operational Grade 8 Mathematics Teacher

| Previous item |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6. Approximately how much mathematics homework do you assign to students in this class each day? <br> (4) None 15 minutes 30 minutes 45 minutes One hour <br> (1) More than one hour <br> (2017 Grade 8) |  |  |  |  |  |  | 4. Approximately how much mathematics homework do you assign to students in this class each day? <br> (4) None <br> (B) 15 minutes <br> © 30 minutes <br> (1) 45 minutes <br> (1) One hour <br> (1) More than one hour <br> Issue: Organization of Instruction |  |  |  |  |  |  | NC | N/A |
| 7. In your mathematics class this year, how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in esch row. |  |  |  |  |  |  | 8. In your mathematics class this year, how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | Never | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { year } \end{gathered}$ | $\begin{aligned} & \text { About once } \\ & \text { or twice a } \\ & \text { month } \end{aligned}$ | $\begin{gathered} \text { About ance } \\ \text { or twice a } \\ \text { week } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}$ |  |  | Never | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or wive a } \\ \text { year } \end{array} \\ \hline \end{array}$ | About once or twice a month | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { week } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}$ |  |  |  |
| - ${ }_{\text {a. Practice or revicw }}^{\text {mathematics topics }}$ | © | ¢ | - | © | © | nem | (2. Practice or review | © | $\odot$ | $\odot$ | $\odot$ | © | m |  |  |
|  | ๑ | ${ }^{\circ}$ | $\odot$ | $\bullet$ | ${ }^{\circ}$ |  |  | © | ${ }^{\circ}$ | - | $\odot$ | $\odot$ |  |  |  |
| c. Rescarch mathematicy topics on the Intemet | © | ¢ | $\omega$ | $\oplus$ | Ф |  | $\begin{array}{\|c\|} \hline \text { c. Rescarch mathematics } \\ \text { topics on the Internet } \\ \hline \end{array}$ |  | © | $\odot$ | $\oplus$ | $\odot$ | 4 |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| 8. When you give students a mathematics test or quiz, how often do they use a <br> calculator? <br> (4) Never <br> (B) Sometimes <br> © Always <br> (2017 Grade 8) |  |  |  |  |  |  | 7. When you give students a mathematics test or quiz, how often do they use a calculator? <br> (4) Never <br> (B) Sometimes <br> © Always <br> Issue: Organization of Instruction |  |  |  |  |  |  | NC | N/A |
| 9. To what extent are students permitted to use calculators during mathematics lessons? <br> (4) Unrestricted use <br> (B) Restricted use <br> © Calculators are not permitted. <br> (2017 Grade 8) |  |  |  |  |  |  | 5. To what extent are students permitted to use calculators during mathematics lessons? <br> (4) Unrestricted use <br> (B) Restricted use <br> © Calculators are not permitted. <br> Issue: Organization of Instruction |  |  |  |  |  |  | NC | N/A |
|  |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Operational Grade 8 Mathematics Teacher



[^11]| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11. In your mathematics class this year, do you use any of the following instructional materials? Select one circle in each row. |  |  |  |  |  |  | N/A |  |  |  |  |  |  | D | This version of this item was dropped and was replaced by VH845832. |
|  |  |  | Yes |  | No |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { a. Textbooks provided by y } \\ & \text { school } \end{aligned}$ | our district of |  | $\oplus$ |  | © | mpows |  |  |  |  |  |  |  |  |  |
| b. Other materials provided school | by your dist | ict or | $\stackrel{\square}{*}$ |  | © | veress |  |  |  |  |  |  |  |  |  |
| c. Materials found on the I | hternet |  | $\odot$ |  | - | veroses |  |  |  |  |  |  |  |  |  |
| d. Materials you have creat |  |  | ${ }^{\circ}$ |  | © | 否 |  |  |  |  |  |  |  |  |  |
| e. Other materials (Please | specify): |  | $\oplus$ |  | © | mos |  |  |  |  |  |  |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. Thinking about your eighth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the following? Select one circle in each row. |  |  |  |  |  |  | 11. Thinking about your eighth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the following? Select one circle in each row. |  |  |  |  |  |  | R | Previous subitem "b" was dropped due to a high percentage of respondents choosing "Quite a bit of emphasis" and "A lot of emphasis". <br> Previous subitem " f " was dropped since current subitem "d" is also about conjectures and the response distribution for both was similar. |
|  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|l\|l} \hline \begin{array}{l} \text { Very little } \\ \text { emphasis } \end{array} \\ \hline \hline \end{array}$ | $\begin{gathered} \text { Some } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Quite a bit } \\ \text { of emphasis } \\ \hline \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { A lot of } \\ \text { emphasis } \end{gathered}$ |  |  | $\underset{\text { emphasis }}{\text { No }}$ | Very little <br> emplasis | $\begin{aligned} & \text { Some } \\ & \text { emphasis } \end{aligned}$ | $\begin{gathered} \text { Quite a bit } \\ \text { of emphasis } \end{gathered}$ | $\begin{gathered} \text { Alot of } \\ \text { Amphasis } \end{gathered}$ |  |  |  |
| a. Use definitions and <br> notation precisely | ๑ | $\odot$ | $\odot$ | $\odot$ | © | visume |  | © | ¢ | $\bigcirc$ | 速 | $\odot$ | Sture |  |  |
| $\begin{aligned} & \text { b. Justify } \begin{array}{c} \text { cand explain } \\ \text { their reasoning } \end{array} \end{aligned}$ | © | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\odot$ | visure |  | $\odot$ | $\odot$ | $\odot$ | $\odot$ | ${ }^{\circ}$ | пия |  |  |
| $\begin{array}{\|c\|c\|} \hline \text { c. Identify and orrect } \\ \text { flawed mathematical } \\ \text { reasoning } \end{array}$ | © | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | ทEsplas |  | ${ }^{\odot}$ | ${ }^{\oplus}$ | ${ }^{\circ}$ | ${ }^{\odot}$ | $\odot$ |  |  |  |
| $\begin{array}{\|l} \text { d. Construct arguments } \\ \text { using tables, graphs, or } \\ \text { diagrams } \end{array}$ | © | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | visures | $\begin{array}{l}\text { using tables, graphs, or } \\ \text { diagrams }\end{array}$ <br> d. Make, test, and | ${ }^{\bullet}$ | ${ }_{\odot}{ }^{\oplus}$ | ${ }^{\circ}$ | $\odot$ | ${ }^{\oplus}$ | visuruc |  |  |
|  | $\oplus$ | ${ }^{\circ}$ | $\odot$ | ${ }^{\circ}$ | $\oplus$ | ${ }^{146}$ | validate conjectures |  | ${ }^{\circ}$ | $\bigcirc$ | $\odot$ |  |  |  |  |
| f. Use examples or <br> counterexamples to <br> support or refetute a <br> mathematical <br> conjecture | © | $\oplus$ | - | $\odot$ | $\odot$ | , | ${ }^{\text {c. }}$ (reasoning and informal proofs | © | $\odot$ | - | $\oplus$ | $\odot$ | \%s\%us |  |  |
| $\begin{array}{\|c\|} \hline \text { g. Engage in deductive } \\ \text { reasoning and intormal } \\ \text { proofs } \end{array}$ | © | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | $\xrightarrow{\text { Ms/bus }}$ |  |  |  |  |  |  |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Organization | $n$ of in | tructio |  |  |  |  |  |  |

[^12]

2019 Operational Grade 8 Mathematics Teacher

| Previous item |  |  |  |  |  |  | 2019 item | D/A/ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5. Thinking about your eighth-grade mathematics classes this year, bow much emphasis did you place on teaching your students each of the following? Select one circle in each row. |  |  |  |  |  |  |  |  |  |
|  | ${ }_{\text {emplasis }}$ | $\begin{aligned} & \text { Very little } \\ & \text { emphasis } \end{aligned}$ | $\begin{aligned} & \text { Some } \\ & \text { emphasis } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { Ouitea bit } \\ \hline \text { of emphasis } \\ \hline \end{array}$ | $\begin{aligned} & \text { A lot of } \\ & \text { emphasis } \end{aligned}$ |  |  |  |  |
| a. Usc clear and precisc <br> language to tiscuss <br> problem solving and <br> reasoning <br> cesing | ¢ | ${ }^{\circ}$ | $\bigcirc$ | © | $\bigcirc$ |  |  |  |  |
| b. Use modcls to | $\bigcirc$ | ${ }^{\bullet}$ | $\bigcirc$ | ${ }^{\oplus}$ | ${ }^{\circ}$ | neor |  |  |  |
|  | ${ }^{\circ}$ | ${ }^{\circ}$ | - | - | Ф | now |  |  |  |
| d. Use models to <br> examine racl.life and <br> mathematical <br> examples | $\cdots$ | $\oplus$ | $\cdots$ | $\oplus$ | ${ }^{\oplus}$ | nem |  |  |  |
| e. Evaluatc a problem-solving process | $\pm$ | $\pm$ | - | $\oplus$ | $\oplus$ | neem |  |  |  |
| 1. Create equations | ${ }^{\infty}$ | ${ }^{\circ}$ | $\bigcirc$ | ${ }^{\circ}$ | ${ }^{\circ}$ | $\cdots$ |  |  |  |
| 8. Relate what your <br> student know to the <br> racl wworld and make <br> sense of it <br> mathematically | $\infty$ | $\cdots$ | - | $\oplus$ | $\pm$ | neer |  |  |  |
|  | © | $\oplus$ | © | © | ${ }^{\oplus}$ | $\cdots$ |  |  |  |
|  | © | ¢ | - | $\odot$ | $\odot$ |  |  |  |  |
| 1. Examine patteras in | © | © | - | $\bigcirc$ | ${ }^{\circ}$ |  |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  |  |  |

## 2019 Operational Grade 8 Mathematics Teacher



+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


2019 Operational Grade 8 Mathematics Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  | 15. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{array}{\|c} \substack{\text { Not at all } \\ \text { aikely }} \end{array}$ | Not likely | $\begin{gathered} \text { Somewhat } \\ \text { likely } \end{gathered}$ | Quite likely | $\begin{array}{\|l\|l\|} \hline \text { Extremely } \\ \text { likely } \end{array}$ |  |  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |  |  |
| $\begin{aligned} & \text { a. My students did well } \\ & \text { because they studied } \\ & \text { and were prepared. } \end{aligned}$ | $\odot$ | ${ }^{\circ}$ | - | $\odot$ | ${ }^{\circ}$ | veruas | a. My students did well because they studied and were prepared. | © | ${ }^{(1)}$ | $\bigcirc$ | ${ }^{\circ}$ | $\odot$ | manax |  |  |
| $\begin{aligned} & \text { b. My students did well } \\ & \text { because thye put in a } \\ & \text { lot of effort. } \end{aligned}$ | © | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | virzoor | b. My students did well because they put in lot of effort | $\oplus$ | $\oplus$ | $\odot$ | $\odot$ | $\oplus$ | 2mon |  |  |
| $\begin{array}{\|l} \text { c. My students did wall } \\ \text { because they always } \\ \text { do well on tests. } \end{array}$ | © | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\odot$ |  | c. My students did well | $\oplus$ | $\oplus$ | $\odot$ | $\odot$ | $\oplus$ | mem |  |  |
| $\begin{aligned} & \text { d. My students did well } \\ & \text { because tauyht the } \\ & \text { concepts well. } \end{aligned}$ | $\odot$ | ${ }^{\circ}$ | $\odot$ | $\oplus$ | $\odot$ |  | d. My students did well because It taught the concepts well. | $\oplus$ | © | $\odot$ | $\oplus$ | $\oplus$ | ammen |  |  |
| $\begin{aligned} & \text { e. My sudents did well } \\ & \text { because they guessed } \\ & \text { well on the test. } \end{aligned}$ | © | $\odot$ | $\odot$ | $\oplus$ | $\odot$ |  | $\begin{aligned} & \text { e. My students did well } \\ & \text { because they guessed } \\ & \text { well on the test. } \end{aligned}$ | $\oplus$ | ${ }^{1}$ | $\odot$ | $\odot$ | ${ }^{\circ}$ |  |  |  |
| $\begin{aligned} & \text { f. My students did well } \\ & \text { because the are just } \\ & \text { good at math. } \end{aligned}$ | © | $\oplus$ | $\odot$ | $\odot$ | $\odot$ |  | $\begin{array}{\|l} \text { well on the test. } \\ \hline \text { f. My students did well } \\ \text { because they are just } \\ \text { good at math. } \\ \hline \end{array}$ | © | ${ }^{(1)}$ | $\odot$ | $\odot$ | ${ }^{\circ}$ |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |  |  |
| 18. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school? <br> (4) Never <br> (B) About once or twice a year <br> © About once or twice a month <br> (1) About once or twice a week <br> (1) Every day or almost every day <br> (2017 Grade 8) |  |  |  |  |  |  | 16. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school? <br> (2) Never <br> (B) About once or twice a year <br> © About once or twice a month <br> (1) About once or twice a week <br> (D) Every day or almost every day <br> Issue: Resources for Learning and Instruction |  |  |  |  |  |  | NC | N/A |
| 19. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school? <br> (4) Never <br> (B) Once <br> - Two or three times <br> (1) Four or five times <br> (c) More than five times <br> (2017 Grade 8) |  |  |  |  |  |  | 17. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school? <br> (4) Never <br> (1) Once <br> © Two or three times <br> (D) Four or five times <br> (c) More than five times <br> Issue: Resources for Learning and Instruction |  |  |  |  |  |  | NC | N/A |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Operational Grade 8 Mathematics Teacher

| Previous item |  |  |  |  |  |  | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6. Thinking about your eighth-grade mathematics classes this year, how often do you incorporate the following practices when teaching your students? Select one circle in each row. |  |  |  |  |  |  | N/A | D | This item was dropped since a high percentage of respondents chose "Often" and "Always or almost always" across all subitems, indicating that this item may elicit socially desirable responses. |
|  | Never or hardly ever | Once in a while | Sometimes | Often | $\begin{array}{\|l\|l\|} \hline \begin{array}{c} \text { liways or } \\ \text { allwors } \\ \text { always } \end{array} \\ \hline \end{array}$ |  |  |  |  |
| a. Posing questions <br> during a lesson that <br> will help students to <br> reason and make sense <br> of mathematical <br> connections and <br> relationships | © | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\odot$ | suss |  |  |  |
| b. Using overall learning <br> goals to guide <br> instructional decisions | $\oplus$ | $\oplus$ | $\odot$ | $\oplus$ | $\odot$ | ves |  |  |  |
| c. Building procedural <br> understanding to <br> encourage the use of <br> multiple <br> proble-solviving <br> strategies <br> dies | © | $\oplus$ | $\odot$ | $\odot$ | ${ }^{\circ}$ | ves |  |  |  |
| d. Providing <br> opportunities for <br> students to <br> productively struggle <br> with mathematical <br> ideas and relationships | © | $\oplus$ | $\odot$ | $\oplus$ | ${ }^{\odot}$ | , 12 |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  |  |  |

## Appendix K-2v: Operational Grade 8 Mathematics

1. Which best describes your role in teaching mathematics to this class?
(A) I do not teach mathematics to this class.
(B) I teach all or most subjects, including mathematics.
© The only subject I teach is mathematics.
(D) We team teach, and I have primary responsibility for teaching mathematics.
2. How many students are in this class? Enter the number of students.

3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes and include in-class time only.
$\qquad$ hours and $\qquad$ minutes per week
4. Approximately how much mathematics homework do you assign to students in this class each day?
(A) None
(B) 15 minutes
© 30 minutes
(D) 45 minutes
(E) One hour
() More than one hour
5. To what extent are students permitted to use calculators during mathematics lessons?
(A) Unrestricted use
(B) Restricted use
© Calculators are not permitted.
6. What kind of calculator do your students usually use during mathematics lessons?
(A) None
© Basic four-function (addition, subtraction, multiplication, division)
© Scientific (not graphing)
(D) Graphing
7. When you give students a mathematics test or quiz, how often do they use a calculator?
(4) Never
(B) Sometimes
© Always
8. In your mathematics class this year, how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Practice or review mathematics topics | (4) | (B) | © | (1) | (1) | VH269922 |
| b. Extend mathematics learning with enrichment activities | (4) | (B) | © | (1) | (1) | VH269923 |
| c. Research mathematics topics on the Internet | (4) | (B) | © | (1) | (1) | vH269924 |

9. In your mathematics class this year, do you use any of the following instructional materials? Select one circle in each row.

|  | Yes | No, I do not prefer to use this resource. | No, this resource is not available to me. |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Textbooks provided by your district or school | (4) | (B) | © | VH845833 |
| b. Other materials provided by your district or school | (4) | (B) | © | VH845834 |
| c. Materials you have created | (4) | (B) | © | VH845842 |
| d. Printed workbooks | (4) | (B) | © | vH845840 |
| e. Physical and/or digital manipulatives | (4) | (B) | © | vH845837 |
| f. Digital games | (4) | (8) | © | VH845841 |
| g. Interactive whiteboard | (4) | (B) | © | vH845844 |

10. Thinking about your eighth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the following? Select one circle in each row.

|  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Use clear and precise language to discuss problem solving and reasoning | (4) | (B) | © | (1) | (c) | vH562965 |
| b. Make assumptions | (4) | (8) | © | (1) | (1) | vH617994 |
| c. Make approximations | (4) | (8) | © | (1) | (1) | VH617995 |
| d. Represent a problem in multiple ways including using numbers, words, pictures, and charts | (4) | (B) | © | (1) | (1) | vH562967 |
| e. Use models to examine real-life and mathematical examples | (4) | (B) | © | (1) | (1) | vH540999 |
| f. Create equations | (4) | (B) | © | (1) | (1) | vH562985 |
| g. Examine patterns in tables and graphs to describe relationships | (4) | (B) | © | (1) | (1) | vH562991 |
| h. Evaluate a problem-solving process | (4) | (B) | © | (1) | (1) | vH562983 |
| i. Evaluate the conclusions of other students | (4) | (B) | © | (1) | (1) | vH549107 |
| j. Relate what your students know to the real world and make sense of it mathematically | (4) | (B) | $\bigcirc$ | (1) | (1) | VH562988 |

11. Thinking about your eighth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the following? Select one circle in each row.

|  | No emphasis | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Use definitions and notation precisely | (4) | (B) | © | (1) | (1) | VH547462 |
| b. Identify and correct flawed mathematical reasoning | (4) | (B) | © | (1) | © | VH547464 |
| c. Construct arguments using tables, graphs, or diagrams | (4) | (B) | © | (1) | (1) | VH547468 |
| d. Make, test, and validate conjectures | (4) | (B) | © | (1) | (1) | VH547466 |
| e. Engage in deductive reasoning and informal proofs | (4) | (B) | © | (1) | (1) | VH547465 |

12. Think about your plans for this mathematics class for the entire year. How much emphasis did you or will you give each of the following? Select one circle in each row.

|  | Little or no emphasis | Moderate emphasis | Heavy emphasis |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Numbers and operations | (4) | (8) | © | vH240851 |
| b. Measurement | (4) | (B) | $\bigcirc$ | VH240852 |
| c. Geometry | (4) | (B) | © | vH240853 |
| d. Data analysis, statistics, and probability | (4) | (8) | © | vH240856 |
| e. Algebra and functions | (4) | (B) | © | VH240854 |

13. When you teach mathematics to your eighth-grade class, do you do any of the following? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Set different achievement standards for some students | (4) | (8) | © | (1) | vH240900 |
| b. Supplement the regular course curriculum with additional material for some students | (4) | (B) | © | (1) | vH240901 |
| c. Have some students engage in different classroom activities | (4) | (B) | © | (1) | vH240904 |
| d. Use a different set of methods in teaching some students | (1) | (B) | © | (1) | vH240903 |
| e. Pace my teaching differently for some students | (1) | (B) | © | (1) | vH24092 |

14. In your mathematics class this year, how often do you do each of the following with individual students to assess their progress in mathematics? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Discuss each student's current level of performance with them | (4) | (B) | © | (1) | (1) | VH845878 |
| b. Set goals for specific progress the student would like to make | (1) | (B) | © | (1) | (1) | vH269928 |
| c. Discuss progress the student has made toward goals previously set | (4) | (B) | © | (1) | (1) | VH269930 |
| d. Determine how to adjust your teaching strategies to meet the student's current learning needs | (4) | (B) | © | (1) | (1) | VH269931 |

15. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (4) | (B) | © | (1) | (1) | VH270306 |
| b. My students did well because they put in a lot of effort. | (1) | (B) | © | (1) | (1) | vH270307 |
| c. My students did well because they always do well on tests. | (4) | (B) | © | (1) | (1) | VH270308 |
| d. My students did well because I taught the concepts well. | (4) | (B) | © | (1) | (c) | vH270309 |
| e. My students did well because they guessed well on the test. | (4) | (B) | © | (1) | (c) | VH270311 |
| f. My students did well because they are just good at math. | (4) | ® | © | (1) | © | VH270313 |

16. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school?
(4) Never
(B) About once or twice a year
© About once or twice a month
(D) About once or twice a week
(E) Every day or almost every day
17. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school?
(A) Never
(B) Once
© Two or three times
(D) Four or five times
(®) More than five times
18. In your mathematics class this year, how often do you use each of the following strategies when teaching? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I teach mathematics as a whole-class activity. | (4) | (B) | © | (1) | (1) | vH617289 |
| b. I create student groups with the same achievement level. | (1) | (B) | © | (1) | (1) | VH617290 |
| c. I create student groups with different achievement levels. | (1) | (B) | © | (1) | (1) | vH887867 |
| d. I create groups by random assignment. | (4) | (B) | © | (1) | (1) | vH617291 |
| e. I allow students to choose their own groups. | (1) | (B) | © | (1) | (c) | VH852844 |

## Appendix K-2w: Summary of Changes Pilot Grade 8 Mathematics

2019 Pilot Grade 8 Mathematics Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 1. Which best describes your role in teaching mathematics to this class? <br> (4) I do not tcach mathematics to this class. Questions 2-19 are not applicable and will be skipped. <br> (1) I teach all or most subjects, including mathematics. <br> © The only subject I teach is mathematics. <br> (1) We team teach, and I have primary responsibility for teaching mathematics. <br> (2017 Grade 8) | 1. Which best describes your role in teaching mathematics to this class? <br> (8) I do not teach mathematics to this class. <br> (1) 1 teach all or most subjects, including mathematics. <br> © The only subject I teach is mathematics. <br> (D) We team teach, and I have primary responsibility for teaching mathematics. <br> Issue: Resources for Learning and Instruction | NC | Please note that no content changes were made to the item but the skip pattern text was removed from the item given the transition from PBA to DBA. |
| N/A | 2. Which best describes how mathematics instruction is organized for eighth-grade students at this school? Select one circle. <br> (4) Mathematics is taught primarily as a discrete subject with little or no integration with instruction in other subjects. <br> (1) Some mathematics instruction is integrated with other subjects, and some mathematics instruction is presented as a discrete subject. <br> (0) Mathematics lessons are primarily integrated with instruction in other subjects. <br> Issue: Resources for Learning and Instruction | A | This was added from Reading as a parallel item to the Mathematics pilot assessment. The pilot data will determine whether this item should be further considered for the 2021 Mathematics operational assessment. |

[^13]2019 Pilot Grade 8 Mathematics Teacher

| Previous item |  | 2019 item |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2. How many students are in this class? Enter the number of students. $\square$ <br> (2017 Grade 8) | visalu | 3. How many students are in this class? Enter the number of students. $\square$ $\square$ <br> Issue: Resources for Learning and Instruction | ${ }^{\text {masmea }}$ | NC | N/A |
| 3. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week <br> (2017 Grade 8) | ynuser | 4. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes and include in-class time only. $\qquad$ hours and $\qquad$ minutes per week <br> Issue: Resources for Learning and Instruction | ${ }^{\text {newrs }}$ | R | As per the Standing Committee recommendat ion, the text "and include in-class time only" was added to the inline directions to clarify mathematics instruction as the time spent instructing in class. |
| 4. Are students assigned to this class by achievement level? <br> (1) Yes <br> (1) No <br> (2017 Grade 8) | wouser | N/A |  | D | This item was dropped to reduce burden. |
| 5. What kind of calculator do your students usually use during mathematics lessons? <br> (4) None <br> (D) Basic four-function (addition, subtraction, multiplication, division) <br> © Scientific (not graphing) <br> (D) Graphing <br> (2017 Grade 8) | neman | 12. What kind of calculator do your students usually use during mathematics lessons? <br> (4) None <br> (1) Basic four-function (addition. subtraction, multiplication, division) <br> © Scientific (not graphing) <br> (2) Graphing <br> Issue: Resources for Learning and Instruction |  | NC | N/A |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Pilot Grade 8 Mathematics Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6. Approximately how much mathematics homework do you assign to students in this class each day? <br> (1) None <br> (3) 15 minutes <br> © 30 minutes <br> (D) 45 minutes <br> (1) One hour <br> (c) More than one hour <br> (2017 Grade 8) |  |  |  |  |  |  | 10. Approximately how much mathematics homework do you assign to students in this class each day? <br> (ब) None <br> (1) 15 minutes <br> © 30 minutes <br> (1) 45 minutes <br> (2) One hour <br> (1) More than one hour <br> Issue: Organization of instruction |  |  |  |  |  |  | NC | N/A |
| 7. In your mathematics class this year, how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one cirele in each row. |  |  |  |  |  |  | 8. In your mathematics class this year, how often do your scudents use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | Never | About once or twice a year | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { month } \end{gathered}$ | About once or twice a week | $\begin{array}{\|c} \hline \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}$ |  |  | Never | $\begin{array}{\|c\|} \hline \text { About once } \\ \text { or twice a } \\ \text { year } \end{array}$ | $\begin{gathered} \text { About once } \\ \text { or wive a } \\ \text { month } \end{gathered}$ | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { week } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { Every day or } \\ \text { almot } \\ \text { every day } \end{array}$ |  |  |  |
| - ${ }^{\text {a. Practice or revicw }}$ mathematics topics | $\oplus$ | © | $\odot$ | © | © |  | a. Practice or review | © | $\oplus$ | - | © | © | numa |  |  |
|  | $\oplus$ | © | $\odot$ | $\oplus$ | © |  | \|b. Extend mathematics <br> leannin \%ith <br> cenrichment <br> activities | © | ${ }^{(1)}$ | $\odot$ | $\oplus$ | © |  |  |  |
| c. Rescarch mathematics topics on the Intemet | * | © | $\odot$ | © | $\oplus$ | mames | $\begin{array}{\|l\|} \hline \text { c. Research mathematics } \\ \text { topics on the Internet } \\ \hline \end{array}$ | © | ¢ | $\odot$ | $\oplus$ | Ф | 2. |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Organization of instruction |  |  |  |  |  |  |  |  |
| 8. When you give students a mathematics test or quiz, how often do they use a calculator? <br> (8) Never <br> (1) Sometimes <br> © Always <br> (2017 Grade 8) |  |  |  |  |  |  | 13. When you give students a mathematics test or quiz, how often do they use a calculator? <br> (4) Never <br> (D) Sometimes <br> © Always <br> Issue: Organization of instruction |  |  |  |  |  |  | NC | N/A |
| 9. To what extent are students permitted to use calculators during mathematics lessons? <br> (8) Unrestricted use <br> (1) Restricted use <br> © Calculators are not permitted. <br> (2017 Grade 8) |  |  |  |  |  |  | 11. To what extent are students permitted to use calculators during mathematics lessons? <br> (ब) Unrestricted use <br> (1) Restricted use <br> © Calculators are not permitted. <br> Issue: Organization of instruction |  |  |  |  |  |  | NC | N/A |
|  |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10. In your mathematics class this year. how often do you use assessment results to do each of the following? Select one circle in each row. |  |  |  |  |  |  | N/A |  |  |  | D | This item was dropped to reduce burden. |
|  | Never | $\begin{array}{\|c\|} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array}$ | $\begin{array}{\|c\|} \hline \text { About once } \\ \text { or twice } \\ \text { month } \end{array}$ |  | $\left\|\begin{array}{c} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}\right\|$ |  |  |  |  |  |  |  |
| a. Discuss the progress <br> your students have <br> made toward <br> individually set goals | © | © | $\bigcirc$ | © | © | ma |  |  |  |  |  |  |
| b. Adjust your teaching <br> strategirs tom meet the <br> curtent leaming needs <br> of individual students | © | © | $\odot$ | $\oplus$ | $\oplus$ | $\pm$ |  |  |  |  |  |  |
|  | © | ${ }^{\text {® }}$ | $\odot$ | © | © | enss |  |  |  |  |  |  |
| a. Discuss class progress <br> with school <br> administrators | © | $\oplus$ | - | $\oplus$ | $\oplus$ | mes |  |  |  |  |  |  |
| $\begin{array}{\|c} \text { e. Discuss class progress } \\ \text { with other colleagues } \\ \hline \end{array}$ | © | (1) | $\bigcirc$ | $\oplus$ | ${ }^{\circ}$ | - |  |  |  |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. In your mathematics class this year. do you use any of the following instructional materials? Select one circle in each row. |  |  |  |  |  |  | 7. In your mathematics class this year, do you use any of the following instructional materials? Select one circle in each row. |  |  |  | R | Sub-item "a" was revised to include "(print or digital)". Subitems "b" and "d" were part of the 2017 pilot and have been included for the 2019 pilot; subitem "c" was combined from two distinct subitems that were in 2017 pilot; sub- |
|  |  |  | Yes |  | No |  |  | Yes | No |  |  |  |
| a. Textbooks provided by your district orschool |  |  | © |  | © | mones | a. Textbooks (print or digital) provided by your district or school | © | © | Hes |  |  |
| b. Other matcrials provided by your district or school |  |  | $\oplus$ |  | © | nss | b. Printed workbooks | © | ${ }^{\circ}$ | $\pm$ mata |  |  |
| c. Materials found on the Internet <br> d. Materials you have created |  |  | © |  | © | memss | c. Physical and/or digital mamipulatives | © | ${ }^{\circ}$ | vesans |  |  |
|  |  |  | ${ }^{\circ}$ |  | ${ }^{\circ}$ |  | $\begin{aligned} & \text { d. Digital games } \\ & \hline \text { c. Intractive panel (e.g., SMART board. } \\ & \text { Promethean ActivPanel) } \end{aligned}$ | © | © | visuman |  |  |
| $\begin{array}{\|l\|} \hline \text { d. Materials you have created } \\ \hline \text { e. Other materials (Please speciify): } \\ \hline \end{array}$ |  |  | ¢ |  | $\oplus$ |  |  | © | (1) |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | f. Materials you have created | © | (1) | ynsomen |  |  |
|  |  |  |  |  |  |  | $\begin{array}{\|l\|} \hline \text { \%. Math software and/or apps } \\ \text { h. Other material provided hy your district or } \\ \text { school (ceg., math board games, math } \\ \text { puzzes) } \\ \hline \end{array}$ | © | © |  |  |  |
|  |  |  |  |  |  |  | © | (1) | ynsen |  |  |  |
|  |  |  |  |  |  |  | Issue: Resources for learning and instruction |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^14]| Previous item |  |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4. In your mathematics class this year, do you use any of the following instructional materials during instruction? Select one circle in each row. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | item " g " is new and was added based on ADC feedback; and sub-item "h" has been revised based on ADC feedback. |
|  |  | Yes | $\begin{gathered} \text { No, Id } \\ \text { prefer to } \\ \text { resou } \end{gathered}$ |  | $\left\lvert\, \begin{gathered} \text { No, th } \\ \text { is notot } \end{gathered}\right.$ | his resource me. |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l} \text { a. Textbooks provided by } \\ \text { district or school } \\ \hline \end{array}$ |  | © | © |  |  | $\odot$ | wente |  |  |  |  |  |  |  |  |  |
| b. Other materials provide district or school | by your | © | Ф |  |  | $\odot$ | wnem |  |  |  |  |  |  |  |  |  |
| c. Materials found on the 1 | nternet | - | ${ }^{\circ}$ |  |  | $\bigcirc$ | nruee |  |  |  |  |  |  |  |  |  |
| d. Printed workbooks |  | © | © |  |  | $\bigcirc$ |  |  |  |  |  |  |  |  |  |  |
| e. Digital manipulatives |  | - | © |  |  | - |  |  |  |  |  |  |  |  |  |  |
| f. Physical manipulatives example. .uler. protract compass) |  | © | © |  |  | - | whese |  |  |  |  |  |  |  |  |  |
| 2. Digital games |  | $\stackrel{\square}{\circ}$ | ${ }^{\circ}$ |  |  | $\bigcirc$ | $\square^{\text {пги }}$ |  |  |  |  |  |  |  |  |  |
| h. Interactive white board |  | © | © |  |  | $\odot$ | пияпи |  |  |  |  |  |  |  |  |  |
| (Please specify: - |  | ${ }^{\circ}$ | $\oplus$ |  |  | ${ }^{\circ}$ | $\cdots$ |  |  |  |  |  |  |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12. Thinking about your eighth-grade mathematics classes this year. how much emphasis did you place on teaching your students each of the following? Select one circle in each row. |  |  |  |  |  |  |  | 9. Thinking about your emphasis did you pl circle in each row. | ghth-grade on teachi | athematies c your studen | asses this ye each of the | , how much following? Sel | ct one | weran | R | Current subitem "a" was revised for 2021 <br> development as per ADC feedback; current subitems "d" and " h " were part of the 2017 pilot and have been included for the 2019 pilot; current sub-item " f " was revised. |
|  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|l\|l} \hline \begin{array}{l} \text { Very little } \\ \text { emphasis } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c} \begin{array}{c} \text { Some } \\ \text { emphasis } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c} \begin{array}{c} \text { Quite } \\ \text { of empl } \end{array} \\ \hline \end{array}$ |  | $\begin{aligned} & \text { A lot of } \\ & \text { emphasis } \end{aligned}$ |  |  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | Very little emphasis | $\begin{gathered} \text { Some } \\ \text { emphasis } \end{gathered}$ | Quite a bit of emphasis | A lot of emphasis |  |  |  |
| a. Make assumptions | $\oplus$ | $\oplus$ | $\bigcirc$ | ${ }_{\square}^{\text {® }}$ |  | ¢ | ) |  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l} \text { b. Make approximations } \\ \hline \text { c. Use models to explain } \\ \text { calculations } \end{array}$ | $\stackrel{\square}{\odot}$ | $\stackrel{\oplus}{\oplus}$ | $\bigcirc$ | ${ }_{\square}{ }^{\circ}$ |  | $\stackrel{\oplus}{\oplus}$ |  | using mathematical knowledge to solve problem | * | (1) | - | © | $\oplus$ | nums |  |  |
| d. Represent a problem |  |  |  |  |  |  |  | b. Make approximations | © | ${ }_{\square}$ | © | ${ }_{\square}$ | $\oplus$ | netwe |  |  |
| situation in multiple ways, including numbers. words, and chart | © | ${ }^{(1)}$ | $\oplus$ | © |  | ¢ | nomma | c. Represent a problem situation in multiple ways. including | * | © | © | ${ }^{\circ}$ | ${ }^{\circ}$ | nemes |  |  |
| c. Evaluate at problem-solving | © | © | © | $\odot$ |  | ${ }^{\circ}$ | nimess | pictures, and charts |  |  |  |  |  |  |  |  |
|  | ${ }^{\circ}$ | ${ }^{\circ}$ | $\bigcirc$ | ${ }^{\circ}$ |  | ${ }^{\odot}$ | nomm | d. Use models to examine teallife and | (1) | © | © | ${ }^{(1)}$ | © | Ham |  |  |
| f. Create equations | ${ }^{\circ}$ | ${ }^{(1)}$ | - | ${ }^{\circ}$ |  | ${ }^{\circ}$ | nomas | mathematical examples | © | © | $\odot$ | $\Phi$ | $\Phi$ | them |  |  |
| students know to the real world and make | © | $\oplus$ | $\bigcirc$ | ${ }^{\circ}$ |  | ${ }^{\circ}$ | msom | e. Create equations | © | ${ }^{\circ}$ | © | $\oplus$ | © | nusase |  |  |
|  |  |  |  |  |  |  |  | f. Examine patterns in tables and graphs to | © | © | $\odot$ | ¢ | ${ }^{\circ}$ | 4 |  |  |
| h. Use appropriate terminology when number system number system | $\oplus$ | $\oplus$ | - | © |  | ${ }^{\circ}$ | - | describe relationships <br> g. Evaluate a <br> problem-solving <br> process <br> . Eys. | © | $\oplus$ | $\odot$ | $\oplus$ | © | mex |  |  |
| $\begin{array}{\|l} \begin{array}{l} \text { functions, geomerric } \\ \text { figures, and data } \\ \text { displays } \end{array} \\ \hline \end{array}$ |  |  |  |  |  |  |  | h. Evaluate the conclusions of other students | $\odot$ | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | H15 |  |  |
|  | © | © | - | $\oplus$ |  | © | Snos | i. Relate what your students know to the sal world and make real world and mak sense of it sense or it | ¢ | ${ }^{\circ}$ | $\odot$ | $\oplus$ | Ф | cres |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14. When you teach mathematics to your eighth-grade class, do you do any of the following! Select one circle in each row. |  |  |  |  |  | 15. When you teach mathematics to your eighth-grade class, do you do any of the following: Select one circle in each row. |  |  |  |  |  | R | Sub-item " f " is new. It was created to address the ADC's comment on including an item that captured a UDL-oriented approach. |
|  | Notat all | Small extent | $\begin{gathered} \text { Moderate } \\ \text { extent } \end{gathered}$ | Large extent |  |  | Not at all | Small extent | Moderate extent | Large extent |  |  |  |
| a. Set different achievement <br> standards for some <br> students <br> . | © | © | $\odot$ | $\oplus$ | + | $\begin{aligned} & \hline \text { a. Set different achicvement } \\ & \text { standards for some } \\ & \text { students } \\ & \hline \end{aligned}$ | © | ${ }^{(1)}$ | $\odot$ | © | vaumo |  |  |
| $\begin{array}{\|l} \text { b. Supplement the regular } \\ \text { course curriculumm with } \\ \text { additional material for } \\ \text { some students } \end{array}$ | © | $\oplus$ | $\odot$ | $\oplus$ | mse | b. Supplement the regular course curriculum with additional material for anc | $\oplus$ | © | $\odot$ | © | 2mm |  |  |
| c. Have some studcents engage <br> $\begin{array}{c}\text { in difteres classtom } \\ \text { activitics }\end{array}$ <br> . | $\oplus$ | ${ }^{\text {® }}$ | $\odot$ | © | mexam | c. Have some sudents engage in different classroom activitics | © | (1) | $\odot$ | © | nut |  |  |
| d. Use a different set of methods in teaching some students | © | © | $\odot$ | $\oplus$ | naume | d. Use a different set of methods in teaching some students | © | (1) | $\odot$ | $\oplus$ | mases |  |  |
| $\begin{array}{\|l\|} \hline \text { e. Pace my teaching } \\ \text { differently for some } \\ \text { students } \end{array}$ | © | $\pm$ | $\bigcirc$ | $\oplus$ | $4 \times$ | students <br> c. Pace my teaching differently for some students | $\oplus$ | © | $\bigcirc$ | ${ }^{\circ}$ | won |  |  |
|  |  |  |  |  |  | $\begin{array}{\|l} \text { f. Provide multiple } \\ \text { representation of concepts. } \\ \text { and gnide students tept. } \\ \text { express what hyy know } \\ \text { using vanous formats } \end{array}$ | ${ }^{\circ}$ | ${ }^{1}$ | $\odot$ | $\oplus$ |  |  |  |
| (2017 Grade 8) |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |
| 15. How often do you use cach of the following to assess student progress in mathematics? Sclect one circle in cach row. |  |  |  |  |  | N/A |  |  |  |  |  | D | This item was dropped to reduce burden. |
|  | $\begin{aligned} & \text { Never or } \\ & \text { hardly ever } \end{aligned}$ | Once or twice <br> a year | Once or twice a month | Once or twice a week |  |  |  |  |  |  |  |  |  |
| 2. Multiple.choice tests | $\stackrel{\square}{\square}$ | ${ }^{\circ}$ | $\bigcirc$ | ${ }_{\square}$ | $\square$ |  |  |  |  |  |  |  |  |
| b. Small proiect lased <br> assignments | © | © | - | © | maxe |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l\|} \hline \text { c. } \begin{array}{l} \text { Individual students } \\ \text { collaborating on group } \\ \text { assignments } \end{array} \\ \hline \end{array}$ | (1) | © | $\cdots$ | © | maxse |  |  |  |  |  |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^15]2019 Pilot Grade 8 Mathematics Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16. In your mathematics class this year, how often do you do each of the following with individual students to assess their progress in mathematicsi Select one circle in each row. |  |  |  |  |  |  | 5. In your mathematics class this year, how often do you do each of the following with individual students to assess their progress in mathematics? Select one circle in each row. |  |  |  |  |  |  | R | Sub-item "a" <br> was revised to remove the word "Regularly" for clarification with the response options. |
|  | Never | $\begin{array}{\|c\|c\|} \begin{array}{c} \text { About once } \\ \text { or wivea } \\ \text { year } \end{array} \\ \hline \end{array}$ |  | $\begin{gathered} \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { week } \end{array} \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Every day or } \\ \text { almot } \\ \text { every day } \end{array} \\ \hline \end{array}$ |  |  | Never | $\begin{array}{\|c} \hline \begin{array}{c} \text { About once } \\ \text { or wice a } \\ \text { year } \end{array} \end{array}$ | $\begin{array}{\|c} \text { About once } \\ \text { or twice a } \\ \text { month } \end{array}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { week } \end{array} \\ \hline \end{array}$ | $\left\|\begin{array}{c} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}\right\|$ |  |  |  |
| a. Regularly discuss each students current level of performance with them | © | ${ }^{\circ}$ | $\odot$ | © | ${ }^{\circ}$ | nuens | a. Discuss cach student's current level of performance with them | © | ${ }^{\circ}$ | $\odot$ | © | © | noturs |  |  |
| b. Set goals for specific <br> progress the student <br> would like to make | © | Ф | - | $\odot$ | ${ }^{\circ}$ | nuema | b. Set goals for specific progress the student would like to make | © | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | \% 2 |  |  |
| C. Discuss progress the <br> stedent has made <br> toward gools <br> previously set | $\oplus$ | © | $\bigcirc$ | $\oplus$ | © | mo | c. Discuss progress the student has made toward goals previously set | $\oplus$ | ${ }^{(1)}$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ | momm |  |  |
|  | © | ${ }^{\circ}$ | $\odot$ | © | $\oplus$ | "41 | previously set <br> d. Determine how to <br> adjust your teaching <br> stratecives to mece the <br> student's current <br> learning needs | © | © | $\odot$ | ${ }^{\circ}$ | $\oplus$ | " |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| 17. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in cach row. |  |  |  |  |  |  | 18. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in cach row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{gathered} \text { Not at all all } \\ \text { likely } \end{gathered}$ | Not likely | $\begin{aligned} & \text { Somewhat } \\ & \text { likely } \end{aligned}$ | Quite likely | $\begin{gathered} \text { Extremely } \\ \text { likely } \end{gathered}$ |  |  | Not at all likely | Not likely | $\begin{aligned} & \text { Somewhat } \\ & \text { likely } \end{aligned}$ | Quite likely | $\begin{aligned} & \text { Exremely } \\ & \text { likely } \end{aligned}$ |  |  |  |
| a. My students did wcll because they sudicd and were prepared. | $\oplus$ | Ф | $\bigcirc$ | $\oplus$ | ${ }^{\circ}$ | mam | a. My students did well <br> because they studied <br> and were prepared. <br> By | © | © | $\odot$ | ¢ | $\odot$ | netras |  |  |
| $\begin{aligned} & \text { b. My students did well } \\ & \text { because they put in a } \\ & \text { lot of effort. } \\ & \hline \end{aligned}$ | $\oplus$ | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | nupem | $\begin{aligned} & \text { b. My students did well } \\ & \text { because hey put in a } \\ & \text { lot of effort. } \end{aligned}$ | $\oplus$ | (1) | $\odot$ | ${ }^{\circ}$ | $\oplus$ | mexam |  |  |
| $\begin{aligned} & \hline \text { c. My sudents did well } \\ & \text { because they always } \\ & \text { do well on tests. } \end{aligned}$ | © | $\oplus$ | $\odot$ | $\oplus$ | $\oplus$ | nowee | C. My students did well <br> because they always <br> do well on tests. <br> d | © | © | $\odot$ | ${ }^{\circ}$ | ${ }^{\circ}$ | nexum |  |  |
| $\begin{aligned} & \text { d. My sudents did well } \\ & \text { because I taught the } \\ & \text { concepts well. } \end{aligned}$ | © | ${ }^{\text {® }}$ | $\odot$ | $\oplus$ | $\oplus$ | nomm | d. My students did well <br> because 1 taught the <br> concepts well. <br> . | © | $\pm$ | $\bullet$ | (1) | Ф | verwem |  |  |
| $\begin{aligned} & \text { c. My students did well } \\ & \text { because they guessed } \\ & \text { well on the test. } \\ & \hline \end{aligned}$ | © | $\oplus$ | - | $\oplus$ | $\oplus$ | питsun | c. My students did well hecause they yuessed well on the test. | © | $\oplus$ | $\odot$ | ${ }^{(1)}$ | $\oplus$ | магии |  |  |
| $\begin{aligned} & \text { f. My sududents did well } \\ & \text { because they are just } \\ & \text { good at math. } \end{aligned}$ | © | Ф | © | © | © | 5 | $\begin{aligned} & \text { well on the test. } \\ & \hline \text { f. My students did well } \\ & \text { because they are just } \\ & \text { good at math. } \\ & \hline \end{aligned}$ | © | © | $\sigma$ | $\Phi$ | ¢ | neroas |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |  |  |

[^16]
## 2019 Pilot Grade 8 Mathematics Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 18. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school? <br> (4) Never <br> (1) About once or twice a year <br> © About once or twice a month <br> (1) About once or twice a week <br> (D) Every day or almost every day <br> (2017 Grade 8) | 19. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school? <br> (4) Never <br> (1) About once or twice a year <br> - About once or twice a month <br> (1) About once or twice a week <br> (1) Every day or almost every day <br> Issue: Resources for learning and instruction | NC | N/A |
| 19. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school? <br> (4) Never <br> (1) Once <br> © Two or three times <br> (1) Four or five times <br> (1) More than five times <br> (2017 Grade 8) | 20. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school? Never Once Two or three times Four or five times <br> (D) More than five times <br> Issue: Resources for learning and instruction | NC | N/A |
| N/A | 6. How often do you use long written responses (e.g., several sentences or paragraphs) to assess student progress in mathematics? Never or hardly ever Once or twice a year Once or twice a month Once or twice a week <br> Issue: Organization of Instruction | A | This item was part of a matrix. The other subitems in the matrix were dropped and this item was revised to a discrete item. |

[^17]| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. Thinking about your eighth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the following? Select one circle in each row. |  |  |  |  |  |  | 16. Thinking about your eighth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the followingl Select one circle in each row. |  |  |  |  |  |  | R | Previous subitems "b" and " f " were dropped to reduce burden. |
|  | $\underset{\text { No }}{\text { emphasis }}$ | Very little emphasis | $\begin{gathered} \text { Some } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{l} \text { Quite a b bit } \\ \text { of emphasis } \end{array} \\ \hline \end{array}$ | $\begin{aligned} & \text { A lot of } \\ & \text { emphasis } \end{aligned}$ |  |  | $\begin{gathered} \text { No } \\ \text { Nomphasis } \end{gathered}$ | Very little emplasis | Some emphasis | Quite a bit of emphasis | $\begin{aligned} & \text { A lot of } \\ & \text { emphasis } \\ & \hline \end{aligned}$ |  |  |  |
| a. Use definitions and notation precisely | © | $\odot$ | $\odot$ | $\odot$ | $\odot$ | Sore | a. Use definitions and notation precisely | © | (1) | $\circ$ | $\stackrel{\square}{*}$ | Ф | nsentas |  |  |
| - $\begin{aligned} & \text { b. Justify and explain } \\ & \text { their reasoning }\end{aligned}$ | © | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | visous | b. Identify and correct | © | $\pm$ | $\odot$ | $\oplus$ | ${ }^{\odot}$ | пиенй |  |  |
| c. Identify and correct flawed mathematical reasoning | © | © | $\odot$ | $\oplus$ | $\odot$ |  |  | © | © | $\odot$ | © | $\odot$ | nexmes |  |  |
| d. Construct arguments diagrams diagrams | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\odot$ | $\bullet$ | ${ }^{\text {rissuese }}$ | d. Make test, and | © | (1) | © | © | © | veneme |  |  |
|  | © | $\odot$ | $\odot$ | $\odot$ | $\odot$ | visoues | e. Engage in deductive <br> rasononing and informal <br> proofs | © | (1) | $\infty$ | $\oplus$ | $\oplus$ | wosmes |  |  |
|  | © | $\odot$ | $\odot$ | $\odot$ | $\odot$ | ${ }^{46}$ | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| $\begin{array}{\|c\|} \hline \text { g. Engage in deductive } \\ \text { reasoning and informal } \\ \text { proofs } \end{array}$ | © | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | vous |  |  |  |  |  |  |  |  |  |
| (2017 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. In your mathematics class this year, how often do you use each of the following strategies when teaching? Select one circle in each row. |  |  |  |  |  |  | 17. In your mathematics class this year, how often do you use each of the following strategies when teaching! Select one circle in each row. |  |  |  |  |  |  | R | Sub-item "c" <br> was added based on ADC feedback for this item for 2019 <br> operational. <br> This sub-item can be added at this stage given it was included for the Reading teacher questionnaire for a similar matrix item. Sub-item "e" was revised |
|  | $\begin{aligned} & \text { Never or } \\ & \text { hardly ever } \end{aligned}$ | Once in a while | Sometimes | Often | $\begin{gathered} \text { Always or } \\ \text { almost } \\ \text { always } \end{gathered}$ |  |  | Never or hardly ever | Once in a while | Sometimes | Often | $\begin{gathered} \text { Always or } \\ \text { almost } \\ \text { always } \end{gathered}$ |  |  |  |
| a. I teach mathematics as | © | © | $\odot$ | $\odot$ | $\odot$ | vearres | a. I teach mathematics as <br> a whole-class activity. | © | $\oplus$ | $\odot$ | © | © | netam |  |  |
| b. I create student groups <br> with the same <br> achievement level. | © | $\odot$ | $\odot$ | $\odot$ | $\odot$ | viluzo | b. I Create student groups <br> with the same <br> achicvement level. | (1) | (1) | $\odot$ | $\oplus$ | $\oplus$ | \%atam |  |  |
| c.c. I create groups by <br> random assignment. | © | © | - | © | $\stackrel{\square}{\circ}$ | vatros | c. Icreate sudent groups wish different | © | ${ }^{\text {® }}$ | $\odot$ | $\oplus$ | $\cdots$ |  |  |  |
| $\begin{array}{\|l} \hline \text { d. I allow students to } \\ \text { choose their own } \\ \text { group. } \end{array}$ | © | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | Litre | With different <br> achievement levels. <br> d I create groups by <br> random assignment. <br> . | ${ }^{\circ}$ | © | $\odot$ | $\pm$ | $\stackrel{\odot}{\odot}$ | 4sa |  |  |
| (2017 Grade 8) |  |  |  |  |  |  | c. I Iallow students to choose their own groups. | © | $\pm$ | $\odot$ | © | $\oplus$ | neves. |  |  |
|  |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Pilot Grade 8 Mathematics Teacher


## Appendix K-2x: Pilot Grade 8 Mathematics

1. Which best describes your role in teaching mathematics to this class?
(A) I do not teach mathematics to this class.
(B) I teach all or most subjects, including mathematics.
(C) The only subject I teach is mathematics.
(D) We team teach, and I have primary responsibility for teaching mathematics.
2. Which best describes how mathematics instruction is organized for eighth-grade students at this school? Select one circle.
(A) Mathematics is taught primarily as a discrete subject with little or no integration with instruction in other subjects.
(B) Some mathematics instruction is integrated with other subjects, and some mathematics instruction is presented as a discrete subject.
© Mathematics lessons are primarily integrated with instruction in other subjects.
3. How many students are in this class? Enter the number of students.

4. In a typical week, about how much time in total do you spend with this class on mathematics instruction? Enter the hours and minutes and include in-class time only.
hours and ___ minutes per week
5. In your mathematics class this year, how often do you do each of the following with individual students to assess their progress in mathematics? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Discuss each student's current level of performance with them | (1) | (B) | © | (1) | (1) | vH845878 |
| b. Set goals for specific progress the student would like to make | (1) | (B) | © | (1) | (1) | vH269928 |
| c. Discuss progress the student has made toward goals previously set | (4) | (B) | $\bigcirc$ | (1) | (1) | vH269930 |
| d. Determine how to adjust your teaching strategies to meet the student's current learning needs | (4) | (B) | © | (1) | (1) | vH269931 |

6. How often do you use long written responses (e.g., several sentences or paragraphs) to assess student progress in mathematics?
(A) Never or hardly ever
(B) Once or twice a year
© Once or twice a month
(D) Once or twice a week
7. In your mathematics class this year, do you use any of the following instructional materials? Select one circle in each row.

|  | Yes | No |  |
| :---: | :---: | :---: | :---: |
| a. Textbooks (print or digital) provided by your district or school | (4) | (8) | VH811602 |
| b. Printed workbooks | (4) | © | vH854173 |
| c. Physical and/or digital manipulatives | (4) | (8) | vH854175 |
| d. Digital games | (4) | (B) | VH854178 |
| e. Interactive panel (e.g., SMART board, Promethean ActivPanel) | (4) | (B) | vH854179 |
| f. Materials you have created | (4) | (B) | vH854180 |
| g. Math software and/or apps | (4) | (B) | VH854182 |
| h. Other materials provided by your district or school (e.g., math board games, math puzzles) | (4) | (8) | vH811624 |

8. In your mathematics class this year, how often do your students use a computer or other digital device (excluding handheld calculators) to do each of the following? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Practice or review mathematics topics | (4) | (B) | © | (1) | (c) | VH269922 |
| b. Extend mathematics learning with enrichment activities | (4) | (B) | © | (1) | (c) | VH269923 |
| c. Research mathematics topics on the Internet | (4) | (B) | $\bigcirc$ | (1) | (1) | VH269924 |

9. Thinking about your eighth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the following? Select one circle in each row.

|  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Make assumptions using mathematical knowledge to solve a problem | (4) | (B) | © | © | (c) | VH812897 |
| b. Make approximations | (4) | (8) | © | (1) | (1) | VH617995 |
| c. Represent a problem situation in multiple ways, including numbers, words, pictures, and charts | (4) | (B) | © | (1) | (1) | vH270285 |
| d. Use models to examine real-life and mathematical examples | (4) | (B) | $\bigcirc$ | (1) | (®) | vH549099 |
| e. Create equations | (4) | (8) | © | (1) | (1) | vH270288 |
| f. Examine patterns in tables and graphs to describe relationships | (4) | (B) | © | (1) | (E) | VH854203 |
| g. Evaluate a problem-solving process | (4) | (B) | © | (1) | (1) | vH270286 |
| h. Evaluate the conclusions of other students | (4) | (B) | © | (1) | (1) | vH549107 |
| i. Relate what your students know to the real world and make sense of it mathematically | (4) | (B) | © | (1) | (c) | vH270289 |

10. Approximately how much mathematics homework do you assign to students in this class each day?
(A) None
(B) 15 minutes
© 30 minutes
(D) 45 minutes
(E) One hour
© More than one hour
11. To what extent are students permitted to use calculators during mathematics lessons?
(A) Unrestricted use
(B) Restricted use
© Calculators are not permitted.
12. What kind of calculator do your students usually use during mathematics lessons?
(A) None
(B) Basic four-function (addition, subtraction, multiplication, division)
© Scientific (not graphing)
(D) Graphing
13. When you give students a mathematics test or quiz, how often do they use a calculator?
(A) Never
(B) Sometimes
© Always
14. Think about your plans for this mathematics class for the entire year. How much emphasis did you or will you give each of the following? Select one circle in each row.

|  | Little or no emphasis | Moderate emphasis | Heavy emphasis |  |
| :---: | :---: | :---: | :---: | :---: |
| a. Numbers and operations | (4) | (8) | © | VH248851 |
| b. Measurement | (4) | (B) | $\bigcirc$ | VH240852 |
| c. Geometry | (4) | (B) | © | VH240853 |
| d. Data analysis, statistics, and probability | (4) | (B) | © | vH240856 |
| e. Algebra and functions | (4) | (B) | © | VH240854 |

15. When you teach mathematics to your eighth-grade class, do you do any of the following? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Set different achievement standards for some students | (4) | (B) | $\bigcirc$ | (1) | vH240900 |
| b. Supplement the regular course curriculum with additional material for some students | (4) | (B) | © | (1) | vH240901 |
| c. Have some students engage in different classroom activities | (1) | (B) | © | (1) | vH240904 |
| d. Use a different set of methods in teaching some students | (4) | (B) | © | (1) | vH240903 |
| e. Pace my teaching differently for some students | (4) | (B) | $\bigcirc$ | (1) | vH240922 |
| f. Provide multiple representation of concepts, and guide students to express what they know using various formats | (4) | © | © | (1) | vH811659 |

16. Thinking about your eighth-grade mathematics classes this year, how much emphasis did you place on teaching your students each of the following? Select one circle in each row.

|  | No emphasis | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Use definitions and notation precisely | (4) | (B) | © | (1) | (1) | vH547462 |
| b. Identify and correct flawed mathematical reasoning | (4) | (B) | © | (1) | (1) | vH547464 |
| c. Construct arguments using tables, graphs, or diagrams | (4) | (B) | © | (1) | (1) | vH547468 |
| d. Make, test, and validate conjectures | (4) | (B) | $\bigcirc$ | (1) | (E) | vH547466 |
| e. Engage in deductive reasoning and informal proofs | (4) | (B) | © | (1) | (E) | vH547465 |

17. In your mathematics class this year, how often do you use each of the following strategies when teaching? Select one circle in each row.

|  | Never or hardly ever | Once in a while | Sometimes | Often | Always or almost always |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. I teach mathematics as a whole-class activity. | (4) | (8) | © | (1) | (1) | VH617289 |
| b. I create student groups with the same achievement level. | (4) | (B) | © | (1) | (e) | vH617290 |
| c. I create student groups with different achievement levels. | (4) | (B) | $\bigcirc$ | © | (1) | vH888336 |
| d. I create groups by random assignment. | (4) | (8) | © | (1) | (c) | VH617291 |
| e. I allow students to choose their own groups. | (4) | (B) | © | (1) | (c) | VH852844 |

18. Suppose your students did very well on their last mathematics test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (4) | (B) | © | (1) | (1) | vH270306 |
| b. My students did well because they put in a lot of effort. | (4) | (B) | © | (1) | (1) | vH270307 |
| c. My students did well because they always do well on tests. | (4) | (B) | © | (1) | (1) | VH270308 |
| d. My students did well because I taught the concepts well. | (4) | (B) | © | (1) | (1) | VH270309 |
| e. My students did well because they guessed well on the test. | (4) | (B) | © | (1) | (1) | VH270311 |
| f. My students did well because they are just good at math. | (4) | (B) | © | © | (c) | VH270313 |

19. In your mathematics classes this year, how often did you encourage your students to participate in mathematics activities outside of school?
(A) Never
(B) About once or twice a year
© About once or twice a month
(1) About once or twice a week
(E) Every day or almost every day
20. In this school year, how many times did you provide direct opportunities for your students to participate in mathematics activities outside of school?
(A) Never
(B) Once
© Two or three times
(D) Four or five times
(E) More than five times
21. How well has your education and professional training prepared you to teach students with the following attributes? Select one circle in each row.

|  | Not well at all | A little | Somewhat | Quite a bit | Extremely well |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Students lacking prerequisite knowledge or skills | (4) | ® | $\bigcirc$ | (1) | (1) | VH888067 |
| b. Students with special needs (e.g., physical disabilities, mental or emotional/ psychological impairment) | (4) | (B) | $\bigcirc$ | (1) | (E) | VH888068 |
| c. Disruptive students | (4) | (8) | $\bigcirc$ | (1) | (®) | vH888069 |
| d. Uninterested students | (4) | (8) | $\bigcirc$ | (1) | (®) | vH888070 |
| e. English-language learners (ELLs) | (4) | (B) | © | (1) | (1) | VH888071 |
| f. Gifted and talented students | (4) | (B) | © | (1) | (1) | VH888072 |
| g. Students with different cultural backgrounds (e.g., racial/ethnic, socioeconomic, religious) | (4) | (8) | © | (1) | (®) | VH888073 |

Appendix K-2y: Summary of Changes Operational Grade 4 Science

2019 Operational Grade 4 Science Teacher

| Previous item |  | 2019 item |  | D/A/ <br> R/NC+ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Which best describes your role in teaching science to this elass? Select one circle. <br> (4) I do not teach science to this class. <br> (1) Iteach all or most subiects, including science. <br> Q The only subject I teach is science. <br> (1) We team teach, and I have primary responsibility for teaching science. <br> (2018 Grade 4) | vemar | 1. Which best describes your role in teaching science to this class? Select one circle. <br> (2) I do not teach science to this class. <br> (1) I teach all or most subjects, including science. <br> © The only subject I teach is science. <br> (1) We team teach, and I have primary responsibility for teaching science. <br> Issue: Resources for Learning and Instruction | nomis | NC | N/A |
| 2. How many students are in this class? Enter the number of students. $\square$ <br> (2018 Grade 4) | wrasem | 2. How many students are in this class? Enter the number of students. $\square$ $\square$ <br> Issue: Resources for Learning and Instruction | NH2BATE | NC | N/A |
| 3. In a typical week, how much time do you spend teaching science to the students in this class? Write in the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week | vasuen | 3. In a typical week, how much time do you spend teaching science to the students in this class? Enter the hours and minutes and include in-class time only. $\qquad$ hours and $\qquad$ minutes per week <br> Issue: Resources for Learning and Instruction |  | R | The second sentence was replaced with wording used in other subject questionnaire |
| 4. Are students assigned to this class by achievement level? <br> (2) Yes <br> © No <br> (2018 Grade 4) |  | N/A |  | D | To align with content reductions made for other subjects and to keep teacher burden low, this item was dropped. |

[^18]

[^19]2019 Operational Grade 4 Science Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. About how often do your science students do each of the following activities? Select one circle in each row. |  |  |  |  |  |  | 5. About how often do your science students do each of the following activities? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | Never | About once or twice a year | About once or twice a month | About once or twice: week | $\begin{gathered} \text { Every day of } \\ \text { almost } \\ \text { every day } \end{gathered}$ |  |  | Never | $\begin{aligned} & \text { About once } \\ & \text { or twice a } \\ & \text { year } \end{aligned}$ | About once or twice a month | $\begin{gathered} \begin{array}{c} \text { About once } \\ \text { of twice } \\ \text { week } \end{array} \\ \text { wis. } \end{gathered}$ | $\left\|\begin{array}{c} \text { Every day or or } \\ \text { almose } \\ \text { every day } \end{array}\right\|$ |  |  |  |
| a. Work with orher students on a science activity or project | $\oplus$ | © | $\odot$ | $\oplus$ | © | ne | a. Work with other <br> students on a cience <br> activity or proiect | ${ }^{(1)}$ | (1) | $\odot$ | ${ }^{\circ}$ | (1) | sp |  |  |
|  | Ф | © | $\odot$ | ${ }^{\circ}$ | ${ }^{\circ}$ | $\cdots$ | b. Write about science <br> (e.t, papers. reports, or <br> student science <br> iournals) <br> c. | (1) | ${ }^{(1)}$ | $\bigcirc$ | $\oplus$ | ${ }^{(1)}$ | \%ex |  |  |
|  | $\oplus$ | © | $\odot$ | $\oplus$ | © | mes | c. Watch you do a science activity | © | $\oplus$ | $\odot$ | $\oplus$ | ¢ | , |  |  |
| d. Talk about themeasurements andmesults from theirhands-on activities $\|$.. Discuss the kinds of | $\oplus$ | © | $\odot$ | ${ }^{\circ}$ | © | 3 | $\begin{array}{\|l\|} \hline \text { d. Talk about the } \\ \text { measurements and } \\ \text { results from their } \\ \text { hands-on activities } \\ \hline \end{array}$ | © | ${ }^{\text {® }}$ | $\odot$ | © | ${ }^{\circ}$ | 80, |  |  |
| problems that c. . how to build bndge or how to collcet encrgy from the Sun) | © | Ф | © | © | © | masm | e. Discuss the kinds of problems that engineers can solve ce. . how to bull bridge or how to collect energy from the Sun) | © | ${ }^{1}$ | $\odot$ | © | ${ }^{\oplus}$ | usser |  |  |
| $\begin{array}{\|l\|l} \hline \text { figure our different } \\ \text { wasy to solve a science } \\ \text { problem } \end{array}$ | © | © | $\odot$ | ${ }^{\circ}$ | $\oplus$ | 5 | f. Figure out different <br> wass to solve a science <br> problem | © | © | $\odot$ | $\bullet$ | Ф | sme |  |  |
| $\begin{aligned} & \text { 8. } \begin{array}{l} \text { Present what they } \\ \text { have leamed about } \\ \text { science } \end{array} \\ & \hline \end{aligned}$ | © | © | Q | © | © | "sm | problem <br> 8. Present what they <br> have learned about <br> science | $\oplus$ | ${ }^{(1)}$ | $\odot$ | ${ }^{1}$ | © |  |  |  |
| (2018 Grade 4) |  |  |  |  |  |  | Issue: Resources for Learning and Instruction |  |  |  |  |  |  |  |  |



[^20]
## 2019 Operational Grade 4 Science Teacher



[^21]

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Operational Grade 4 Science Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13. In this school year, how often do you meet with students one-on-one to give feedback on their work and evaluate their progress in science? <br> (4) Never or hardly ever <br> (D) A few times a year <br> (6) Once or twice a month <br> (D) Once or twice a week <br> (c) Every day or almost every day <br> (2018 Grade 4) |  |  |  |  |  |  | 9. In this school year, how often do you meet with students one-on-one to give feedback on their work and evaluate their progress in science? Never or hardly ever A few times a year Once or twice a month Once or twice a week <br> (a) Every day or almost every day <br> Issue: Organization of Instruction |  |  |  |  |  |  | NC | N/A |
| 14. In this school year. how often do you do each of the following activities with individual students to evaluate their progress in science? Select one circle in each row. |  |  |  |  |  |  | 10. In this school year. how often do you do each of the following activities with individual students to evaluate their progress in science? Select one circle in each row. |  |  |  |  |  |  | R | In sub-item A, the word "regularly" has been removed to create consistency across similar items in multiple subject questionnaire s. |
|  | Never | $\begin{gathered} \text { About once } \\ \text { or wide a } \\ \text { year } \end{gathered}$ | About once or twice a mont | About once or twice a week | $\left\lvert\, \begin{gathered} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{gathered}\right.$ |  |  | Never | About once or twice a year | About once or twice a month | About once or twice a week | $\left\lvert\, \begin{gathered} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{gathered}\right.$ |  |  |  |
|  | Ф | ${ }^{1}$ | $\odot$ | $\oplus$ | $\oplus$ | $\cdots$ | a. Discuss each student's <br> a <br> current level of <br> peromance <br> them | © | $\oplus$ | $\odot$ | $\odot$ | $\odot$ | mase |  |  |
| b. Set goals for specific <br> prograss the student <br> would like to make <br> c. | $\oplus$ | © | $\bigcirc$ | $\pm$ | $\oplus$ |  | b. Set goals for specific progress the student would like to make | © | © | $\odot$ | $\oplus$ | ${ }^{\circ}$ |  |  |  |
| $\begin{array}{\|l\|l} \text { c. Discuss progress the } \\ \text { sutdent has made } \\ \text { toward gals } \\ \text { previously set } \end{array}$ | © | © | $\odot$ | $\oplus$ | $\oplus$ | " | c. Discuss progress the student tas made toward goals previously set | © | ${ }^{(1)}$ | $\odot$ | $\odot$ | ${ }^{\circ}$ | $\cdots$ |  |  |
| d. Determinc how to adiust yuur ceaching strategies to mect the student's current learning necds | © | $\oplus$ | © | $\oplus$ | $\oplus$ | $\pm$ | d. Determine how to <br> adiust your teaching <br> strategies to meet the <br> studentst's current <br> learning needs | © | ${ }^{\circ}$ | $\odot$ | $\odot$ | $\stackrel{\square}{ }$ |  |  |  |
| (2018 Grade 4) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Operational Grade 4 Science Teacher



## Appendix K-2z: Operational Grade 4 Science

1. Which best describes your role in teaching science to this class? Select one circle.
(A) I do not teach science to this class.
(B) I teach all or most subjects, including science.
© The only subject I teach is science.
(D) We team teach, and I have primary responsibility for teaching science.
2. How many students are in this class? Enter the number of students.

3. In a typical week, how much time do you spend teaching science to the students in this class? Enter the hours and minutes and include in-class time only.
$\qquad$ hours and $\qquad$ minutes per week
4. In this class, about how much time do you spend on each of the following areas of science? Select one circle in each row.

|  | No time | Very little time | Some time | Quite a bit of time | A lot of time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Life science | (1) | (B) | © | (1) | (1) | VH639434 |
| b. Earth and space science | (4) | (B) | © | (1) | (1) | VH63436 |
| c. Physical science | (4) | (B) | © | (1) | (1) | vH634435 |
| d. Engineering and technology | (4) | © | $\bigcirc$ | (1) | © | VH639437 |

5. About how often do your science students do each of the following activities? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Work with other students on a science activity or project | (4) | (B) | © | (1) | (1) | VH639589 |
| b. Write about science (e.g., papers, reports, or student science journals) | (4) | (B) | $\bigcirc$ | (1) | (E) | vH63600 |
| c. Watch you do a science activity | (4) | (B) | © | (1) | (E) | VH638856 |
| d. Talk about the measurements and results from their hands-on activities | (4) | (B) | $\bigcirc$ | (1) | (1) | VH63594 |
| e. Discuss the kinds of problems that engineers can solve (e.g., how to build a bridge or how to collect energy from the Sun) | (4) | (B) | $\bigcirc$ | (1) | (1) | vH63597 |
| f. Figure out different ways to solve a science problem | (1) | (B) | © | (1) | (e) | vH63846 |
| g. Present what they have learned about science | (1) | (B) | © | (1) | (c) | vH639593 |

6. Thinking about your science class this year, how much emphasis did you place on teaching your students each of the following skills? Select one circle in each row.

|  | No emphasis | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Developing good research questions | (4) | (B) | © | (1) | (1) | vH640901 |
| b. Using drawings or models to explain events or phenomena | (4) | (B) | © | (1) | (®) | vH640902 |
| c. Coming up with experiments or other tests to answer a scientific question | (4) | (B) | $\bigcirc$ | (1) | (1) | vH640903 |
| d. Organizing data into a chart, graph, or spreadsheet to test a solution | (4) | (B) | © | (1) | (E) | vH640906 |
| e. Deciding when to use quantitative versus qualitative data | (1) | (B) | © | (1) | (1) | vH640907 |
| f. Generating explanations based on observations and measurements | (4) | (B) | © | (1) | (1) | vH640908 |
| g. Evaluating the quality of data | (4) | (B) | © | (1) | (1) | vH640909 |
| h. Teaching science ideas to others (e.g., students or teachers) | (1) | (B) | © | (1) | (1) | vH640911 |

7. To what extent are the following resources available to you in your school system (including your school and school district)? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Science textbooks (print or online) | (1) | (B) | © | (1) | vH63921 |
| b. Science magazines and books (print or online) | (4) | (B) | © | (1) | vH639522 |
| c. Supplies or equipment for science labs or demonstrations | (1) | (B) | © | (1) | vH639523 |
| d. Space to conduct science labs | (4) | (B) | $\bigcirc$ | (1) | vH639525 |
| e. Computers for teachers' use | (4) | (B) | © | (1) | vH639228 |
| f. Science kits | (1) | (8) | © | (1) | VH639531 |
| g. Scientific measurement instruments (e.g., microscopes, thermometers, beakers, or weighing scales) | (4) | (B) | © | (1) | vH63926 |

8. To what extent do you use each of the following technological resources for science instruction? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Desktop or laptop computer(s) (including Chromebooks) | (4) | (B) | © | (1) | vH641307 |
| b. Tablet(s) (e.g., Surface Pro, iPad, Kindle Fire) | (4) | (B) | © | (1) | vH641308 |
| c. Online content (e.g., online software, podcasts, or videos) | (1) | (B) | © | (1) | vH641309 |
| d. Interactive web spaces or virtual classrooms (e.g., websites where students can interact and share class materials) | (4) | (B) | © | (1) | VH641310 |
| e. Interactive panel (e.g., SMART Board, Promethean ActivPanel) | (4) | (B) | © | (1) | vH859326 |

9. In this school year, how often do you meet with students one-on-one to give feedback on their work and evaluate their progress in science?
(A) Never or hardly ever
(B) A few times a year
© Once or twice a month
(D) Once or twice a week
(®) Every day or almost every day
10. In this school year, how often do you do each of the following activities with individual students to evaluate their progress in science? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Discuss each student's current level of performance with them | (4) | (B) | © | (1) | (1) | VH639634 |
| b. Set goals for specific progress the student would like to make | (4) | (B) | © | (1) | (c) | VH639635 |
| c. Discuss progress the student has made toward goals previously set | (4) | (B) | © | (1) | (1) | vH639636 |
| d. Determine how to adjust your teaching strategies to meet the student's current learning needs | (4) | (B) | © | (1) | (c) | VH636637 |

11. Suppose your students did very well on their last science test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (4) | (B) | © | (1) | (1) | vH641273 |
| b. My students did well because they put in a lot of effort. | (4) | (B) | © | (1) | (E) | vH641276 |
| c. My students did well because they always do well on tests. | (4) | (B) | © | (1) | (c) | VH641277 |
| d. My students did well because I taught the concepts well. | (4) | (B) | © | (1) | (E) | vH641279 |
| e. My students did well because they guessed well on the test. | (4) | © | © | (1) | (1) | VH641281 |
| f. My students did well because they are just good in science. | (4) | (B) | © | (1) | © | VH641284 |

12. In this school year, did your school offer any of the following supplemental activities? Select one answer choice in each row.

|  | Yes | No |  |
| :---: | :---: | :---: | :---: |
| a. Opportunities for students to work together to solve problems in their community or the world | (1) | ® | VH641334 |
| b. Opportunities for students to engage in group science activities | (4) | ® | vH641338 |
| c. Opportunities for students to use scientific instruments (e.g., thermometers, microscopes, or telescopes) | (1) | (B) | VH641339 |
| d. Opportunities for students to participate in science outreach programs (e.g., partnerships with colleges, museums, or foundations) | (4) | (B) | vH641341 |

Appendix K-2aa: Summary of Changes Operational Grade 8 Science

## 2019 Operational Grade 8 Science Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 1. Which best describes your role in teaching science to this class? Select one circle. <br> (2) I do not teach science to this class. <br> (1) I teach all or most subjects, including science. <br> © The only subject I teach is science. <br> (1) We team teach, and 1 have primary responsibility for teaching science. <br> (2018 Grade 8) | 1. Which best describes your role in teaching science to this class? Select one circle. I do not teach science to this class. I teach all or most subjects, including science. The only subject I teach is science. We team teach, and I have primary responsibility for teaching science. <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 2. How many students are in this class? Enter the number of students. $\square$ <br> (2018 Grade 8) | 2. How many students are in this class? Enter the number of students. $\square$ <br> Issue: Resources for Learning and Instruction | NC | N/A |
| 3. In a typical week, how much time do you spend teaching science to the students in this class? Write in the hours and minutes. $\qquad$ hours and $\qquad$ minutes per week | 3. In a typical week. how much time do you spend teaching science to the students in this class? Enter the hours and minutes and include in-class time only. $\qquad$ hours and $\qquad$ minutes per week <br> Issue: Resources for Learning and Instruction | R | The second sentence was replaced with wording used in other subject questionnaire |
| 4. Are students assigned to this class by achievement level? <br> (d) Yes <br> (1) No <br> (2018 Grade 8) | N/A | D | To align with content reductions made for other subjects and to keep teacher burden low, this item was dropped. |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


[^22]2019 Operational Grade 8 Science Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7. About how often do your science students do each of the following activities? Select one circle in each row. |  |  |  |  |  |  | 5. About how often do your science students do each of the following activities? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | Never | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array} \\ \hline \end{array}$ | About once or twice a month | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { week } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{gathered}$ |  |  | Never | $\begin{array}{\|c} \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { month } \end{gathered}$ | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { week } \end{gathered}$ | Every day or almost every day |  |  |  |
| a. Work with other students on a science activity or project | (c) | (1) | $\odot$ | © | (1) | пихзм | a. Work with other students on a science activity or project | (1) | (1) | © | (1) | © |  |  |  |
| b. Write about science (e.g., papers, reports, or student science journals) | (1) | © | - | $\oplus$ | © | пихехо | b. Write about science (e.g., papers, reports, or student science journals) | (1) | (1) | © | $\pm$ | (1) | noums |  |  |
| c. Watch you do a science activity <br> d. Talk about the | $\infty$ | (1) | Q | © | © | nıams | c. Watch you do a science activity | (1) | (1) | 0 | © | (1) | vinusis |  |  |
| d. Talk about the measurements and results from their hands-on activities | (1) | © | 0 | © | © | vussm | d. Talk about the measurements and results from their hands-on activities | (1) | (1) | © | © | (1) | vnesss |  |  |
| problems that engincers can solve (e.g. how to build a bridge or how to collect energy from the Sun) | © | (1) | $\odot$ | co | © | nemsm | e. Discuss the kinds of problems that engineers can solve (e.g., how to build a bridge or how to collect energy from | (4) | (1) | © | c) | (1) | vhasor |  |  |
| f. Figure out different ways to solve a science problem | (1) | (1) | $\bigcirc$ | $\oplus$ | © | nusime | the Sum) <br> $f$. Figure out different <br> ways to solve a science | (1) | (1) | $\bigcirc$ | (1) | (1) | venumes |  |  |
| g. Present what they have Iearned about science | (1) | (1) | $\theta$ | © | $\oplus$ | ทuman | problem | (1) | (1) | $\bigcirc$ | ${ }_{\square}$ | ${ }^{(1)}$ | \% |  |  |
| (2018 Grade 8) |  |  |  |  |  |  | Issue: Resources for Learning and Instruction |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| 2019 Operational Grade 8 Science Teacher |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item |  |  |  |  |  |  | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| 8. In your science class this year. how much emphasis have you devoted to teaching your students each of the following skills? Select one circle in each row. |  |  |  |  |  |  | N/A | D | This item was dropped. Two matrix items concerning science skills were developed and piloted with the intention of only one matrix being selected for operational use. |
|  | $\begin{array}{\|c} \text { Noo } \\ \text { emplasis } \end{array}$ | $\begin{aligned} & \text { Very lititle } \\ & \text { emphasis } \end{aligned}$ | $\begin{gathered} \text { Some } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{l} \text { Quite a bit } \\ \text { of emphasis } \end{array} \\ \hline \end{array}$ | $\begin{aligned} & \text { A lot of } \\ & \text { emphasis } \end{aligned}$ |  |  |  |  |
| a. Making observations <br> of natural hhenomena <br> (e.g. making <br> measurements) | © | © | $\odot$ | © | $\oplus$ | , |  |  |  |
| b. Making predictions <br> basedon prior <br> experimental <br> obscrvations | - | © | $\odot$ | © | © | , |  |  |  |
|  | ${ }^{\infty}$ | (1) | $\oplus$ | ¢ | $\oplus$ | "us |  |  |  |
| d. Reading data in tables <br> or charts to draw <br> conclusions about <br> hypotheses | © | ${ }^{1}$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ | "um |  |  |  |
| c. Deciding which tools would be most appropriate to gather data | © | (1) | $\odot$ | ${ }^{\circ}$ | ${ }^{\oplus}$ | weenta |  |  |  |
| $\begin{aligned} & \text { f. Designing and testing } \\ & \text { a solution to a } \\ & \text { problem } \end{aligned}$ | © | (1) | $\odot$ | $\oplus$ | © |  |  |  |  |
| (2018 Grade 8) |  |  |  |  |  |  |  |  |  |

[^23]
## 2019 Operational Grade 8 Science Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9. Thinking about your science class this year, how much emphasis did you place on teaching your students each of the following skills? Select one circle in each row. |  |  |  |  |  |  | 6. Thinking about your science class this ycar, how much emphasis did you place on teaching your students each of the following skills? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | $\begin{aligned} & \text { Very litule } \\ & \text { emphasis } \end{aligned}$ | $\begin{gathered} \text { Some } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|c} \text { Quite a bit } \\ \text { of emphasis } \\ \hline \end{array}$ | $\begin{aligned} & \text { A lot of } \\ & \text { emphasis } \end{aligned}$ |  |  | $\begin{gathered} \text { No } \\ \text { emphasis } \end{gathered}$ | $\begin{aligned} & \text { Very little } \\ & \text { emphasis } \end{aligned}$ | $\begin{gathered} \text { Some } \\ \text { emphasis } \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Quite a bit } \\ \text { of emphasis } \end{array} \\ \hline \end{array}$ | $\begin{aligned} & \text { A lot of } \\ & \text { emphasis } \end{aligned}$ |  |  |  |
| $\begin{aligned} & \text { a. Developing good } \\ & \text { research questions } \end{aligned}$ | © | © | $\bigcirc$ | ¢ | © | mumem | a. Developing good | © | © | $\bigcirc$ | $\bullet$ | ¢ | mbewo |  |  |
| $\begin{array}{\|l\|} \hline \text { b. Ssing drawings or or } \\ \text { models to explain } \\ \text { events or phenomena } \\ \hline \end{array}$ | © | $\oplus$ | $\odot$ | © | ¢ | nowem | b. Using drawings or <br> models to explain <br> events or phenomena | © | (1) | $\bigcirc$ | © | ¢ | viluex |  |  |
|  | © | ${ }^{\circ}$ | $\odot$ | $\oplus$ | ${ }^{\circ}$ | 4 | c. Coming up with <br> experiments or orher <br> tests to answer al <br> scientific question | $\oplus$ | ${ }^{(1)}$ | $\odot$ | $\pm$ | ${ }^{\circ}$ | \%mas |  |  |
|  | ${ }^{\circ}$ | ${ }^{\circ}$ | $\odot$ | ${ }^{\circ}$ | ${ }^{\circ}$ | "* | d. Organizing data into a <br> $\begin{array}{c}\text { chart rupht, or } \\ \text { spreadshect to test a } \\ \text { solution }\end{array}$ | © | (1) | $\odot$ | $\oplus$ | ${ }^{\oplus}$ | mamb |  |  |
| e. Deciding when to use <br> quantitative versus <br> qualitative data | © | ¢ | - | $\oplus$ | ¢ | nuemes | $\begin{array}{l}\text { c. Deciding when to use } \\ \text { quantitative cersus } \\ \text { qualitative data }\end{array}$ | © | (1) | $\odot$ | $\oplus$ | © | nemer |  |  |
| $\begin{array}{\|l\|} \text { 1. } \begin{array}{l} \text { Generating } \\ \text { explanatons based on } \\ \text { observations and } \end{array} \\ \hline \text { measurements } \end{array}$ | © | $\bullet$ | $\odot$ | $\oplus$ | $\oplus$ | 5 | $\begin{array}{\|l\|} \text { f. Generating } \\ \text { explanations based on } \\ \text { observations and } \\ \text { measurements } \end{array}$ | $\oplus$ | ${ }^{(1)}$ | $\odot$ | ${ }^{\circ}$ | ${ }^{\oplus}$ | 4 mman |  |  |
| $\begin{aligned} & \text { g. Evaluating the quality } \\ & \text { of data } \\ & \text { h. Tcaching scienceidcas } \end{aligned}$ | © | © | - | $\odot$ | © | nuem | $\begin{array}{\|l} \text { g. Evaluating the quality } \\ \text { of data } \end{array}$ | * | (1) | $\odot$ | © | © | neaseos |  |  |
|  | ¢ | ¢ | $\bigcirc$ | © | $\oplus$ | " | $\begin{array}{\|c\|} \hline \text { of data } \\ \hline \text { h. Teaching science ideas } \\ \text { to others (e.g., ies } \\ \text { students or teachers) } \\ \hline \end{array}$ | , | ${ }^{(1)}$ | - | ${ }^{\circ}$ | ${ }_{\square}$ | M1 |  |  |
| (2018 Grade 8) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| 10. To what extent do you em science to your eighth-grad | mphasize | ch of the fol elect one ei | wing objice in each ro | tives in teachin aw. |  | vicuIv | N/A |  |  |  |  |  |  | D | To make room for new content and to keep teacher burden low, this item was dropped. |
|  | Not at all |  | Small extent | $\begin{gathered} \text { Moderate } \\ \text { extent } \end{gathered}$ | Large extent |  |  |  |  |  |  |  |  |  |  |
| a. Increasing students' | - 0 |  | $\oplus$ | $\bigcirc$ | © | weose |  |  |  |  |  |  |  |  |  |
| b. Increasing awarencss of the importance of science in importan daily life | c |  | $\oplus$ | $\odot$ | $\oplus$ | maspe |  |  |  |  |  |  |  |  |  |
| c. Teaching the iterative process of scientific inquiry | \% |  | $\pm$ | $\bigcirc$ | $\pm$ | nomeot |  |  |  |  |  |  |  |  |  |
| d. Teaching the iterative process practice | (1) |  | $\pm$ | $\odot$ | $\odot$ | uneer |  |  |  |  |  |  |  |  |  |
| c. Developing problem-solving skills | © |  | ${ }^{\circ}$ | $\odot$ | $\oplus$ | \% |  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l} \text { f. Devcloping scientific } \\ \text { writing skills } \end{array}$ | (c) |  | ${ }^{\circ}$ | $\odot$ | $\oplus$ | natue |  |  |  |  |  |  |  |  |  |
| (2018 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Operational Grade 8 Science Teacher

| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11. To what extent are the following resources available to you in your school system (including your school and school district)i Select one circle in each row. |  |  |  |  |  | 7. To what extent are the following resources available to you in your school system (including your school and school district)? Select one circle in each row. |  |  |  |  |  | R | Because subitems E and F overlapped with other, newer content in the student/teac her/school administrator questionnaire and to keep teacher burden low, sub-items E and $F$ were dropped. |
|  | Notatall | Small extent | Moderate extent | Large extent |  |  | Not at all | Small extent | Moderate exten | Large extent |  |  |  |
| 3. Science textbooks (print or online) | © | © | $\oplus$ | $\oplus$ | nuexa | a. Science textbooks (print or online) | © | $\stackrel{\square}{\square}$ | $\odot$ | $\odot$ | vinase ${ }^{\text {a }}$ |  |  |
| b. Science magazines and books (print or online) | © | $\oplus$ | $\odot$ | $\oplus$ | пкхм | b. Science magazines and | © | $\oplus$ | $\odot$ | $\odot$ | ¢2 |  |  |
| c. Supplies or equipment for science labs or demonstrations | © | © | $\sigma$ | $\pm$ | $\cdots$ | c. Supplies or equipment for science labs or demonstrations | © | (1) | $\odot$ | $\odot$ | vinasz |  |  |
| d. Space to conduct science labs | © | © | $\odot$ | $\oplus$ | numes | d. Space to conduct science labs | © | $\stackrel{\square}{1}$ | $\odot$ | $\odot$ | vuasz |  |  |
| e. Computers for students usc in class | © | © | $\odot$ | © | "mana |  | © | (1) | $\odot$ | © | vrasess |  |  |
| f. Computer labs | © | © | $\odot$ | $\oplus$ | nustur | f. Science kits | © | ${ }^{\circ}$ | $\odot$ | © | vyasel |  |  |
| 8. Computers for teachers' | © | © | © | $\oplus$ | mss | g. Scientific measurement | © | $\oplus$ | $\odot$ | $\odot$ |  |  |  |
| h. Science kits <br> i. Scientific measurement <br> instuments s.e.g. <br> microscopes. <br> thermometers, beakers, or <br> termores. <br> weighing scales) | ${ }^{\circ}$ | ${ }^{\circ}$ | ¢ | ${ }^{\circ}$ | numain | instruments (e.g. |  |  |  |  | visase ${ }^{\text {a }}$ |  |  |
|  | © | $\oplus$ | $\cdots$ | $\oplus$ | wnemen | microscopes beakers, or weighing scales |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (2018 Grade 8) |  |  |  |  |  | Issue: Resources for Learning and Instruction |  |  |  |  |  |  |  |
| 12. In your eighth-grade class, how often do your students use a computer or other digital device to do each of the following activities? Select one circle in each row. |  |  |  |  |  | 9. In your eighth-grade class, how often do your students use a computer or other digital device to do each of the following activities? Select one circle in each row. |  |  |  |  |  | NC | N/A |
|  | $\begin{aligned} & \text { Never or } \\ & \text { hardly ever } \end{aligned}$ | $\begin{gathered} \text { Once or twice } \\ \text { a month } \end{gathered}$ | Once or twice a week | $\begin{gathered} \text { Every day or } \\ \text { almost every } \\ \text { day } \end{gathered}$ |  |  | Never or hardly ever | Once or twice a month | Once or twice a week | $\begin{aligned} & \text { Every day or } \\ & \text { almost every } \end{aligned}$ day |  |  |  |
| a. Conduct a search for <br> science information | * | $\oplus$ | © | © | 18 | a. Conduct a search for science information | © | $\oplus$ | $\odot$ | $\odot$ | v2a422 |  |  |
| b. Simulate a physical or <br> biologicial process or see <br> how something works (e.g.. <br> how plancts orbitit the Sun <br> or how gas expands) | © | © | $\odot$ | $\odot$ | 118 |  | © | ${ }^{(1)}$ | $\odot$ | $\odot$ | \%2124 |  |  |
| $\begin{aligned} & \text { c. Make a chart or graph that } \\ & \text { shows results of a science } \\ & \text { proicct } \end{aligned}$ | ${ }^{\circ}$ | ${ }^{(1)}$ | $\odot$ | © | neter | $\begin{aligned} & \text { or how gas expands) } \\ & \hline \text { c. Make a chart or graph that } \\ & \text { shows results of a science } \\ & \text { proiect } \end{aligned}$ | © | © | $\odot$ | $\odot$ | ниazs |  |  |
| (2018 Grade 8) |  |  |  |  |  | Issue: Resources for Learning and Instruction |  |  |  |  |  |  |  |

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## 2019 Operational Grade 8 Science Teacher

| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13. To what extent do you use each of the following technological resources for science instruction? Select one circle in cach row. |  |  |  |  |  | 8. To what extent do you use each of the following technological resources for science instruction? Select one circle in each row. |  |  |  |  |  | R | Sub-item E has been revised to use the "Interactive Panel" wording used in questionnaire s for other subjects. |
|  | Not at all | Small extent | $\begin{gathered} \text { Moderate } \\ \text { extent } \end{gathered}$ | Large extent |  |  | Not at all | Small extent | Moderate extent | Large extent |  |  |  |
| a. Desktop or laptop <br> computer(s) (including <br> Chromelooks) | $\oplus$ | ${ }^{\circ}$ | $\bigcirc$ | $\oplus$ | neer | $\begin{aligned} & \text { a. Desktop or laptop } \\ & \text { computer(s) (including } \\ & \text { Chrometooks) } \\ & \hline \end{aligned}$ | © | ${ }^{\circ}$ | $\odot$ | $\odot$ | ненı" |  |  |
| b. Tablet(s) (e.g. Surface Pro. iPad. Kindle Fire) | $\oplus$ | ¢ | - | $\oplus$ | maxiter | b. Tablet(s) (e.g., Surface Pro, iPad. Kindle Fire) | © | © | $\odot$ | $\odot$ | vusumes |  |  |
| $\begin{array}{\|l\|l} \hline \text { c. Onlinc content (e.,., onlinc } \\ \text { software, podcasts, or } \\ \text { videos) } \end{array}$ | © | $\oplus$ | © | $\pm$ | 4000 | c. Online content (e.g., online software. podcasts, or videos) | © | © | $\bigcirc$ | $\odot$ | mismes |  |  |
|  | ${ }^{(1)}$ | ${ }^{(1)}$ | ${ }^{\circ}$ | ${ }^{*}$ | vamin | d. Interactive web spaces or <br> virtual classrooms (e.g., <br> websites where students. <br> can interact and share class <br> materials) | © | ${ }^{1}$ | - | $\odot$ | 130 |  |  |
| e. Smart board(s) | © | ${ }_{\square}$ | $\bigcirc$ | ${ }^{1}$ | ) | $\begin{array}{\|l\|} \text { materials) } \\ \hline \text { e. Interactive panel (e.g., } \\ \text { SMART Board. Promethean } \\ \text { ActivPanel) } \\ \hline \end{array}$ | © | © | $\odot$ | $\odot$ |  |  |  |
| (2018 Grade 8) |  |  |  |  |  | Issue: Resources for Learning and Instruction |  |  |  |  |  |  |  |
| 14. In this school year, how often do you meet with students one-on-one to give feedback on their work and evaluate their progress in science? |  |  |  |  |  | 10. In this school year, how often do you meet with students one-on-one to give feedback on their work and evaluate their progress in science? |  |  |  |  |  | NC | N/A |
|  |  |  |  |  |  |  |  |  |  |
| (1) Never or hardly ever |  |  |  |  |  |  |  |  |  |  |  | © Never or hardly ever |  |  |  |  |  |  |  |
| (1) A few times a year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| © Once or twice a month <br> © Once or twice a weck |  |  |  |  |  | © A few times a year |  |  |  |  |  |  |  |
|  |  |  |  |  |  | (1) Once or twice a week(1) Every day or almost every day |  |  |  |  |  |  |  |
| (1) Every day or almost every day |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (2018 Grade 8) |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |

2019 Operational Grade 8 Science Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15. In this school year, how often do you do each of the following activities with individual students to evaluate their progress in science? Select one circle in each row. |  |  |  |  |  |  | 11. In this school year, how often do you do each of the following activities with individual students to evaluate their progress in science? Select one circle in each row. |  |  |  |  |  |  | R | In sub-item A, the word "regularly" has been removed to create consistency across similar items in multiple subject questionnaire s . |
|  | Never | $\begin{array}{\|c} \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array} \\ \hline \end{array}$ | $\begin{gathered} \text { About once } \\ \text { or twice a } \\ \text { month } \end{gathered}$ | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { week } \end{array} \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \text { Every day or } \\ \text { elmost } \\ \text { every day } \end{array}$ |  |  | Never | $\begin{array}{\|c} \hline \begin{array}{c} \text { About once } \\ \text { or twice a } \\ \text { year } \end{array} \\ \hline \end{array}$ | About once or twice a month month | $\begin{array}{\|c} \hline \text { About once } \\ \text { or twice a } \\ \text { wwek } \end{array}$ | $\begin{gathered} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{gathered}$ |  |  |  |
| a. Regularly discuss cach <br> student s current level <br> of performance with <br> them <br> arer | (1) | © | © | © | © | vesasa | a. Discuss each student's current level of performance with them | (1) | (1) | © | (1) | (1) | v1/69624 |  |  |
| b. Set goals for specific progress the student would like to make | (1) | (1) | O | (1) | (1) | питеп | b. Set goals for specific progress the student would like to make | (1) | (1) | $\bigcirc$ | (1) | (1) | vhasat |  |  |
| c. Discuss progress the student thas made toward goals previously set | (1) | (1) | 0 | © | © | nuenus | $\begin{aligned} & \text { c. Discuss progress the } \\ & \text { student has made } \\ & \text { toward goals } \\ & \text { previously set } \end{aligned}$ | (1) | (1) | $\odot$ | © | (1) | ${ }^{\text {vHasasab }}$ |  |  |
| d. Determine how to adust your teaching strategies to meet the student's current learning needs | (1) | (1) | 0 | © | (1) | nк*** | $\begin{array}{\|l} \hline \text { d. Determine how to } \\ \text { adjust your teaching } \\ \text { strategies to meet the } \\ \text { student's current } \\ \text { learning needs } \\ \hline \end{array}$ | (1) | (1) | © | © | (1) | vH133d7 |  |  |
| (2018 Grade 8) |  |  |  |  |  |  | Issue: Organization of Instruction |  |  |  |  |  |  |  |  |
| 16. Suppose your students did very well on their last science test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  | 12. Suppose your students did very well on their last science test. How likely do you think each of the following explanations is in this situation? Select one circle in each row. |  |  |  |  |  |  | NC | N/A |
|  | $\begin{gathered} \text { Not at all } \\ \text { likely } \end{gathered}$ | Not likely | Somewhat likely | Quite likely | $\begin{gathered} \text { Extremely } \\ \text { likely } \end{gathered}$ |  |  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |  |  |
| $\begin{aligned} & \text { a. My students did well } \\ & \text { because they studied } \\ & \text { and were prepared. } \\ & \hline \end{aligned}$ | (1) | (1) | $\bigcirc$ | © | © | Tuxald | a. My students did well because they studied and were prepared. | (1) | (1) | $\bigcirc$ | (1) | (1) | vhat123 |  |  |
| b. My students did well because they put in a lot of effort. | (1) | (1) | $\bigcirc$ | © | © | Matars | b. My students did well because they put in a lot of effort. | (1) | (1) | $\bigcirc$ | (1) | (1) | Vh\%41276 |  |  |
| c. My students did well because they always do well on tests. | © | (1) | © | (1) | (1) | **arı | c. My students did well because they always do well on tests. | (1) | (1) | $\bigcirc$ | (1) | (1) | v1star |  |  |
| d. My students did well because I taught the concepts well. | © | (1) | 0 | (1) | (1) | v10, | d. My students did well because I taught the concepts well. | (1) | (1) | $\odot$ | © | (1) | vasal29 |  |  |
| e. My students did well because they guessed well on the test. | (1) | (1) | $\odot$ | (1) | © | 5104209 | e. My students did well because they guessed well on the test. | (1) | (1) | $\odot$ | (1) | (1) | vhstist |  |  |
| f. My students did well good in science. | © | (1) | $\bigcirc$ | (1) | © |  | $\begin{aligned} & \text { f. My students did well } \\ & \text { because they are just } \\ & \text { good in science. } \end{aligned}$ | (1) | (1) | © | © | (1) | vhat124. |  |  |
| (2018 Grade 8) |  |  |  |  |  |  | Issue: Teacher Preparation |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

| 2019 Operational Grade 8 Science Teacher |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous item <br> 17. In this school year, did your school offer any of the following supplemental activities? Select one answer choice in each row. |  |  |  | 2019 item |  |  |  | $\begin{array}{\|l\|} \hline \text { D/A/ } \\ \text { R/NC+ } \end{array}$ | Rationale |
|  |  |  |  | 13. In this school year, did your school offer activities? Select one answer choice in each $\qquad$ <br> a. Opportunities for students to work | ollowing supplemental vilasiwe |  |  | NC | N/A |
|  | Yes | No |  |  | Yes | No |  |  |  |
| a. Opportunities for students to work together to solve problems in their community or the world | - | (1) | , | a. Opportunities for students to work together to solve problems in their community or the world | © | © | 134 |  |  |
| b. Opportunities for students to engage in group science activities | © | © | , | b. Opportunities for students to engage in group science activities | © | © | mismixa |  |  |
| $\begin{aligned} & \text { c. Oportunities for sudents to use scientific } \\ & \text { instuments (e., thermometers. } \\ & \text { microscopeses. or telescopes) } \\ & \hline \end{aligned}$ | © | (1) | ппихм | c. Opportunities for students to use scientific $\begin{aligned} & \text { instruments } \\ & \text { microg.. therrmometeters. }\end{aligned}$ mepes. or telescopes) | $\oplus$ | © |  |  |  |
|  | © | © |  | d. Opportunities for students to participate in <br> $\begin{array}{l}\text { science outreach programs (e.g., } \\ \text { partnerships with colleges, museums, or } \\ \text { toundations) }\end{array}$ | ® | © | Hestar |  |  |
| (2018 Grade 8) |  |  |  | Issue: Resources for Learning and Instruction |  |  |  |  |  |

## Appendix K-2ab: Operational Grade 8 Science

1. Which best describes your role in teaching science to this class? Select one circle.
(A) I do not teach science to this class.
(B) I teach all or most subjects, including science.
© The only subject I teach is science.
(D) We team teach, and I have primary responsibility for teaching science.
2. How many students are in this class? Enter the number of students.

3. In a typical week, how much time do you spend teaching science to the students in this class? Enter the hours and minutes and include in-class time only.
$\qquad$ hours and $\qquad$ minutes per week
4. In this class, about how much time do you spend on each of the following areas of science? Select one circle in each row.

|  | No time | Very little time | Some time | Quite a bit of time | A lot of time |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Life science | (1) | (B) | © | (1) | (1) | VH639434 |
| b. Earth and space science | (4) | (B) | © | (1) | (1) | VH63436 |
| c. Physical science | (4) | (B) | © | (1) | (1) | vH634435 |
| d. Engineering and technology | (4) | © | $\bigcirc$ | (1) | © | VH639437 |

5. About how often do your science students do each of the following activities? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Work with other students on a science activity or project | (4) | (B) | © | (1) | (1) | VH639589 |
| b. Write about science (e.g., papers, reports, or student science journals) | (4) | (B) | $\bigcirc$ | (1) | (E) | vH63600 |
| c. Watch you do a science activity | (4) | (B) | © | (1) | (E) | VH638856 |
| d. Talk about the measurements and results from their hands-on activities | (4) | (B) | $\bigcirc$ | (1) | (1) | VH63594 |
| e. Discuss the kinds of problems that engineers can solve (e.g., how to build a bridge or how to collect energy from the Sun) | (4) | (B) | $\bigcirc$ | (1) | (1) | vH63597 |
| f. Figure out different ways to solve a science problem | (1) | (B) | © | (1) | (e) | vH63846 |
| g. Present what they have learned about science | (1) | (B) | © | (1) | (c) | vH639593 |

6. Thinking about your science class this year, how much emphasis did you place on teaching your students each of the following skills? Select one circle in each row.

|  | No emphasis | Very little emphasis | Some emphasis | Quite a bit of emphasis | A lot of emphasis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Developing good research questions | (4) | (B) | © | (1) | (1) | vH640901 |
| b. Using drawings or models to explain events or phenomena | (4) | (B) | © | (1) | (®) | vH640902 |
| c. Coming up with experiments or other tests to answer a scientific question | (4) | (B) | $\bigcirc$ | (1) | (1) | vH640903 |
| d. Organizing data into a chart, graph, or spreadsheet to test a solution | (4) | (B) | © | (1) | (E) | vH640906 |
| e. Deciding when to use quantitative versus qualitative data | (1) | (B) | © | (1) | (1) | vH640907 |
| f. Generating explanations based on observations and measurements | (4) | (B) | © | (1) | (1) | vH640908 |
| g. Evaluating the quality of data | (4) | (B) | © | (1) | (1) | vH640909 |
| h. Teaching science ideas to others (e.g., students or teachers) | (1) | (B) | © | (1) | (1) | vH640911 |

7. To what extent are the following resources available to you in your school system (including your school and school district)? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Science textbooks (print or online) | (1) | (B) | © | (1) | vH63921 |
| b. Science magazines and books (print or online) | (4) | (B) | © | (1) | vH639522 |
| c. Supplies or equipment for science labs or demonstrations | (1) | (B) | © | (1) | vH639523 |
| d. Space to conduct science labs | (4) | (B) | $\bigcirc$ | (1) | vH639525 |
| e. Computers for teachers' use | (4) | (B) | © | (1) | vH639228 |
| f. Science kits | (1) | (8) | © | (1) | VH639531 |
| g. Scientific measurement instruments (e.g., microscopes, thermometers, beakers, or weighing scales) | (4) | (B) | © | (1) | vH63926 |

8. To what extent do you use each of the following technological resources for science instruction? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Desktop or laptop computer(s) (including Chromebooks) | (4) | (B) | © | (1) | VH641307 |
| b. Tablet(s) (e.g., Surface Pro, iPad, Kindle Fire) | (4) | (B) | $\bigcirc$ | (1) | vH641308 |
| c. Online content (e.g., online software, podcasts, or videos) | (1) | (8) | © | (1) | VH641309 |
| d. Interactive web spaces or virtual classrooms (e.g., websites where students can interact and share class materials) | (1) | (B) | $\bigcirc$ | (1) | vH641310 |
| e. Interactive panel (e.g., SMART Board, Promethean ActivPanel) | (1) | (B) | © | (1) | vH859326 |

9. In your eighth-grade class, how often do your students use a computer or other digital device to do each of the following activities? Select one circle in each row.

|  | Never or hardly ever | Once or twice a month | Once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Conduct a search for science information | (1) | (B) | © | (1) | vH241282 |
| b. Simulate a physical or biological process or see how something works (e.g., how planets orbit the Sun or how gas expands) | (1) | (B) | © | (1) | vH241284 |
| c. Make a chart or graph that shows results of a science project | (4) | (8) | © | (1) | VH241283 |

10. In this school year, how often do you meet with students one-on-one to give feedback on their work and evaluate their progress in science?
(A) Never or hardly ever
(B) A few times a year
© Once or twice a month
(D) Once or twice a week
(E) Every day or almost every day
11. In this school year, how often do you do each of the following activities with individual students to evaluate their progress in science? Select one circle in each row.

|  | Never | About once or twice a year | About once or twice a month | About once or twice a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Discuss each student's current level of performance with them | (4) | (B) | © | (1) | (1) | vH639634 |
| b. Set goals for specific progress the student would like to make | (4) | (B) | © | (1) | (E) | vH639635 |
| c. Discuss progress the student has made toward goals previously set | (4) | (B) | © | (1) | (E) | vH639636 |
| d. Determine how to adjust your teaching strategies to meet the student's current learning needs | (4) | (B) | © | (1) | (1) | vH639637 |

12. Suppose your students did very well on their last science test. How likely do you think each of the following explanations is in this situation? Select one circle in each row.

|  | Not at all likely | Not likely | Somewhat likely | Quite likely | Extremely likely |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. My students did well because they studied and were prepared. | (4) | (B) | © | (1) | (1) | vH641273 |
| b. My students did well because they put in a lot of effort. | (4) | (B) | © | (1) | (E) | vH641276 |
| c. My students did well because they always do well on tests. | (4) | (B) | © | (1) | (c) | VH641277 |
| d. My students did well because I taught the concepts well. | (4) | (B) | © | (1) | (E) | vH641279 |
| e. My students did well because they guessed well on the test. | (4) | © | © | (1) | (1) | VH641281 |
| f. My students did well because they are just good in science. | (4) | (B) | © | (1) | © | VH641284 |

13. In this school year, did your school offer any of the following supplemental
activities? Select one answer choice in each row.

|  | Yes | No |  |
| :---: | :---: | :---: | :---: |
| a. Opportunities for students to work together to solve problems in their community or the world | (1) | (B) | vH641334 |
| b. Opportunities for students to engage in group science activities | (1) | © | vH641338 |
| c. Opportunities for students to use scientific instruments (e.g., thermometers, microscopes, or telescopes) | (1) | (B) | vH641339 |
| d. Opportunities for students to participate in science outreach programs (e.g., partnerships with colleges, museums, or foundations) | (1) | (B) | vH641341 |

## Appendix K-2ac: Summary of Changes Operational Grade 4 NIES

2019 Operational Grade 4 National Indian Education Study (NIES) Teacher


+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Operational Grade 4 National Indian Education Study (NIES) Teacher

| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale <br> choice on each row." |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. During the last two years. how many times bave you consulted each of the following resources to help you improve the academic periormance of your American Indian or Alaska Native students? Fill in one oval on each line. |  |  |  |  |  | 5. During the last two years. how many times have you consulted each of the following resources to help you improve the academic performance of your American Indian or Alaska Native students? Sclect one circle in cach row. |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one oval on each line." was adapted to "Select one answer choice on each row." |
|  | Never | 1 or 2 times | 3 or 4 times | 5 or more times |  |  | Never | 1 or 2 times | 3 or 4 times | $\begin{gathered} 5 \text { or more } \\ \text { times } \end{gathered}$ |  |  |  |
| a. Online websites or | $\oplus$ | ${ }^{\circ}$ | $\bigcirc$ | $\Phi$ | numse | a. Online websites or | * | © | - | © |  |  |  |
| b. Articles in professional journals | $\oplus$ | ${ }^{\circ}$ | $\bigcirc$ | $\oplus$ | moxep | b. Articles in professional ioumals | © | © | $\bigcirc$ | $\oplus$ | nenss |  |  |
|  | $\oplus$ | © | $\bigcirc$ | $\Phi$ | -mes | c. Local libraties or cultural centers | © | ¢ |  | © |  |  |  |
| d. Other teachers in your school | - | ${ }^{\circ}$ | $\odot$ | © | minees | d. Other teachers in your school | © | (1) | $\odot$ | © | ncusen |  |  |
| e. Elders or other experts | ${ }^{\circ}$ | ${ }^{\circ}$ | $\bigcirc$ | ${ }^{\circ}$ | , minme | e. Elders of other experts | © | $\oplus$ | $\cdots$ | $\stackrel{\square}{6}$ | , |  |  |
| (2015 Grade 4) |  |  |  |  |  | ¢ |  |  |  |  |  |  |  |
| 6. During the last two years, to what extent have you implemented culturally specific instructional practices for American Indian or Alaska Native students in your classroom? <br> (1) Not at all <br> (1) Small extent <br> © Moderate extent <br> (1) Large extent <br> (2015 Grade 4) |  |  |  |  |  | 6. During the last two years, to what extent have you implemented culturally specific instructional practices for American Indian or Alaska Native students in your classroom? <br> (4) Notat all <br> (1) Small extent <br> © Moderate extent <br> (1) Large extent |  |  |  |  |  | NC | N/A |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. During the last two years, community-based develop workshops, including onli instructional practices for <br> (1) Never $\rightarrow$ Skip to Quest <br> (1) 1 or 2 times <br> © 3 or 4 times <br> (1) 5 or more times <br> (2015 Grade 4) | many tim programs sses) aim ican Ind |  | d professional classes and students? |  |  | 7. During the last two years, community-based develop workshops, including onli instructional practices for <br> (2) Never <br> (1) 1 or 2 times <br> © 3 or 4 times <br> (1) 5 or more times | many tin program sseses ain rican Ind | ave you attenc ch as in-servic developing cu Alaska Nativ | d professional classes and turally specific students? |  |  | NC | Please note that no content changes were made to the item but the skip pattern text was removed from the item. |

[^25]2019 Operational Grade 4 National Indian Education Study (NIES) Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 8. To what extent have you implemented lessons learned from these professional or community-based development programs in your classroom? <br> (2) Not at all <br> (1) Small extent <br> © Moderate extent <br> (1) Large extent <br> (2015 Grade 4) | 8. To what extent have you implemented lessons learned from these professional or community-based development programs in your classroom? Not at all Small extent Moderate extent <br> (1) Large extent | NC | N/A |
| 9. Who sponsored the professional or community-based development programs you attended in the last two years? Fill in all ovals that apply. <br> (8) State <br> (1) District <br> © Tribal education department <br> (1) Indian cducation professional associations <br> (1) College or university <br> (1) Other (please specify): $\qquad$ <br> (2015 Grade 4) | 9. Who sponsored the professional or community-based development programs you attended in the last two years? Select all squares that apply. <br> (4) State <br> (1) District <br> © Tribal education department <br> (1) Indian education professional associations <br> (1) College or university <br> (1) Other (please specify): $\qquad$ | NC | The in-line direction was adapted from PBA to DBA: "Fill in all ovals that apply." was adapted to "Select one answer choice on each row." |
| 10. To what extent do you speak any of the native languages spoken by American Indian or Alaska Native students who attend this school? If you know more than one of these languages, answer for the one you know best. <br> (ब) No knowledge or skill; nonspeaker <br> (1) Minimal functional or communicative ability: ability to use some words or phrases <br> (0) Moderate communicative ability; can express some ideas and communicate in some situations, but limited and cannot always express ideas <br> (1) Fluent nonnative speaker <br> (1) Fluent native speaker <br> (2015 Grade 4) | 10. To what extent do you speak any of the native languages spoken by American Indian or Alaska Native students who attend this school? If you know more than one of these languages. answer for the one you know best. <br> (2) No knowledge or skill; nonspeaker <br> (1) Minimal functional or communicative ability; ability to use some words or phrases <br> © Moderate communicative ability; can express some ideas and communicate in some situations. but limited and cannot always express ideas <br> (1) Fluent nonnative speaker <br> (1) Fluent native speaker | NC | N/A |

[^26]2019 Operational Grade 4 National Indian Education Study (NIES) Teacher


[^27]2019 Operational Grade 4 National Indian Education Study (NIES) Teacher


+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Operational Grade 4 National Indian Education Study (NIES) Teacher


[^28]
## 2019 Operational Grade 4 National Indian Education Study (NIES) Teacher



[^29]2019 Operational Grade 4 National Indian Education Study (NIES) Teacher


+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Operational Grade 4 National Indian Education Study (NIES) Teacher

| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22. How much do you agree with each of the following statements about the materials available in your school library, media center, or resource center? Fill in one oval on each line. |  |  |  |  |  | 22. How much do you agree with each of the following statements about the materials ivailable in your school library, media center, or resource center! Select one circle in each row. |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one oval on each line." was adapted to "Select one answer choice on each row." |
|  | $\begin{aligned} & \text { Strongy } \\ & \text { disagre } \end{aligned}$ | Disagree | Agree | Strongly agree |  |  | Strongly disagree | Disagree | Agree | Strongly agree |  |  |  |
| a. The number of books and <br> materials available for 4 th <br> grade students is sufficient. | © | (1) | $\odot$ | $\oplus$ | nes | 3. The number of books and materials available for 4th grade students is sufficient. | © | © | $\bigcirc$ | $\oplus$ | nrasan |  |  |
| b. The qualitit of the books <br> and materials available for <br> 4th grade students is <br> satistactory. <br> . | © | $\oplus$ | $\odot$ | $\oplus$ | usp | b. The quality of the books and materials available for ith grade students is satisfactory. | © | ${ }^{(1)}$ | $\odot$ | $\oplus$ | $\mathrm{tancem}^{4}$ |  |  |
| c. The number of books and <br> materials specific to <br> American Indian and <br> Alaska Native auture <br> available for tuth rade <br> students is sufficicent. | $\oplus$ | ${ }^{\oplus}$ | $\odot$ | $\oplus$ | es | c. The number of books and materials specific to American Indian and Alaska Native culture avaiabie or turf grade students is sufficient. | (1) | © | $\odot$ | $\oplus$ | nex |  |  |
| d. The quality of the books and materyals specific to American Indian and Alaska Native culture available for 4th trade students is satisfactory. | (1) | $\oplus$ | $\odot$ | $\oplus$ | пиems | d. The quality of the books and materials specific to American Indian and Alaska Native culture available tor 4th grade students is satisfactory. | © | © | $\odot$ | $\oplus$ | Hes |  |  |
| (2015 Grade 4) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23. To what extent is each of the following a problem in your school? Fill in one oval on each line. |  |  |  |  |  | 23. To what extent is each of the following a problem in your school? Select one circle in each row. |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one oval on each line." was adapted to "Select one answer choice on each row." |
|  | Not atall | Small extent | Moderate extent | Large extent |  |  | Not at all | Small extent | Moderate extent | Large extent |  |  |  |
| a. Student alsentreeism | (1) | © | $\bigcirc$ | $\oplus$ | Insama | a. Student albsentecism | (1) | $\pm$ | $\bigcirc$ | $\stackrel{\square}{\square}$ | nonect |  |  |
| b. Student tardiness | ๑ | (1) | $\odot$ | ¢ | \%ames | b. Student tardiness | © | (1) | - | (1) | nounci |  |  |
| c. Student health problems | $\otimes$ | ${ }^{1}$ | $\stackrel{\square}{\circ}$ | © | \%ment | c. Student health problems | © | ${ }^{\circ}$ | $\bigcirc$ | ${ }^{\circ}$ | -rovat |  |  |
| d. Student misbchavior in class | $\oplus$ | © | - | $\oplus$ | nowas | d. Student mishehavior in class | © | © | $\bigcirc$ | © | nenues |  |  |
| c. Physical conflicts among students | © | $\oplus$ | $\odot$ | $\oplus$ | neasis | e. Physical conflicts among | © | $\oplus$ | $\odot$ | $\oplus$ | noumes |  |  |
| t. Bullying | $\stackrel{\square}{\square}$ | ${ }_{\square}{ }^{\circ}$ | $\bigcirc$ | ${ }_{\square}$ | memas | f. Bullying | (1) | ${ }^{1}$ | $\odot$ | $\stackrel{\square}{\square}$ | जrancel |  |  |
| \%. Low student aspirations | $\stackrel{\square}{4}$ | ${ }_{\square}^{1}$ | $\stackrel{\circ}{\circ}$ | $\stackrel{\square}{\oplus}$ | \%mbans | \%. Low student aspirations | ¢ | ${ }^{\circ}$ | $\stackrel{\square}{\circ}$ | $\stackrel{\square}{\circ}$ | nesmes |  |  |
| 1. Low reacher expectations | $\stackrel{\square}{\circ}$ | ${ }^{\text {a }}$ |  |  | Hesmese | h. Low teacher expectations | $\triangle$ | ${ }^{\circ}$ | $\odot$ | $\odot^{\circ}$ |  |  |  |
| (2015 Grade 4) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24. Arc you Hispanic or Latino? Fill in one or more ovals <br> (4) No, 1 am not Hispanic or Latino. <br> (1) Yes. 1 am Mexican. Mexican American, or Chicano. <br> © Yes. I am Puerto Rican or Puerto Rican American. <br> (ब) Yes, 1 am Cuban or Cuban American. <br> (1) Yes, I am from some other Hispanic or Latino background. <br> (2015 Grade 4) |  |  |  |  |  | 24. Are you Hispanic or Latino? Select all squares that apply. <br> (4) No, 1 am not Hispanic or Latino. <br> (1) Yes, 1 am Mexican, Mexican American, or Chicano. <br> © Yes, I am Puerto Rican or Puerto Rican American. <br> (1) Yes. I am Cuban or Cuban American. <br> (1) Yes, 1 am from some other Hispanic or Latino background. |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one or more ovals." was adapted |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Operational Grade 4 National Indian Education Study (NIES) Teacher



+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Operational Grade 4 National Indian Education Study (NIES) Teacher



## Appendix K-2ad: Operational Grade 4 NIES

1. Counting this year, how many years have you taught at this school? If less than 1 year total at this school, enter "01."

2. How many students are currently in your class?

3. To what extent have you acquired knowledge, skills, and information specific to teaching American Indian or Alaska Native students from each of the following sources? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Independent reading and study | (4) | (B) | $\bigcirc$ | (1) | VH241584 |
| b. Your own personal or family background and experiences | (4) | (B) | $\bigcirc$ | (1) | VH241586 |
| c. Locally sponsored American Indian or Alaska Native cultural orientation program | (4) | (B) | © | (1) | VH241585 |
| d. Living and working in an American Indian or Alaska Native community | (4) | (B) | © | (1) | VH241588 |

4. To what extent have you acquired knowledge, skills, and information specific to teaching American Indian or Alaska Native students from each of the following types of classes? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. College courses, or other classes or workshops with a focus on teaching American Indian or Alaska Native students | (4) | (B) | $\bigcirc$ | (1) | vH241592 |
| b. College courses, or other classes or workshops with a general focus on various cultures or diversity | (4) | (B) | © | (1) | VH241591 |

5. During the last two years, how many times have you consulted each of the following resources to help you improve the academic performance of your American Indian or Alaska Native students? Select one circle in each row.

|  | Never | 1 or 2 times | 3 or 4 times | $\begin{aligned} & 5 \text { or more } \\ & \text { times } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Online websites or databases | (4) | (B) | © | (1) | vH241594 |
| b. Articles in professional journals | (4) | (B) | © | (1) | vH241595 |
| c. Local libraries or cultural centers | (4) | (B) | © | (1) | vH241596 |
| d. Other teachers in your school | (4) | (8) | © | (1) | vH241597 |
| e. Elders or other experts | (4) | (8) | © | (1) | vH241598 |

6. During the last two years, to what extent have you implemented culturally specific instructional practices for American Indian or Alaska Native students in your classroom?
(A) Not at all
(B) Small extent
© Moderate extent
(D) Large extent
7. During the last two years, how many times have you attended professional or community-based development programs (such as in-service classes and workshops, including online classes) aimed at developing culturally specific instructional practices for American Indian or Alaska Native students?
(4) Never
(B) 1 or 2 times
© 3 or 4 times
(D) 5 or more times
8. To what extent have you implemented lessons learned from these professional or community-based development programs in your classroom?
(A) Not at all
(B) Small extent
© Moderate extent
(D) Large extent
9. Who sponsored the professional or community-based development programs you attended in the last two years? Select all squares that apply.
(A) State
(B) District
© Tribal education department
(D) Indian education professional associations
(E) College or university
(®) Other (please specify): $\qquad$
10. To what extent do you speak any of the native languages spoken by American Indian or Alaska Native students who attend this school? If you know more than one of these languages, answer for the one you know best.
(A) No knowledge or skill; nonspeaker
(B) Minimal functional or communicative ability; ability to use some words or phrases
© Moderate communicative ability; can express some ideas and communicate in some situations, but limited and cannot always express ideas
(D) Fluent nonnative speaker
(E) Fluent native speaker
11. To what extent do you use your students' American Indian or Alaska Native language(s) when you teach any core subject (reading, mathematics, science, and social studies)?
(A) Instruction is entirely in English.
(B) Instruction is primarily in English, but words or phrases from the students' American Indian or Alaska Native language(s) are included occasionally.
© Instruction is primarily in English, but words or phrases from the students' American Indian or Alaska Native language(s) are included frequently.
(D) Instruction is primarily in the students' American Indian or Alaska Native language(s).
12. Have you received any of the following forms of preparation for teaching students whose first language is not English (sometimes called Limited English Proficiency [LEP] students or English Language Learners [ELL])? Select one circle in each row.

|  | Yes | No |  |
| :---: | :---: | :---: | :---: |
| a. At least one college-level course on how to teach students whose first language is not English (but not a major, minor, or special emphasis) | (4) | (8) | VH241600 |
| b. An undergraduate or graduate major, minor, or special emphasis in teaching English as a Second Language (ESL), English Language Development (ELD), or Bilingual Education | (4) | © | VH241602 |
| c. Any other training or professional development on how to teach students whose first language is not English | (4) | (8) | VH241601 |

13. To what extent do you use the following to assess the progress of your American Indian or Alaska Native students? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. State assessments | (4) | (8) | © | (1) | VH241604 |
| b. District assessments | (4) | (8) | $\bigcirc$ | (1) | VH241605 |
| c. Assessments developed by American Indian or Alaska Native organizations | (4) | (B) | © | (1) | VH241606 |
| d. Tests supplied by textbook publishers (for example, end of unit or chapter tests) | (1) | (B) | $\bigcirc$ | (1) | VH241607 |
| e. Teacher-made tests or quizzes | (4) | (B) | © | (1) | vH241611 |
| f. Performance-based assessments | (4) | (B) | © | (1) | vH241612 |
| g. Group projects | (4) | (8) | © | (1) | VH241609 |
| h. Oral responses of students during class discussions | (4) | (B) | © | (1) | vH241610 |
| i. Assessments to evaluate English language proficiency | (4) | (B) | © | (1) | VH241608 |

14. Do you teach reading/language arts to grade 4 students?
(4) Yes
(B) No
15. How often do you integrate materials about the following topics into your reading/language arts lessons? Select one circle in each row.

|  | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. American Indian or Alaska Native culture or history | (4) | (B) | © | (1) | (1) | vH241615 |
| b. Current issues affecting American Indian or Alaska Native people or communities | (4) | (B) | $\bigcirc$ | (1) | (E) | VH241614 |

16. How often do you have your students do each of the following reading/language arts activities? Select one circle in each row.

|  | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Read literature with American Indian or Alaska Native themes | (4) | (B) | © | (1) | (1) | vH241617 |
| b. Read literature by American Indian or Alaska Native authors | (4) | (B) | © | (1) | (1) | vH241618 |
| c. Read about, or discuss, current issues of concern to the American Indian or Alaska Native community | (4) | (B) | © | (1) | (1) | vH241621 |
| d. Write about experiences or issues affecting American Indian or Alaska Native people | (1) | (B) | © | (1) | (1) | vH241620 |
| e. Write about their own experiences as an American Indian or Alaska Native person | (4) | (B) | © | (1) | (1) | vH241619 |

17. How much do you rely on each of the following documents in planning reading/language arts lessons? Select one circle in each row.

|  | Not at all | A little | Some | A lot | Not aware of any |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Standards developed by national professional organizations | (4) | (B) | © | (1) | (®) | vH241623 |
| b. State content standards | (4) | (B) | © | (1) | (1) | vH241626 |
| c. District content standards | (4) | (B) | $\bigcirc$ | (1) | (1) | vH241625 |
| d. American Indian or Alaska Native content or cultural standards | (4) | (B) | © | (1) | (1) | vH241624 |

18. Do you teach mathematics to grade 4 students?
(A) Yes
(B) No
19. How often do you integrate materials about the following topics into your mathematics lessons? Select one circle in each row.

|  | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. American Indian or Alaska Native culture or history | (1) | (B) | © | (1) | (E) | vH241629 |
| b. Current issues affecting American Indian or Alaska Native people or communities | (1) | (B) | © | (1) | (1) | vH241628 |

20. How often do you have your students do each of the following mathematics activities? Select one circle in each row.

|  | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Solve mathematics problems that reflect situations found in American Indian or Alaska Native communities | (1) | (B) | © | (1) | (1) | vH241631 |
| b. Participate in activities that integrate mathematics with American Indian or Alaska Native themes (for example, use traditional symbols and designs to teach geometric concepts) | (4) | (B) | © | (1) | (1) | vH241634 |
| c. Study traditional American Indian or Alaska Native mathematics (for example, American Indian or Alaska Native systems of counting, estimating, and recording quantities) | (1) | (B) | © | (1) | (1) | vH241633 |
| d. Study mathematics within traditional American Indian or Alaska Native contexts (for example, American Indian or Alaska Native systems of astronomy and physics) | (1) | (8) | © | (1) | (1) | vH241632 |

21. How much do you rely on each of the following documents in planning mathematics lessons? Select one circle in each row.

|  | Not at all | A little | Some | A lot | Not aware of any |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Standards developed by national professional organizations | (4) | (B) | © | © | (c) | vH241636 |
| b. State content standards | (4) | (B) | © | (1) | (1) | vH241639 |
| c. District content standards | (4) | (B) | © | (1) | (1) | vH241638 |
| d. American Indian or Alaska Native content or cultural standards | (4) | (B) | © | (1) | (c) | VH241637 |

22. How much do you agree with each of the following statements about the materials available in your school library, media center, or resource center? Select one circle in each row.

|  | Strongly disagree | Disagree | Agree | Strongly agree |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. The number of books and materials available for 4th grade students is sufficient. | (4) | (B) | © | (1) | vH241641 |
| b. The quality of the books and materials available for 4th grade students is satisfactory. | (4) | (B) | © | (1) | VH241644 |
| c. The number of books and materials specific to American Indian and Alaska Native culture available for 4th grade students is sufficient. | (4) | (B) | © | (1) | VH241643 |
| d. The quality of the books and materials specific to American Indian and Alaska Native culture available for 4th grade students is satisfactory. | (4) | (B) | © | (1) | VH241642 |

23. To what extent is each of the following a problem in your school? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Student absenteeism | (4) | (8) | © | (1) | VH241646 |
| b. Student tardiness | (4) | (8) | © | (1) | VH241647 |
| c. Student health problems | (4) | (B) | $\bigcirc$ | (1) | VH241648 |
| d. Student misbehavior in class | (4) | (B) | © | (1) | VH241656 |
| e. Physical conflicts among students | (1) | (B) | © | (1) | vH241652 |
| f. Bullying | (4) | © | © | (1) | VH241653 |
| g. Low student aspirations | (4) | (B) | $\bigcirc$ | © | VH241654 |
| h. Low teacher expectations | (4) | (8) | $\bigcirc$ | (1) | VH241655 |
| i. Low family involvement | (4) | (B) | © | © | VH241651 |

VH240385
24. Are you Hispanic or Latino? Select all squares that apply.
(A) No, I am not Hispanic or Latino.
(B) Yes, I am Mexican, Mexican American, or Chicano.
© Yes, I am Puerto Rican or Puerto Rican American.
(D) Yes, I am Cuban or Cuban American.
(e) Yes, I am from some other Hispanic or Latino background.
25. Which of the following best describes you? Select all squares that apply.
(4) White
(B) Black or African American
© Asian
(D) American Indian or Alaska Native (Print the name of your American Indian tribe or Alaska Native group below. You may indicate more than one tribe or group.)
(E) Native Hawaiian or other Pacific Islander
26. What have you found to be the most effective teaching and learning strategies for increasing the achievement of your American Indian or Alaska Native students?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
27. In the space below, please share with us your thoughts about any other important issue(s) about your students, school, or community that are related to student academic performance, student aspirations, or other educational matters.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Appendix K-2ae: Summary of Changes Operational Grade 8 NIES

2019 Operational Grade 8 National Indian Education Study (NIES) Teacher

| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Counting this year, how many years have you taught at this school? If less than 1 year total at this school. enter "01." $\square$ Years <br> (2015 Grade 8) |  |  |  |  |  | 1. Counting this year, how many years have you taught at this school? If less than 1 year total at this school, enter "01."$\square$ Years |  |  |  |  |  | NC | N/A |
| 2. To what extent have you aequired knowledge, skills, and information specific to teaching American Indian or Alaska Native students from each of the following sources? Fill in one oval on each line. |  |  |  |  |  | 2. To what extent have you acquired knowledge, skills, and information specific to teaching American Indian or Alaska Native students from each of the following sourcesi Select one circle in each row. |  |  |  |  |  | NC | The in-line direction was |
|  | Notatall | Small extent | Moderate extent | Large extent |  |  | Notatall | Small extent | Moderate extent | Large extent |  |  | adapted from PBA to DBA: |
| a. Independent reading and study | © | ${ }^{\oplus}$ | $\bigcirc$ | © | voster | a. Independent reading and study | © | © | $\odot$ | $\oplus$ | rease |  | "Fill in one |
| b. Your own personal or | $\oplus$ | ${ }^{\circ}$ | - | $\oplus$ | мхиих | b. Your own personal or family backround and experiences | © | © | $\bigcirc$ | $\Phi$ | "ancem |  | oval on each |
| c. Locally sponsored American Indian or Alaska Native culural oricntation program a | $\triangle$ | ${ }^{\circ}$ | $\odot$ | $\oplus$ | vama | c. Locally sponsored <br> American Indian or Alaska <br> Native cultural orientation <br> program | © | $\omega$ | $\odot$ | ${ }^{(1)}$ | Henses |  | line. was adapted to |
| Living and working in an American Indian or Alaska Native community <br> (2015 Grade 8) | © | $\oplus$ | $\odot$ | $\odot$ | vams | d. Living and working in an <br> American Indian or Alaska <br> Native community | © | © | $\odot$ | © | norse |  | "Select one answer choice on each row." |
| 3. To what extent have you acquired knowledge, skills, and information specific to teaching American Indian or Alaska Native students from each of the following types of classes? Fill in one oval on each line. |  |  |  |  |  | 3. To what extent have you acquired knowledge, skills, and information specific to reaching, American Indian or Alaska Native students from each of the following types of classes? Select one circle in each row. |  |  |  |  |  | NC | The in-line direction was |
|  | Notatall | Small extent | Moderate extent | Large extent |  |  | Not at all | Small extent | $\begin{gathered} \text { Moderate } \\ \text { extent } \end{gathered}$ | Large extent |  |  | adapted from PBA to DBA: |
| a. College courses, or other classes or workshops with a focus on teaching Amcrican Indian or Alaska Native students R | (1) | ${ }^{\circ}$ | - | © | 3, |  | © | © | $\odot$ | $\odot$ | 458 |  | "Fill in one oval on each |
| b. Collcese courses, or other clasces or workshops with a gencral focus on vanious cultures or diversity | © | ${ }^{(1)}$ | $\bigcirc$ | $\odot$ | vorus | $\begin{array}{\|l\|l} \hline \text { b. College courses, or other } \\ \text { classecs or workshops with } \\ \text { a general focus on various } \\ \text { cultures or diversity } \end{array}$ | © | $\oplus$ | $\odot$ | © | (19) |  | line." was adapted to "Select one |
| (2015 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  | answer choice on each row." |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Operational Grade 8 National Indian Education Study (NIES) Teacher


[^30]2019 Operational Grade 8 National Indian Education Study (NIES) Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 7. To what extent have you implemented lessons learned from these professional or community-based development programs in your classroom? <br> (4) Not at all <br> (1) Small extent <br> © Moderatc extent <br> (1) Large extent <br> (2015 Grade 8) | 7. To what extent have you implemented lessons learned from these professional or community-based development programs in your classroom? <br> (1) Not at all <br> (1) Small extent <br> © Moderate extent <br> (1) Large extent | NC | N/A |
| 8. Who sponsored the professional or community-based development programs you attended in the last two years? Fill in all ovals that apply. <br> (2) State <br> (1) District <br> © Tribal education department <br> (1) Indian education professional associations <br> (1) College or university <br> (1) Other (please specify): $\qquad$ <br> (2015 Grade 8) | 8. Who sponsored the professional or community-based development programs you attended in the last two years? Select all squares that apply. <br> (1) State <br> (1) District <br> (0) Tribal education department <br> (D) Indian education professional associations <br> (1) College or university <br> (1) Other (please specify): $\qquad$ | NC | The in-line direction was adapted from PBA to DBA: "Fill in all ovals that apply." was adapted to "Select all squares that apply." |
| 9. To what extent do you speak any of the native languages spoken by American Indian or Alaska Native students who attend this school? If you know more than one of these languages, answer for the one you know best. <br> (4) No knowledge or skill: nonspeaker <br> (1) Minimal functional or communicative ability; ability to use some words or phrases <br> © Moderate communicative ability; can express some ideas and communicate in some situations, but limited and cannot always express ideas <br> (1) Fluent nomnative speaker <br> (1) Fluent native speaker <br> (2015 Grade 8) | 9. To what extent do you speak any of the native languages spoken by American Indian or Alaska Native students who attend this school? If you know more than one of these languages, answer for the one you know best. <br> (4) No knowledge or skill: nonspeaker <br> (1) Minimal functional or communicative ability: ability to use some words or phrases <br> (a) Moderate communicative ability; can express some ideas and communicate in some situations, but limited and cannot always express ideas <br> (1) Fluent nonnative speaker <br> (1) Fluent native speaker | NC | N/A |

[^31]

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Operational Grade 8 National Indian Education Study (NIES) Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | text was removed from the item. |
| 13. How many students are American Indian or Alaska Native in your reading/language arts class? (Include both enrolled tribal members and descendants in your calculations.) <br> (4) Few (less than 5 ) <br> (1) Several, but less than half the class <br> © At least half the class, but not every student <br> (1) The whole class <br> (1) I don't know. |  |  |  |  |  |  | 13. How many students are American Indian or Alaska Native in your reading/language arts classi (Include both enrolled tribal members and descendants in your calculations.) <br> (4) Few (less than 5) <br> (1) Several, but less than half the class <br> © At least half the class, but not every student <br> (1) The whole class <br> (1) I don't know. |  |  |  |  |  |  | NC | N/A |
| 14. To what extent do you use your students' American Indian or Alaska Native language(s) when you teach reading/language arts? Instruction is entirely in English. Instruction is primarily in English, but words or phrases from the students' American Indian or Alaska Native language(s) are included occasionally. <br> © Instruction is primarily in English, but words or phrases from the students' American Indian or Alaska Native language(s) are included frequently. <br> (1) Instruction is primarily in the students' American Indian or Alaska Native language(s). <br> (2015 Grade 8) |  |  |  |  |  |  | 14. To what extent do you use your students' American Indian or Alaska Native language(s) when you teach reading/language arts? <br> (4) Instruction is entirely in English. <br> (1) Instruction is primarily in English. but words or phrases from the students American Indian or Alaska Native language(s) are included occasionally. <br> (6 Instruction is primarily in English, but words or phrases from the students ${ }^{*}$ American Indian or Alaska Native language(s) are included frequently. <br> (1) Instruction is primarily in the students ${ }^{*}$ American Indian or Alaska Native language(s). |  |  |  |  |  |  | NC | N/A |
| 15. How often do you integrate marerials ahout the following topics into your reading/language arts lessons? Fill in one oval on each line. |  |  |  |  |  |  | 15. How often do you integrate materials about the following topics into your reading/language arts lessons? Select one circle in each row. |  |  |  |  |  |  | NC | The in-line direction was |
|  | Never | At least once a year | At least once a month | At least once a week | $\begin{gathered} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{gathered}$ |  |  | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |  | adapted from PBA to DBA: |
| a. American Indian or Alaska Native culture or history | © | (1) | Q | (1) | © | vinues | a. American Indian or <br> Alaska Native culture <br> or history | (1) | (1) | $\bigcirc$ | (1) | © | $\begin{array}{\|l\|} \hline \end{array}$ |  | "Fill in one |
| b. Current issues affecting American Indian or Alaska Native people or communities | (2) | (1) | $\odot$ | © | © | venam | b. Current issues affecting American Indian or Alaska Native people or communities | (1) | (1) | © | © | © |  |  | oval on each line." was adapted to |
| (2015 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |  | "Select one answer choice on each row." |

[^32]2019 Operational Grade 8 National Indian Education Study (NIES) Teacher


[^33]2019 Operational Grade 8 National Indian Education Study (NIES) Teacher


+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

2019 Operational Grade 8 National Indian Education Study (NIES) Teacher

| Previous item |  |  |  |  |  |  | 2019 item |  |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22. How often do you have your students do each of the following mathematics activities? Fill in one oval on each line. |  |  |  |  |  |  | 22. How often do you have your students do each of the following mathematics activities? Select one circle in each row. |  |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one oval on each line." was adapted to "Select one answer choice on each row." |
|  | Never | At least once a year | At least once a month | At least <br> once a week | $\begin{array}{c\|} \text { Every day or } \\ \text { almost } \\ \text { every day } \end{array}$ |  | a. Solve mathematics | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |  |  |
| a. Solve mathematics problems that reflect situations found in American Indian or Alaska Native communities | (1) | (1) | © | © | (1) | ve01273 | problems that reflect situations found in American Indian or Alaska Native communities <br> b. Participate in | (1) | (1) | $\bigcirc$ | (1) | © | V1224631 |  |  |
| b. Participate in activities that integrate mathematics with American Indian or Alaska Native themes (for example, use traditional symbols and designs to teach geometric concepts) | (1) | (1) | $\bigcirc$ | © | © | venorz5 | b. Participate in activities that integrate mathematics with American Indian or Alaska Native themes (for example, use traditional symbols and designs to teach geometric concepts) | (1) | (1) | © | © | (1) | ve20164 |  |  |
| c. Study traditional American Indian or Alaska Native mathematics (for example, American Indian or Alaska Native systems of counting, estimating, and recording quantities) | (1) | (1) | © | © | (1) | veniz7 | c. Study traditional American Indian or Alaska Native mathematics (for example, American Indian or Alaska Native systems of counting, estimating, and recording quantities) | (1) | (1) | © | (1) | (1) | vi224163 |  |  |
| d. Study mathematics within traditional American Indian or Alaska Native contexts (for example, American Indian or Alaska Native systems of astronomy and physics) | (1) | (1) | $\odot$ | © | (1) | ve01239 | d. Study mathematics within traditional American Indian or Alaska Native contexts (for example, American Indian or Alaska Native systems of astronomy and physics) | (1) | (1) | $\bigcirc$ | (1) | (1) | vi221632 |  |  |
| (2015 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23. How much do you rely on each of the following documents in planning mathematics lessons? Fill in one oval on each line. |  |  |  |  |  |  | 23. How much do you rely on each of the following documents in planning mathematics lessons? Select one circle in each row. |  |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one oval on each line." was adapted to "Select one answer choice on each row." |
|  | Not at all | A little | Some | A lot | Not aware of any |  |  | Not at all | A little | Some | A lot | Not aware of any |  |  |  |
| a. Standards deycloped <br> by national <br> protessional <br> organizations <br> b. | (1) | (1) | © | © | ¢ | velser | a. Standards developed <br> by national <br> profesional <br> organizations | (1) | (1) | $\odot$ | © | (1) | ve4cs |  |  |
| b. State content standards | (1) | (1) | 0 | $\oplus$ | © | veram | b. State content standards | (1) | (1) | $\bigcirc$ | $\pm$ | $\Phi$ | v124138 |  |  |
| $\begin{array}{\|l\|} \hline \text { c. } . \text { District content } \\ \text { standards } \end{array}$ | (1) | (1) | $\bigcirc$ | © | ¢ | venem | c. District content standards | ( $)$ | (1) | $\bigcirc$ | (1) | (1) | vences |  |  |
| d. American Indian or Alaska Native content or cultural standards | (1) | © | © | © | © | ทutrem | d. American Indian or Alaska Native content or cultural standards | (1) | (1) | © | (1) | (1) | vesalat |  |  |
| (2015 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

+ This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).


## 2019 Operational Grade 8 National Indian Education Study (NIES) Teacher

| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 24. How much do you agree with each of the following statements about the matenials available in your school library, media center. or resource centen? Fill in one oval on each line. |  |  |  |  |  | 24. How much do you agree with each of the following statements about the materials available in your school library, media center, or resource center? Select one circle in each row. |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one oval on each line." was adapted to "Select one answer choice on each row." |
|  | $\begin{array}{l}\text { Strongly } \\ \text { disagree }\end{array}$ | Disagree | Agree | Strongly agree |  |  | $\begin{aligned} & \text { Strongly } \\ & \text { disagre } \end{aligned}$ | Disagree | Agree | Strongly agree |  |  |  |
| a. The number of books and materials $\begin{gathered}\text { vailable for } 8 \text { th } \\ \text { grade students is sufficient. }\end{gathered}$. | © | $\oplus$ | © | $\oplus$ |  | a. The number of hooks and materials available for 8 sh grade students is sufficient | (1) | ${ }^{(1)}$ | $\odot$ | © | мmates |  |  |
| $\begin{aligned} & \text { b. The quality of the books } \\ & \text { and materials available for } \\ & \text { sth grade students is } \\ & \text { satistactactory. } \\ & \hline \end{aligned}$ | $\oplus$ | ${ }^{1}$ | $\odot$ | $\oplus$ |  | b. The quality of the books <br> and matecrials availible for <br> 8th grade students is <br> satisfactory. | © | ${ }^{\oplus}$ | $\odot$ | $\oplus$ | mancel |  |  |
| c. The number of books and <br> materials speciicic to <br> American pudian and <br> Alaka Natite culture <br> available for 8th grade <br> students is sufficient. | © | $\oplus$ | $\odot$ | $\oplus$ | bom | c. The number of books and <br> materials specific to to <br> American Indian and <br> Alaska Native culture <br> available for sth grade <br> students is sufficient. | © | © | $\odot$ | $\oplus$ | Leo |  |  |
| d. The quality of the books and materials specific to American lndian and , aska Native culture students is satisfactory | © | $\oplus$ | $\bigcirc$ | $\oplus$ | sose | T. The quality of the books <br> and materials specificic to <br> America Indian and <br> Alaska Native culture <br> available for sth grade <br> students is satistactory. | © | ${ }^{\circ}$ | $\odot$ | ${ }^{\oplus}$ | \% |  |  |
| (2015 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25. About how many of your grade 8 students will complete the 8 th grade? <br> (4) None <br> (1) A few <br> © Some <br> (1) Most <br> (2) All <br> (1) I don't know. <br> (2015 Grade 8) |  |  |  |  |  | 25. About how many of your grade 8 students will complete the 8 th grade? <br> (4) None <br> (1) A few <br> © Some <br> (1) Most <br> (b) All <br> (1) I don't know. |  |  |  |  |  | NC | N/A |
| 26. About how many of your grade 8 students will be prepared for high school? <br> (D) None <br> (1) A few <br> © Some <br> (1) Most <br> (1) All <br> (c) I don't know. <br> (2018 Grade 8) |  |  |  |  |  | 26. About how many of your grade 8 students will be prepared for high school? <br> (b) None <br> (1) A few <br> © Some <br> (1) Most <br> (1) All <br> (c) I don't know. |  |  |  |  |  | NC | N/A |

[^34]| Previous item |  |  |  |  |  | 2019 item |  |  |  |  |  | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27. To what extent is cach of the following a problem in your school? Fill in one oval on each line. |  |  |  |  |  | 27. To what extent is each of the following a problem in your school? Select one circle in cach row. |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one oval on each line." was adapted to "Select one answer choice on each row." |
|  | Notat all | Small extent | Moderate extent | Large extent |  |  | Not at all | Small extent | Moderate extent | Large extent |  |  |  |
| a. Student absenteeism | $\stackrel{\square}{\square}$ | $\stackrel{\square}{\square}$ | $\bigcirc$ | $\stackrel{\square}{\circ}$ | nmam | a. Student absentecism | © | $\oplus$ | - | © | - |  |  |
| b. Student tardiness | © | ${ }_{\square}$ | $\bigcirc$ | $\stackrel{\square}{\square}$ | , mban | b. Student tardiness | $\stackrel{\square}{\circ}$ | $\oplus$ | $\odot$ | ¢ | venas |  |  |
| c. Student health problems | $\stackrel{\square}{\circ}$ | © | $\bigcirc$ | ¢ | mmata | c. Student health problems | ¢ | $\stackrel{\square}{\square}$ | $\odot$ | $\stackrel{\square}{\square}$ | nentat |  |  |
| d. Teen pregnancies | © | ${ }^{\circ}$ | - | ${ }^{\circ}$ | nuean | d. Tcen pregnancics | $\oplus$ | ${ }_{\square}$ | ¢ | ${ }^{\circ}$ | $\cdots$ |  |  |
| e. Drug or alcohol use by <br> students | © | $\oplus$ | - | $\oplus$ | nowe | e. Drug or alcohol use by students | © | © | - | $\oplus$ | munes |  |  |
| . Student misbehavior in class | © | ${ }^{\circ}$ | $\odot$ | ¢ | mown | f. Student misbehavior in class | $\oplus$ | ${ }^{\circ}$ | - | $\pm$ | reacse |  |  |
| 8. Physical conflicts among students | © | $\pm$ | © | ¢ |  | g. Physical conflicts among students | © | © | © | $\oplus$ | venes |  |  |
| h. Bullying | $\stackrel{\square}{\square}$ | $\oplus$ | $\stackrel{\square}{\circ}$ | $\stackrel{\oplus}{\oplus}$ | Tmaxs | h. Bullying | $\oplus$ | © | Q | $\oplus$ | пиaces |  |  |
| 1. Low teacher expcctations | ${ }_{\square}{ }^{\circ}$ | ${ }_{\square}{ }^{\circ}$ | $\stackrel{\circ}{\circ}$ | $\oplus$ | mben | 1. Low student aspirations | ¢ | $\oplus$ | - | ¢ | venes |  |  |
| k. Low family involvement | $\square^{\circ}$ | ${ }_{\square}$ | $\bigcirc$ | ${ }^{\circ}$ | mome | 1. Low teacher expectations | $\stackrel{\square}{\circ}$ | $\pm$ | $\odot$ | ¢ | manam |  |  |
|  |  |  |  |  |  | k. Low family involvement | © | © | $\odot$ | $\odot$ | mancis |  |  |
| (2015 Grade 8) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28. Are you Hispanic or Latino? Fill in one or more ovals, <br> (1) No, I am not Hispanic or Latino. <br> (1) Yes. 1 am Mexican. Mexican American. or Chicano. <br> © Yes, I am Puerto Rican or Puerto Rican American. <br> (1) Yes, 1 am Cuban or Cuban American. <br> (1) Yes, 1 am from some other Hispanic or Latino background. <br> (2015 Grade 8) |  |  |  |  |  | 28. Are you Hispanic or Latino? Select all squares that apply. <br> (1) No, I am not Hispanic or Latino. <br> (1) Yes, I am Mexican, Mexican American, or Chicano. <br> - Yes, I am Puerto Rican or Puerto Rican American. <br> (1) Yes, I am Cuban or Cuban American. <br> (1) Yes, I am from some other Hispanic or Latino background. |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one or more ovals." was adapted to "Select all squares that apply." |
| 29. Which of the following best describes you? Fill in one or more ovals. <br> (D) White <br> (1) Black or African American <br> © Asian <br> (1) American Indian or Alaska Native (Print the name of your American Indian tribe or Alaska Native group below. You may indicate more than one tribe or group.) |  |  |  |  |  | 29. Which of the following best describes you? Select all squares that apply. <br> (1) White <br> (1) Black or African American <br> (6) Asian <br> (1) American Indian or Alaska Native (Print the name of your American Indian tribe or Alaska Native group below. You may indicate more than one tribe or group.) $\qquad$ <br> (1) Native Hawaiian or other Pacific Islander |  |  |  |  |  | NC | The in-line direction was adapted from PBA to DBA: "Fill in one or more ovals." was adapted to "Select all squares that apply." |

[^35]

## Appendix K-2af: Operational Grade 8 NIES

1. Counting this year, how many years have you taught at this school? If less than 1 year total at this school, enter "01."
$\square$ Years
2. To what extent have you acquired knowledge, skills, and information specific to teaching American Indian or Alaska Native students from each of the following sources? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Independent reading and study | (4) | (B) | © | (1) | vH241584 |
| b. Your own personal or family background and experiences | (4) | (B) | © | (1) | VH241586 |
| c. Locally sponsored American Indian or Alaska Native cultural orientation program | (4) | (B) | © | (1) | vH241585 |
| d. Living and working in an American Indian or Alaska Native community | (1) | (B) | © | (1) | vH241588 |

3. To what extent have you acquired knowledge, skills, and information specific to teaching American Indian or Alaska Native students from each of the following types of classes? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. College courses, or other classes or workshops with a focus on teaching American Indian or Alaska Native students | (4) | (B) | © | (1) | VH241592 |
| b. College courses, or other classes or workshops with a general focus on various cultures or diversity | (4) | (B) | $\bigcirc$ | (1) | vH241591 |

4. During the last two years, how many times have you consulted each of the following resources to help you improve the academic performance of your American Indian or Alaska Native students? Select one circle in each row.

|  | Never | 1 or 2 times | 3 or 4 times | $\begin{aligned} & 5 \text { or more } \\ & \text { times } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Online websites or databases | (1) | (8) | © | (1) | VH241594 |
| b. Articles in professional journals | (1) | (B) | © | (1) | VH241595 |
| c. Local libraries or cultural centers | (4) | (B) | © | (1) | VH241596 |
| d. Other teachers in your school | (4) | (B) | © | (1) | VH241597 |
| e. Elders or other experts | (4) | (8) | $\bigcirc$ | (1) | VH241598 |

5. During the last two years, to what extent have you implemented culturally specific instructional practices for American Indian or Alaska Native students in your classroom?
(A) Not at all
(B) Small extent
© Moderate extent
(D) Large extent
6. During the last two years, how many times have you attended professional or community-based development programs (such as in-service classes and workshops, including online classes) aimed at developing culturally specific instructional practices for American Indian or Alaska Native students?
(4) Never
(B) 1 or 2 times
© 3 or 4 times
(D) 5 or more times
7. To what extent have you implemented lessons learned from these professional or community-based development programs in your classroom?
(A) Not at all
(B) Small extent
© Moderate extent
(D) Large extent

VH240167
8. Who sponsored the professional or community-based development programs you attended in the last two years? Select all squares that apply.
(A) State
(B) District
© Tribal education department
(D) Indian education professional associations
(E) College or university
© Other (please specify): $\qquad$
9. To what extent do you speak any of the native languages spoken by American Indian or Alaska Native students who attend this school? If you know more than one of these languages, answer for the one you know best.
(A) No knowledge or skill; nonspeaker
(B) Minimal functional or communicative ability; ability to use some words or phrases
© Moderate communicative ability; can express some ideas and communicate in some situations, but limited and cannot always express ideas
(D) Fluent nonnative speaker
(®) Fluent native speaker
10. Have you received any of the following forms of preparation for teaching students whose first language is not English (sometimes called Limited English Proficiency [LEP] students or English Language Learners [ELL])? Select one circle in each row.

|  | Yes | No |  |
| :---: | :---: | :---: | :---: |
| a. At least one college-level course on how to teach students whose first language is not English (but not a major, minor, or special emphasis) | (1) | (B) | VH241600 |
| b. An undergraduate or graduate major, minor, or special emphasis in teaching English as a Second Language (ESL), English Language Development (ELD), or Bilingual Education | (4) | (B) | vH241602 |
| c. Any other training or professional development on how to teach students whose first language is not English | (1) | (B) | vH241601 |

11. To what extent do you use the following to assess the progress of your American Indian or Alaska Native students? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. State assessments | (4) | (8) | © | (1) | vH241604 |
| b. District assessments | (4) | (8) | © | (1) | vH241605 |
| c. Assessments developed by American Indian or Alaska Native organizations | (1) | (B) | © | (1) | vH241606 |
| d. Tests supplied by textbook publishers (for example, end of unit or chapter tests) | (1) | (B) | © | (1) | vH241607 |
| e. Teacher-made tests or quizzes | (4) | (B) | © | (1) | vH241611 |
| f. Performance-based assessments | (1) | (B) | © | (1) | vH241612 |
| g. Group projects | (4) | (B) | © | (1) | VH241609 |
| h. Oral responses of students during class discussions | (4) | (B) | © | (1) | vH241610 |
| i. Assessments to evaluate English language proficiency | (4) | (B) | © | (1) | vH241608 |

12. Do you teach reading/language arts to grade 8 students?
(4) Yes
(B) No
13. How many students are American Indian or Alaska Native in your reading/language arts class? (Include both enrolled tribal members and descendants in your calculations.)
(A) Few (less than 5)
(B) Several, but less than half the class
© At least half the class, but not every student
(D) The whole class
(E) I don't know.
14. To what extent do you use your students' American Indian or Alaska Native language(s) when you teach reading/language arts?
(A) Instruction is entirely in English.
(B) Instruction is primarily in English, but words or phrases from the students' American Indian or Alaska Native language(s) are included occasionally.
© Instruction is primarily in English, but words or phrases from the students' American Indian or Alaska Native language(s) are included frequently.
(D) Instruction is primarily in the students' American Indian or Alaska Native language(s).
15. How often do you integrate materials about the following topics into your reading/language arts lessons? Select one circle in each row.

|  | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. American Indian or Alaska Native culture or history | (1) | (B) | © | (1) | (1) | vH241615 |
| b. Current issues affecting American Indian or Alaska Native people or communities | (4) | (B) | © | (1) | © | vH241614 |

16. How often do you have your students do each of the following reading/language arts activities? Select one circle in each row.

|  | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Read literature with American Indian or Alaska Native themes | (4) | (B) | © | (1) | © | VH241617 |
| b. Read literature by American Indian or Alaska Native authors | (4) | (B) | © | (1) | (®) | VH241618 |
| c. Read about, or discuss, current issues of concern to the American Indian or Alaska Native community | (4) | (B) | © | (1) | (1) | VH241621 |
| d. Write about experiences or issues affecting American Indian or Alaska Native people | (4) | (B) | © | (1) | (e) | VH241620 |
| e. Write about their own experiences as an American Indian or Alaska Native person | (4) | (B) | © | (1) | (e) | vH241619 |

17. How much do you rely on each of the following documents in planning reading/language arts lessons? Select one circle in each row.

|  | Not at all | A little | Some | A lot | Not aware of any |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Standards developed by national professional organizations | (4) | (B) | $\bigcirc$ | (1) | © | vH241623 |
| b. State content standards | (4) | (B) | $\bigcirc$ | (1) | (1) | vH241626 |
| c. District content standards | (4) | (B) | © | (1) | (1) | vH241625 |
| d. American Indian or Alaska Native content or cultural standards | (4) | (B) | $\bigcirc$ | (1) | (1) | vH241624 |

18. Do you teach mathematics to grade 8 students?
(4) Yes
(B) No
19. How many students are American Indian or Alaska Native in your mathematics class? (Include both enrolled tribal members and descendants in your calculations.)
(A) Few (less than 5)
(B) Several, but less than half the class
© At least half the class, but not every student
(D) The whole class
(ㄷ) I don't know.
20. To what extent do you use your students' American Indian or Alaska Native language(s) when you teach mathematics?
(A) Instruction is entirely in English.
(B) Instruction is primarily in English, but words or phrases from the students' American Indian or Alaska Native language(s) are included occasionally.
© Instruction is primarily in English, but words or phrases from the students' American Indian or Alaska Native language(s) are included frequently.
(D) Instruction is primarily in the students' American Indian or Alaska Native language(s).
21. How often do you integrate materials about the following topics into your mathematics lessons? Select one circle in each row.

|  | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. American Indian or Alaska Native culture or history | (4) | (B) | $\bigcirc$ | (1) | (1) | vH241629 |
| b. Current issues affecting American Indian or Alaska Native people or communities | (4) | (B) | © | (1) | (E) | vH241628 |

22. How often do you have your students do each of the following mathematics activities? Select one circle in each row.

|  | Never | At least once a year | At least once a month | At least once a week | Every day or almost every day |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Solve mathematics problems that reflect situations found in American Indian or Alaska Native communities | (1) | (B) | © | (1) | (c) | vH241631 |
| b. Participate in activities that integrate mathematics with American Indian or Alaska Native themes (for example, use traditional symbols and designs to teach geometric concepts) | (4) | (B) | © | (1) | (1) | vH241634 |
| c. Study traditional American Indian or Alaska Native mathematics (for example, American Indian or Alaska Native systems of counting, estimating, and recording quantities) | (1) | (B) | © | (1) | © | vH241633 |
| d. Study mathematics within traditional American Indian or Alaska Native contexts (for example, American Indian or Alaska Native systems of astronomy and physics) | (1) | (B) | © | (1) | © | vH241632 |

23. How much do you rely on each of the following documents in planning mathematics lessons? Select one circle in each row.

|  | Not at all | A little | Some | A lot | Not aware of any |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Standards developed by national professional organizations | (4) | (B) | © | (1) | (1) | vH241636 |
| b. State content standards | (4) | (8) | © | (1) | (1) | vH241639 |
| c. District content standards | (1) | (B) | © | (1) | (1) | vH241638 |
| d. American Indian or Alaska Native content or cultural standards | (4) | (8) | © | (1) | (1) | vH241637 |

24. How much do you agree with each of the following statements about the materials available in your school library, media center, or resource center? Select one circle in each row.

|  | Strongly disagree | Disagree | Agree | Strongly agree |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. The number of books and materials available for 8th grade students is sufficient. | (4) | (B) | © | (1) | vH241658 |
| b. The quality of the books and materials available for 8th grade students is satisfactory. | (4) | (B) | © | (1) | vH241661 |
| c. The number of books and materials specific to American Indian and Alaska Native culture available for 8 th grade students is sufficient. | (4) | (B) | © | (1) | VH241660 |
| d. The quality of the books and materials specific to American Indian and Alaska Native culture available for 8 th grade students is satisfactory. | (4) | (B) | $\bigcirc$ | (1) | VH241659 |

25. About how many of your grade 8 students will complete the 8 th grade?
(A) None
(B) A few
© Some
(D) Most
(E) All
() I don't know.
26. About how many of your grade 8 students will be prepared for high school?
(A) None
(B) A few
© Some
(D) Most
(E) All
() I don't know.
27. To what extent is each of the following a problem in your school? Select one circle in each row.

|  | Not at all | Small extent | Moderate extent | Large extent |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Student absenteeism | (4) | (8) | © | (1) | VH241646 |
| b. Student tardiness | (4) | (8) | © | (1) | VH241647 |
| c. Student health problems | (4) | (B) | © | (1) | VH241648 |
| d. Teen pregnancies | (4) | (8) | © | (1) | VH241649 |
| e. Drug or alcohol use by students | (4) | (B) | © | (1) | vH241650 |
| f. Student misbehavior in class | (4) | (B) | © | (1) | vH241656 |
| g. Physical conflicts among students | (4) | (8) | © | (1) | vH241652 |
| h. Bullying | (4) | (8) | $\bigcirc$ | (1) | VH241653 |
| i. Low student aspirations | (4) | © | $\bigcirc$ | (1) | VH241654 |
| j. Low teacher expectations | (4) | (8) | © | (1) | VH241655 |
| k. Low family involvement | (4) | (B) | © | (1) | vH241651 |

28. Are you Hispanic or Latino? Select all squares that apply.
(A) No, I am not Hispanic or Latino.
(B) Yes, I am Mexican, Mexican American, or Chicano.
© Yes, I am Puerto Rican or Puerto Rican American.
(D) Yes, I am Cuban or Cuban American.
© Yes, I am from some other Hispanic or Latino background.
29. Which of the following best describes you? Select all squares that apply.
(4) White
(B) Black or African American
© Asian
(D) American Indian or Alaska Native (Print the name of your American Indian tribe or Alaska Native group below. You may indicate more than one tribe or group.)
© Native Hawaiian or other Pacific Islander
30. What have you found to be the most effective teaching and learning strategies for increasing the achievement of your American Indian or Alaska Native students?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
31. In the space below, please share with us your thoughts about any other important issue(s) about your students, school, or community that are related to student academic performance, student aspirations, or other educational matters.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Appendix K-2ag: Summary of Changes Operational Grade 4 \& 8 CAFS



2019 Operational Grade 4 and 8 Computer and Familiarity Study (CAFS) Teacher


2019 Operational Grade 4 and 8 Computer and Familiarity Study (CAFS) Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
|  |  |  | familiarity study. This will also supplement the information that is already being collected through the student items. |
| N/A | 5. When you assign additional practice for low-performing students, which of the above are your low-performing students most likely to use? <br> (4) Paper and pencil <br> (1) Desktop computer <br> © Laptop computer <br> (1) Tablet <br> (1) Smartphone <br> (1) I do not have any low-performing students. | A | The CAFS teacher items were added to provide contextual information on the computer and familiarity study. This will also supplement the information that is already being collected through the student items. |

## Appendix K-2ah: Operational Grade 4 \& 8 CAFS

1. There are various ways that digital technology can be used as part of instruction.

Please indicate how often you use/assign activities that require your students to use digital technology when they participate in the following learning contexts. Select one circle in each row.

|  | Never | Rarely | Sometimes | Often | Very Often |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. In-class work in which the whole class participates | (4) | (B) | $\bigcirc$ | (1) | (1) | vH871772 |
| b. In-class work done in small groups | (4) | (B) | © | (1) | (E) | vH871773 |
| c. In-class work done individually | (1) | (B) | $\bigcirc$ | (1) | (E) | vH871774 |
| d. Homework (individual or small group) | (4) | (B) | © | (1) | (c) | vH871775 |

2. Digital technology can be used to support students with differing learning needs. Please indicate how often you use digital technology for the following purposes. Select one circle in each row.

|  | Not Applicable | Never | Rarely | Sometimes | Often | Very Often |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. To provide additional practice for low-performing students | (4) | (B) | © | (1) | © | © | vH87177 |
| b. To extend learning opportunities for high-performing students | (4) | © | $\bigcirc$ | (1) | © | © | VH871778 |
| c. To provide a modification or accommodation to comply with an IEP | (4) | (8) | © | (1) | © | © | VH871779 |
| d. To provide support for students who are English-language learners (e.g., digital dictionaries) | (4) | (B) | $\bigcirc$ | (1) | (1) | © | vH871780 |

3. Do you teach any low-performing students?
(4) Yes
(B) No
4. When you assign additional practice for low-performing students, how often do your low-performing students complete these assignments using the following tools? Select one circle in each row.

|  | Not Available | Never | Rarely | Sometimes | Often | Very Often |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Paper and pencil | (4) | (8) | © | (1) | (1) | (1) | VH871792 |
| b. Desktop or laptop computer | (1) | (B) | © | (1) | (1) | (1) | vH871793 |
| c. Tablet | (4) | (8) | © | (1) | © | (1) | vH871794 |
| d. Smartphone | (4) | (8) | $\bigcirc$ | (1) | (®) | (1) | vH871796 |

5. When you assign additional practice for low-performing students, which of the above are your low-performing students most likely to use?
(A) Paper and pencil
(B) Desktop computer
© Laptop computer
(D) Tablet
(E) Smartphone
© I do not have any low-performing students.

Appendix K-2ai: Summary of Changes Operational Grade 4, 8 \& 12 Giving Back

2019 Operational Grade 4 and 8 Giving Back Teacher

| Previous item | 2019 item | $\begin{aligned} & \text { D/A/ } \\ & \text { R/NC+ } \end{aligned}$ | Rationale |
| :---: | :---: | :---: | :---: |
| 1. Would you like to receive information about how other teachers in the nation tesponded to this questionnaire? <br> (4) Y <br> (1) No <br> (2018 Grade 4 and 8) | 1. Would you like to sign up for special access to preliminary information regarding teachers and schools across the nation? <br> Example Question <br> In $2017,75 \%$ of reading teachers used readingrelated websites or apps as supplemental resources when teaching English/language arts. <br> Yes, I want access to preliminary information regarding teachers and schools across the nation. | R | The item was revised to accommodat e system changes. |
| 2. If yes, please provide your email address so that we may send access to the website when it is available in May. <br> (2018 Grade 4 and 8) | 2. What type of analyses do you want to do based on feedback? <br> a. How other teachers and school administrators across the nation responded to this questionnaire <br> b. How other teachers and school administrators in my state responded to this questionnaire <br> c. What resources for learning and instruction are available to and used by teachers and school administrators <br> d. How instruction for different subjects is organized in classrooms <br> e. The type of training and education received by teachers across the nation <br> f. Technology infrastructure that is available for students, teachers, and school administrators <br> g. Information about enrollment and absenteeism in schools across the nation <br> h. How students across the nation performed on the assessment <br> i. How students in my state performed on the assessment <br> j. Other information not listed above (Please specify): $\qquad$ | R | The item was revised to accommodat e system changes. |

[^36]
## Appendix K-2aj: Operational Grade 4, 8 \& 12 Giving Back

1. Would you like to sign up for special access to preliminary information regarding teachers and schools across the nation?

## Example Question

In 2017, $75 \%$ of reading teachers used readingrelated websites or apps as supplemental resources when teaching English/language arts.

$\qquad$ Yes, I want access to preliminary information regarding teachers and schools across the nation.
2. What type of analyses do you want to do based on feedback?
a. How other teachers and school administrators across the nation responded to this questionnaire
b. How other teachers and school administrators in my state responded to this questionnaire
c. What resources for learning and instruction are available to and used by teachers and school administrators
d. How instruction for different subjects is organized in classrooms
e. The type of training and education received by teachers across the nation
f. Technology infrastructure that is available for students, teachers, and school administrators
g. Information about enrollment and absenteeism in schools across the nation
h. How students across the nation performed on the assessment
i. How students in my state performed on the assessment
j. Other information not listed above (Please specify): $\qquad$


[^0]:    + This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC)

[^1]:    + This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

[^2]:    + This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

[^3]:    + This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC)

[^4]:    + This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

[^5]:    + This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

[^6]:    + This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC)

[^7]:    + This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC)

[^8]:    + This column indicates whether the item was dropped (D), added (A), revised (R), or there was no change (NC).

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