

Teaching Complex Thinking Survey

The NMC Horizon Report: 2015 K-12 Edition (<http://cdn.nmc.org/media/2015-nmc-horizon-report-k12-EN.pdf>) lists nine wicked problems in education. We are attempting to address one of those wicked problems: teaching complex thinking.

Complex thinking involves skills such as discerning patterns, communication, problem solving, and visualization skills. These skills drive innovation.

* Required

1. What is your role in your school? *

Mark only one oval.

- Teacher
- Administrator
- Technology specialist
- Support staff
- Counselor
- Office support

2. Which content area do you teach? Choose the most appropriate answer. *

Mark only one oval.

- I am not a teacher
- Foreign Language
- Specialty area (art, dance, music, physical education, etc.)
- Media Specialist
- Elementary classroom teacher
- Math
- Science
- English
- Social Studies
- Technology Integration
- Special educator, Title 1 educator, ESL educator, or other Interventionist

3. If an educator, which grade level do you teach? Choose the most appropriate answer. **Mark only one oval.*

- I am not a classroom teacher.
- Preschool
- Elementary School
- Middle School
- High School
- Higher Education

Availability and Use of Technology**4. How often do you integrate technology in your classroom? ****Mark only one oval.*

- Every day
- A few times a week
- Once a week or less
- A few times a month
- Rarely
- I am not a classroom teacher.

5. What technology is available to you at your school/building? Check all that apply. **Check all that apply.*

- 1 to 1 technology of iPads or laptops
- iPad or laptop carts available for checking out
- Computer labs/media centers available for checking out
- iPads or laptops stored in the classroom, but not enough for every student
- Other: _____

Familiarity & Experiences With Teaching Complex Thinking**6. Were you introduced to the concept/wicked problem of teaching complex thinking (NOT critical thinking) in your teacher preparation program, graduate school, professional development or other continued education opportunities? ****Mark only one oval.*

- Yes, I learned about complex thinking in my teacher preparation or continued education.
- Yes, I learned about it through my own interests/personal research.
- I have heard of it before, but I never have truly learned about it.
- I do not recall ever learning about complex thinking or teaching complex thinking.
- Other: _____

7. How familiar are you with the wicked problem of teaching **COMPLEX THINKING**, not to be confused with critical thinking? *

Mark only one oval.

	1	2	3	4	5	
Not familiar at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very familiar

8. How challenging is it to teach complex thinking? *

Mark only one oval.

	1	2	3	4	5	
Least challenging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most challenging

9. How effective is your content area in teaching complex thinking? *

Mark only one oval.

	1	2	3	4	5	
Least effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most effective

10. How effective is your school in teaching complex thinking? *

Mark only one oval.

	1	2	3	4	5	
Least effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Most effective

Difficulty in Addressing Complex Thinking Skills

For our purposes:

visualization skills = creating charts, diagrams, and infographics that represent their learning

inference skills = discerning patterns, making predictions, etc.

computational thinking skills = problem solving using algorithms - across all disciplines, including math, science, and humanities

11. For each of the following complex thinking skills or teaching methods, please indicate how difficult you feel it is to incorporate them in your classroom. *

Check all that apply.

	Very difficult	Somewhat difficult	Not difficult at all
Technology integration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem solving skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communication skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visualization skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunities for student innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunities for collaboration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inference skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computational thinking skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Authentic opportunities for inquiry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunities for student choice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunities for creativity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Engagement with real world issues and problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coding / computer science	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem based learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Which complex thinking skills do you think are the most important for students to develop to become successful 21st century thinkers? Select up to three. *

Check all that apply.

- Technology integration
- Problem solving skills
- Problem based learning
- Communication skills
- Visualization skills
- Opportunities for student innovation
- Opportunities for collaboration
- Inference skills
- Computational thinking skills
- Authentic opportunities for inquiry
- Opportunities for student choice
- Opportunities for creativity
- Engagement with real world issues and problems
- Coding / computer science

Powered by

