*National Center for Education Statistics*

*National Assessment of Educational Progress*

*National Assessment of Educational Progress (NAEP) 2021 Materials Update #1*

*Appendix F1*

*NAEP 2019 Computer Assess and Familiarity Study (CAFS) Student and Teacher Survey Questionnaires*

*OMB# 1850-0928 v.20*



April 2020

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**The 2021 Student Operational Grade 4 CAFS survey questionnaires were previously submitted and approved for use in 2019 (OMB# 1850-0928 v.17, Appendix F, pp 334-342) and remain the same for 2021 administration.**

# Appendix F1-A: 2019 Student Operational Grade 4 CAFS

1. **At home**, do you have any of the following? Select **one** answer choice on each row.

VH270138

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes** | **No** |  |
| a. A **laptop or desktop computer** that is only for your use | A | B | VH270141 |
| b. A **laptop or desktop computer** that is shared between you and others | A | B | VH270142 |
| c. A **tablet** that is only for your use | A | B | VH270139 |
| d. A **tablet** that is shared between you and others | A | B | VH270140 |
| e. **Wi-Fi** or some other **Internet connection**  you can use | A | B | VH270143 |
| f. A **smartphone** that is only for your use | A | B | VH270144 |

1. When did you first use a **laptop or desktop computer**?
   1. I have never used one.
   2. Before I was in kindergarten
   3. When I was in kindergarten
   4. When I was in first, second, or third grade
   5. When I was in fourth grade

VH270100

1. When did you first use a **tablet**? A Never until this assessment B Before I was in kindergarten
2. When I was in kindergarten
3. When I was in first, second, or third grade
4. When I was in fourth grade

VH270092

1. When did you first use a **smartphone**?
2. I have never used one.
3. Before I was in kindergarten
4. When I was in kindergarten
5. When I was in first, second, or third grade
6. When I was in fourth grade

VH270101

1. **On a weekday**, about **how many hours** do you use a **laptop or desktop computer** for doing schoolwork, including homework?
2. None
3. Less than an hour
4. 1 to 2 hours
5. 2 to 3 hours
6. 3 to 4 hours
7. More than 4 hours

VH270147

1. **On a weekday**, about **how many hours** do you use a **tablet** for doing schoolwork, including homework?
2. None
3. Less than an hour
4. 1 to 2 hours
5. 2 to 3 hours
6. 3 to 4 hours
7. More than 4 hours

VH270148

1. Were you taught any of the following **at school**? Select **one** answer choice on each row.

VH597657

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes** | **No** |  |
| a. How to type on a computer keyboard using the correct fingers | A | B | VH270150 |
| b. How to write sentences and paragraphs using a computer | A | B | VH270151 |
| c. How to edit text using a computer | A | B | VH270164 |
| d. How to search for information on the Internet | A | B | VH270152 |
| e. How to use a tablet | A | B | VH270156 |
| f. How to look up the meaning of a word using a computer | A | B | VH270157 |

VH270165

1. Which of the following are true about the ways in which you and your teachers use computers **at**

**school**? Select **one** answer choice on each row.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes** | **No** |  |
| a. In most of my classes there are **laptop or desktop computers** that I can use for schoolwork. | A | B | VH270166 |
| b. In most of my classes there are **tablets** that I can use for schoolwork. | A | B | VH270167 |
| c. There is **Wi-Fi** or some other **Internet connection** that I can use for schoolwork. | A | B | VH270170 |
| d. Most of my teachers use computers when teaching my classes. | A | B | VH270169 |
| e. Most of my teachers require us to use computers in the classroom. | A | B | VH270168 |

VH270116

1. Has your school assigned you a **laptop or desktop computer** that only you can use?
2. No
3. Yes, but I cannot take it home with me.
4. Yes, and I can take it home with me (laptop only).
5. Has your school assigned you a **tablet** that only you can use?
6. No
7. Yes, but I cannot take it home with me.
8. Yes, and I can take it home with me.

VH270117

1. **This school year**, how often have you used a **laptop or desktop computer** to do each of the following? Select **one** answer choice on each row.

VH597710

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Never** | **A few times** | **Once every few weeks** | **About once a week** | **More than once a week** |  |
| a. Write a short paper (less than a page) for school | A | B | C | D | E | VH270172 |
| b. Write a paper for school that was longer than a page | A | B | C | D | E | VH270173 |
| c. Search the Internet for a school project | A | B | C | D | E | VH270174 |
| d. Practice things in **mathematics** that you were having trouble learning | A | B | C | D | E | VH270181 |
| e. Practice things in **reading** that you were having trouble learning | A | B | C | D | E | VH270177 |
| f. Take a test | A | B | C | D | E | VH270175 |

VH597752

1. **This school year**, how often have you used a **tablet** to do each of the following? Select **one** answer choice on each row.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Never** | **A few times** | **Once every few weeks** | **About once a week** | **More than once a week** |  |
| a. Write a short paper (less than a page) for school | A | B | C | D | E | VH270183 |
| b. Write a paper for school that was longer than a page | A | B | C | D | E | VH270188 |
| c. Search the Internet for a school project | A | B | C | D | E | VH270184 |
| d. Practice things in **mathematics** that you were having trouble learning | A | B | C | D | E | VH270185 |
| e. Practice things in **reading** that you were having trouble learning | A | B | C | D | E | VH270186 |
| f. Take a test | A | B | C | D | E | VH270192 |

1. Which best describes the way you type on a computer keyboard?
2. I don’t know how to type using a computer keyboard.
3. I can type with one or two fingers, but I have to search for where the letter keys are.
4. I can type with one or two fingers, and I know where most of the letter keys are.
5. I can type with all ten fingers when I look at the keyboard.
6. I can type with all ten fingers without looking at the keyboard.

VH270130

1. Would you rather take a test at school using paper and pencil or using a computer?
2. Paper and pencil
3. Computer

VH270132

VH597769

1. Do you think you would be able to do each of the following? Select **one** answer choice on each row.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **I definitely can’t.** | **I probably can’t.** | **I probably can.** | **I definitely can.** |  |
| a. Write sentences and paragraphs using a computer | A | B | C | D | VH270229 |
| b. Edit text using a computer | A | B | C | D | VH270218 |
| c. Use a touchscreen on a computer, tablet, or smartphone | A | B | C | D | VH270230 |
| d. Look up the meaning of a word using a computer | A | B | C | D | VH270225 |
| e. Draw a picture using a computer | A | B | C | D | VH270226 |

1. How familiar are you with each of the following? Select **one** answer choice on each row.

VH597794

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never heard of it** | **Heard of it once or twice** | **Heard of it often** | **Know it well, understand the concept** |  |
| a. Wi-Fi | A | B | C | D | VH270196 |
| b. Firewall | A | B | C | D | VH270197 |
| c. Neuro-digital computing | A | B | C | D | VH270199 |
| d. Instant messaging | A | B | C | D | VH270200 |
| e. Cut and paste | A | B | C | D | VH270203 |
| f. Pyramidal browser | A | B | C | D | VH270204 |
| g. Spreadsheet | A | B | C | D | VH270206 |
| h. Limbic wire | A | B | C | D | VH270207 |
| i. Spinalbyte | A | B | C | D | VH270208 |
| j. Server | A | B | C | D | VH270210 |
| k. Callosum board | A | B | C | D | VH270214 |

**The 2021 Student Operational Grade 8 CAFS survey questionnaires were previously submitted and approved for use in 2019 (OMB# 1850-0928 v.17, Appendix F, pp 342-356) and remain the same for 2021 administration**

# Appendix F1-B: 2019 Student Operational Grade 8 CAFS

1. **At home**, do you have any of the following? Select **one** answer choice on each row.

VH270138

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes** | **No** |  |
| a. A **laptop or desktop computer** that is only for your use | A | B | VH270141 |
| b. A **laptop or desktop computer** that is shared between you and others | A | B | VH270142 |
| c. A **tablet** that is only for your use | A | B | VH270139 |
| d. A **tablet** that is shared between you and others | A | B | VH270140 |
| e. **Wi-Fi** or some other **Internet connection**  you can use | A | B | VH270143 |
| f. A **smartphone** that is only for your use | A | B | VH270144 |

1. When did you first use a **laptop or desktop computer**?
   1. I have never used one.
   2. Before I was in kindergarten
   3. When I was in kindergarten
   4. When I was in first, second, or third grade
   5. When I was in fourth or fifth grade
   6. When I was in sixth, seventh, or eighth grade

VH270145

1. When did you first use a **tablet**? A Never until this assessment B Before I was in kindergarten C When I was in kindergarten
2. When I was in first, second, or third grade
3. When I was in fourth or fifth grade
4. When I was in sixth, seventh, or eighth grade

VH270090

1. When did you first use a **smartphone**?
2. I have never used one.
3. Before I was in kindergarten
4. When I was in kindergarten
5. When I was in first, second, or third grade
6. When I was in fourth or fifth grade
7. When I was in sixth, seventh, or eighth grade

VH270146

1. **On a weekday**, about **how many hours** do you use a **laptop or desktop computer** for doing schoolwork, including homework?
2. None
3. Less than an hour
4. 1 to 2 hours
5. 2 to 3 hours
6. 3 to 4 hours
7. More than 4 hours

VH270147

1. **On a weekday**, about **how many hours** do you use a **tablet** for doing schoolwork, including homework?
2. None
3. Less than an hour
4. 1 to 2 hours
5. 2 to 3 hours
6. 3 to 4 hours
7. More than 4 hours

VH270148

1. Were you taught any of the following **at school**? Select **one** answer choice on each row.

VH270149

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes** | **No** |  |
| a. How to type on a computer keyboard using the correct fingers | A | B | VH270150 |
| b. How to write sentences and paragraphs using a computer | A | B | VH270151 |
| c. How to edit text using a computer | A | B | VH270164 |
| d. How to search for information on the Internet | A | B | VH270152 |
| e. How to use a tablet | A | B | VH270156 |
| f. How to look up the meaning of a word using a computer | A | B | VH270157 |
| g. How to create a spreadsheet using a computer | A | B | VH270154 |
| h. How to create a presentation using a computer | A | B | VH270155 |
| i. How to run simulations using a computer | A | B | VH270159 |
| j. How to write a computer program or app | A | B | VH270160 |
| k. How to create a graph or chart using a computer | A | B | VH270161 |
| l. How to troubleshoot problems with a computer | A | B | VH270158 |

VH270165

1. Which of the following are true about the ways in which you and your teachers use computers **at school**? Select **one** answer choice on each row.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes** | **No** |  |
| a. In most of my classes there are **laptop or desktop computers** that I can use for schoolwork. | A | B | VH270166 |
| b. In most of my classes there are **tablets** that I can use for schoolwork. | A | B | VH270167 |
| c. There is **Wi-Fi** or some other **Internet connection** that I can use for schoolwork. | A | B | VH270170 |
| d. Most of my teachers use computers when teaching my classes. | A | B | VH270169 |
| e. Most of my teachers require us to use computers in the classroom. | A | B | VH270168 |

1. Has your school assigned you a **laptop or desktop computer** that only you can use?
2. No
3. Yes, but I cannot take it home with me.
4. Yes, and I can take it home with me (laptop only).

VH270116

1. Has your school assigned you a **tablet** that only you can use?
2. No
3. Yes, but I cannot take it home with me.
4. Yes, and I can take it home with me.

VH270117

1. **This school year**, how often have you used a **laptop or desktop computer** to do each of the following? Select **one** answer choice on each row.

VH270171

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Never** | **A few times** | **Once every few weeks** | **About once a week** | **More than once a week** |  |
| a. Write a short paper (less than a page) for school | A | B | C | D | E | VH270172 |
| b. Write a paper for school that was longer than a page | A | B | C | D | E | VH270173 |
| c. Search the Internet for a school project | A | B | C | D | E | VH270174 |
| d. Practice things in **mathematics** that you were having trouble learning | A | B | C | D | E | VH270181 |
| e. Practice things in **reading** that you were having trouble learning | A | B | C | D | E | VH270177 |
| f. Take a test | A | B | C | D | E | VH270175 |
| g. Create a map | A | B | C | D | E | VH270178 |
| h. Work on a website or blog that you maintain | A | B | C | D | E | VH270179 |
| i. Create a multimedia presentation *on your own* | A | B | C | D | E | VH270180 |
| j. Work collaboratively *with a team of students* to create a multimedia presentation | A | B | C | D | E | VH270176 |

VH270182

1. **This school year**, how often have you used a **tablet** to do each of the following? Select **one** answer choice on each row.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Never** | **A few times** | **Once every few weeks** | **About once a week** | **More than once a week** |  |
| a. Write a short paper (less than a page) for school | A | B | C | D | E | VH270183 |
| b. Write a paper for school that was longer than a page | A | B | C | D | E | VH270188 |
| c. Search the Internet for a school project | A | B | C | D | E | VH270184 |
| d. Practice things in **mathematics** that you were having trouble learning | A | B | C | D | E | VH270185 |
| e. Practice things in **reading** that you were having trouble learning | A | B | C | D | E | VH270186 |
| f. Take a test | A | B | C | D | E | VH270192 |
| g. Create a map | A | B | C | D | E | VH270189 |
| h. Work on a website or blog that you maintain | A | B | C | D | E | VH270190 |
| i. Create a multimedia presentation *on your own* | A | B | C | D | E | VH270191 |
| j. Work collaboratively *with a team of students* to create a multimedia presentation | A | B | C | D | E | VH270187 |

VH270130

1. Which best describes the way you type on a computer keyboard?
2. I don’t know how to type using a computer keyboard.
3. I can type with one or two fingers, but I have to search for where the letter keys are.
4. I can type with one or two fingers, and I know where most of the letter keys are.
5. I can type with all ten fingers when I look at the keyboard.
6. I can type with all ten fingers without looking at the keyboard.

VH270132

1. Would you rather take a test at school using paper and pencil or using a computer?
2. Paper and pencil
3. Computer

VH270215

1. Do you think you would be able to do each of the following? Select **one** answer choice on each row.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **I definitely can’t.** | **I probably can’t.** | **I probably can.** | **I definitely can.** |  |
| a. Write sentences and paragraphs using a computer | A | B | C | D | VH270229 |
| b. Edit text using a computer | A | B | C | D | VH270218 |
| c. Use a touchscreen on a computer, tablet, or smartphone | A | B | C | D | VH270230 |
| d. Look up the meaning of a word using a computer | A | B | C | D | VH270225 |
| e. Draw a picture using a computer | A | B | C | D | VH270226 |
| f. View or download digital media | A | B | C | D | VH270216 |
| g. Create a presentation using a computer | A | B | C | D | VH270228 |
| h. Create a spreadsheet using a computer | A | B | C | D | VH270231 |
| i. Install new software or apps | A | B | C | D | VH270219 |
| j. Participate in online discussions, forums, social networking sites, or virtual communities | A | B | C | D | VH270220 |
| k. Maintain a website or blog | A | B | C | D | VH270221 |
| l. Search for information on the Internet | A | B | C | D | VH270222 |
| m. Run simulations using a computer | A | B | C | D | VH270223 |
| n. Create a graph or chart using a computer | A | B | C | D | VH270224 |
| o. Write a computer program or app | A | B | C | D | VH270227 |
| p. Troubleshoot a problem with a computer | A | B | C | D | VH270232 |
| q. Figure out how to use new functions of a digital device that I am not yet familiar with | A | B | C | D | VH270217 |

VH270233

1. On a scale from 0 to 10, where 0 is not at all familiar and 10 is very familiar, **how familiar with using computers and other digital devices are you**?
2. 0
3. 1
4. 2
5. 3
6. 4
7. 5
8. 6
9. 7
10. 8
11. 9
12. 10

VH270236

1. Please read the descriptions of the following four eighth-grade students. After you read each description, you will be asked to answer a question about each student based on the information provided.

**Linda** often uses apps to talk to her friends or to play games. She does some of her homework on her laptop and knows how to write and create tables using a computer. Linda cannot type with 10 fingers but is pretty fast with two fingers and mostly finds the right keys.

On a scale from 0 to 10, where 0 is not at all familiar and 10 is very familiar, **how familiar with using computers and other digital devices do you think Linda is**?

1. 0
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6
8. 7
9. 8
10. 9
11. 10

VH270237

1. **Tom** often uses apps to talk to his friends or to play games. He does most of his homework on a computer and knows how to write and edit papers on a computer and how to create complex tables or charts. He also created a few presentations using a computer. Tom can type pretty accurately using ten fingers when looking at the computer keyboard.

On a scale from 0 to 10, where 0 is not at all familiar and 10 is very familiar, **how familiar with using computers and other digital devices do you think Tom is**?

1. 0
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6
8. 7
9. 8
10. 9
11. 10

VH270238

1. **Susan** often uses apps on a smartphone or tablet and does most of her homework on a laptop. She is good at writing and editing papers on her computer and has experience with creating complex tables and charts. Susan can type fast and accurately with 10 fingers without looking at the computer keyboard. She also knows a couple of programming languages. This school year, she built her first app.

On a scale from 0 to 10, where 0 is not at all familiar and 10 is very familiar, **how familiar with using computers and other digital devices do you think Susan is**?

1. 0
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6
8. 7
9. 8
10. 9
11. 10

VH270239

1. **Kevin** sometimes plays games on his smartphone or a computer, but he usually does not use a computer for his homework. He used a computer a couple of times to write a paper but never used a computer to create tables, charts, or presentations. Kevin can type with one or two fingers but has to search to find the correct keys on the computer keyboard.

On a scale from 0 to 10, where 0 is not at all familiar and 10 is very familiar, **how familiar with using computers and other digital devices do you think Kevin is**?

1. 0
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6
8. 7
9. 8
10. 9
11. 10
12. How familiar are you with each of the following? Select **one** answer choice on each row.

VH270194

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never heard of it** | **Heard of it once or twice** | **Heard of it often** | **Know it well, understand the concept** |  |
| a. E-reader | A | B | C | D | VH270195 |
| b. Wi-Fi | A | B | C | D | VH270196 |
| c. Firewall | A | B | C | D | VH270197 |
| d. Hyperlink | A | B | C | D | VH270198 |
| e. Neuro-digital computing | A | B | C | D | VH270199 |
| f. Instant messaging | A | B | C | D | VH270200 |
| g. CPU | A | B | C | D | VH270201 |
| h. Cut and paste | A | B | C | D | VH270203 |
| i. Pyramidal browser | A | B | C | D | VH270204 |
| j. Spreadsheet | A | B | C | D | VH270206 |
| k. Limbic wire | A | B | C | D | VH270207 |
| l. Spinalbyte | A | B | C | D | VH270208 |
| m. Cloud computing | A | B | C | D | VH270209 |
| n. Server | A | B | C | D | VH270210 |
| o. Compiler | A | B | C | D | VH270212 |
| p. Callosum board | A | B | C | D | VH270214 |

**The 2021 Teacher Operational Grades 4 & 8 CAFS survey questionnaires were previously submitted and approved for use in 2019 (OMB# 1850-0928 v.17, Appendix F, pp 657-661) and remain the same for 2021 administration**

# Appendix F1-C: 2019 Teacher Operational Grade 4 & 8 CAFS

**Questions on Teachers’ Use of Digital Technology for Cognitive Testing**

We are interested in how digital technology is being used in your classroom as part of a larger study on the role of student access to and familiarity with digital technology in student academic performance.

When we use the term “digital technology”, we include *devices* such as desktops, laptops (including Chromebooks and convertible laptops), tablets, and smart phones, as well as *software* such as computer programs, digital apps for smartphones and tablets, and web-based or cloud-based applications.

1. To what degree is digital technology (as defined above) used in your school to help students meet specific goals related to the school’s curriculum?
   1. Not at all
   2. To a minor degree
   3. To a substantial degree
   4. Completely
2. To what degree does the *curriculum* in your school demand that *students use* digital technology to demonstrate learning outcomes, if at all?
   1. Not at all
   2. To a minor degree
   3. To a substantial degree
   4. Completely
3. How important is it for *students in your classes* to use digital technology in order to understand and apply the concepts that you teach:
   1. Not at all important
   2. Somewhat important
   3. Substantially important
   4. Critically important
4. To what degree does your instruction depend upon *your own use* of digital technology to support students in mastering important learning objectives?
   1. Not at all
   2. To a minor degree
   3. To a substantial degree
   4. Completely
5. There are various ways that teachers can use digital technology to teach key concepts. Please indicate how often *you* use the following as part of your instruction:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Never** | **Occasionally** | **Often** |
| a. Interactive whiteboards | 1 | 2 | 3 |
| b. Slideshow presentation tools | 1 | 2 | 3 |
| c. Videos found on the Internet | 1 | 2 | 3 |
| d. Photographs, diagrams, and infographics  found on the Internet | 1 | 2 | 3 |
| e. Digital graphic organizers to visually represent and connect key concepts | 1 | 2 | 3 |

1. \*\*\* There are various ways that students can use digital technology as part of instruction. Please indicate how often *students* are *required* to use digital technology in your class for the following:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Never** | **Occasionally** | **Often** |
| a. Participating in whole-class activities | 1 | 2 | 3 |
| b. Participating in small group activities | 1 | 2 | 3 |
| c. Doing in–class individual activities | 1 | 2 | 3 |
| d. Doing homework | 1 | 2 | 3 |

1. \*\*\* Digital technology can be used to support students with differing learning needs. Please indicate how often *you* use digital technology for the following:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Never** | **Occasionally** | **Often** |
| a. To provide additional practice for low  performing students | 1 | 2 | 3 |
| b. To extend learning opportunities for high  performing students | 1 | 2 | 3 |
| c. To provide a modification or  accommodation to comply with an IEP | 1 | 2 | 3 |
| d. To provide support for students who are  English Language Learners | 1 | 2 | 3 |

1. \*\*\* With regards to providing additional practice for low performing students…

8.a. …how often do you ask them to complete the work using:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Never** | **Occasionally** | **Often** |
| a. Paper and pencil | 1 | 2 | 3 |
| b. Desktop computer | 1 | 2 | 3 |
| c. Laptop computer | 1 | 2 | 3 |
| d. Tablet | 1 | 2 | 3 |
| e. Smartphone | 1 | 2 | 3 |

8.b …which of the above are you *most likely* to have students use (choose one)?

paper and pencil

Desktop computer

Laptop computer

Tablet

Smartphone

1. There are various ways that digital technology and tools can be used to support student learning. Please indicate how often your instructional activities require your students to use the following technologies:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Never** | **Occasionally** | **Often** |
| a. **Digital textbooks and reading materials**  to expand the range of available materials beyond print | 1 | 2 | 3 |
| b. **Informational websites** to build  background knowledge about key concepts | 1 | 2 | 3 |
| c. **Web-based search engines** to answer questions about key concepts | 1 | 2 | 3 |
| d. **Library databases** (e.g., Google Scholar)  to access specialized information | 1 | 2 | 3 |
| e. **Digital graphic organizers** to visually  represent and connect key concepts | 1 | 2 | 3 |
| f. **Digital collaborative writing and annotation tools** (e.g., Google Docs) to jointly compose, share, and comment on writing | 1 | 2 | 3 |
| g. **Digital annotation tools** (e.g., to highlight, markup, or comment on a text, image, or  photograph) | 1 | 2 | 3 |
| h. **Multimedia presentation tools** to share  ideas with an audience | 1 | 2 | 3 |

|  |  |  |  |
| --- | --- | --- | --- |
| i. **Screencasting tools** to record a video that  documents thinking about digital work on the screen | 1 | 2 | 3 |
| j. **Digital composition tools** to design creative products that combine text, photos, video, animation, sound, music, and/or audio narration | 1 | 2 | 3 |
| k. **Simulation tools** to explore real-life  phenomena | 1 | 2 | 3 |
| l. **Mathematical modeling tools** to expand  opportunities to engage in mathematical practices | 1 | 2 | 3 |
| m. **Virtual laboratories** to carry out scientific  inquiries | 1 | 2 | 3 |
| n. **Social media tools** to share, view, and comment on each other’s work using  social media (e.g., blogs, Twitter) | 1 | 2 | 3 |
| o. **Student portfolio tools** to compile, organize, and annotate work that  represents learning over time | 1 | 2 | 3 |

1. Please indicate how often you provide opportunities for your students to use digital technology to do the following:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Never** | **Occasionally** | **Often** |
| a. My students have opportunities to consume (e.g. view, read) and construct meaning from information on the  Internet created by others | 1 | 2 | 3 |
| b. My students have opportunities to create or produce and share their own  ideas with others on the Internet | 1 | 2 | 3 |