**Assessment of teachers’ familiarity, use, and value of computational thinking, data practices, and self-regulated learning.**

Directions: Please answer the following questions to the best of your ability. This is not a test of your knowledge, but it will be used to help us determine the content and direction of future professional development sessions.

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| --- | --- | --- | --- | --- |
|  | How **familiar** are you with the following concepts?  1- Not familiar  2 – Somewhat familiar  3 – Very familiar | How **often** do you infuse the following concepts with your teaching?  1- Not often  2 – Somewhat often  3 – Very often | How **valuable** is it for you to improve student functioning in the following topics?  1- Not important  2 – Somewhat important  3 – Very important | How **confident** do you feel in your ability to infuse these concepts into your science lessons?  1-Not confident  2- Somewhat Confident  3-Very Confident |
| Computational thinking |  |  |  |  |
| Self-regulated learning |  |  |  |  |
| Data Practices |  |  |  |  |

Computational Thinking

1. On a scale of one to three, how much exposure have you had to computational thinking?

(1=I have never heard of it, 2=I am aware of it, 3= I am comfortable with it)

1. How many hours of professional development courses, workshops, etc. related to computational thinking have you taken?

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| Computational thinking | How **familiar** are you with the following topics in computational thinking?  1- Not familiar  2 – Somewhat familiar  3 – Very familiar | How **often** do you infuse the following topics in computational thinking with your teaching?  1- Not often  2 – Somewhat often  3 – Very often | How **valuable** is it for you to improve student functioning in the following topics in computational thinking?  1- Not important  2 – Somewhat important  3 – Very important | How **confident** do you feel in your ability to infuse these concepts into your data practices lessons?  1-Not confident  2- Somewhat Confident  3-Very Confident |
| Decomposition (Breaking down a complex problem or system into parts that are easier to understand) |  |  |  |  |
| Pattern recognition (identifying patterns like points of divergence and convergence) |  |  |  |  |
| Abstraction (Examining a group of patterns and describing them in a way that  is clear and efficient) |  |  |  |  |
| Algorithm building (creating and processing algorithms) |  |  |  |  |
| Automation (the ability to reproduce abstractionsquickly and repeatedly) |  |  |  |  |

Note: Definitions borrowed from and Gadanidis (2017),Peters-Burton, Cleary, and Kitsantas (2015), and Yagci (2019)

Data Practices

1. On a scale of one to three, how much exposure have you had to data practices?

(1=I have never heard of it, 2=I am aware of it, 3= I am comfortable with it)

1. How many hours of professional development courses, workshops, etc. related to data practices have you taken?

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| Data practices | How **familiar** are you with the following data practices?  1- Not familiar  2 – Somewhat familiar  3 – Very familiar | How **often** do you infuse the following data practices with your teaching?  1- Not often  2 – Somewhat often  3 – Very often | How **valuable** is it for you to improve student in the following data practices?  1- Not important  2 – Somewhat important  3 – Very important | How **confident** do you feel in your ability to infuse these concepts into your science lessons?  1-Not confident  2- Somewhat Confident  3-Very Confident |
| Creating data (using computational tools to generate data) |  |  |  |  |
| Collecting data(observing, measuring, gathering, and recording data) |  |  |  |  |
| Manipulating data(sorting, filtering, cleaning, normalizing, and joining together data) |  |  |  |  |
| Visualizing data(creating charts, graphs, or other graphic displays) |  |  |  |  |
| Analyzing data(looking for patterns or anomalies, defining rules to categorize  data, and identifying trends and correlations) |  |  |  |  |

Note: Definitions borrowed from Weintrop, Beheshti, Horn, Orton, Jona, Trouille, and Wilensky (2016)

Self-Regulated Learning

1. On a scale of one to three, how much exposure have you had to self-regulated learning?

(1=I have never heard of it, 2=I am aware of it, 3= I am comfortable with it)

1. How many hours of professional development courses, workshops, etc. related to self-regulated learning have you taken?

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| Student self-regulated learning | How **familiar** are you with the following topics in self-regulated learning?  1- Not familiar  2 – Somewhat familiar  3 – Very familiar | How **often** do you infuse the following topics in self-regulated learning with your teaching?  1- Not often  2 – Somewhat often  3 – Very often | How **valuable** is it for you to improve student in the following topics in self-regulated learning?  1- Not important  2 – Somewhat important  3 – Very important | How **confident** do you feel in your ability to infuse these concepts into your computational thinking in data practices lessons?  1-Not confident  2- Somewhat Confident  3-Very Confident |
| Student goal-setting |  |  |  |  |
| Student task analysis |  |  |  |  |
| Student motivation |  |  |  |  |
| Student time management |  |  |  |  |
| Student organization |  |  |  |  |
| Student help seeking |  |  |  |  |
| Student anxiety control |  |  |  |  |
| Student self-monitoring skills |  |  |  |  |
| Student self-reflection |  |  |  |  |
| Student adapting behavior |  |  |  |  |