



## Core Proposition #2: Knowing Your Content and How to Teach It to Students

### Competency

Educator possesses a firm command of their subject area(s), understands factual information as well as major themes, and has the pedagogical insight to communicate their subject knowledge and impact student learning.

### Key Method

The educator deeply understands their academic standards and is able to connect these standards to develop substantive interdisciplinary learning intentions for students. The educator understands which strategies are most effective in teaching a topic or subject and is able to assess whether students met the learning intentions.

### Method Components

Educators will demonstrate competency by:

- Development of learning intentions connected to interdisciplinary standards
- Designing a unit plan that connects standards with learning intentions
- Development of assessment(s) that illustrate students' mastery of the content
- Examples of high-impact teaching strategies
  - Note Taking and Other Study Skills
  - Direct Instruction



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

Page 1 of 7

**NBCT Stack**

Last Revised on Mar 17, 2022

- Spaced practice
- Feedback
- Teaching Metacognitive Skills
- Teaching Problem-Solving Skills
- Reciprocal Teaching
- Mastery Learning
- Concept Mapping
- Worked Examples
- A demonstration of educator's understanding of the Five Core Propositions (National Board for Professional Teaching Standards)

## Supporting Rationale and Research

Dewi, M.S., Setyosari, P., Kuswandi, D., & Ulfa, S. (2020). Analysis of kindergarten teachers on pedagogical content knowledge. *European Journal of Educational Research*, 9(4), 1701-1721.

[https://eric.ed.gov/?q=impact+of+teacher+content+knowledge+on+student+learning&ft=on&ff1=dtySince\\_2017&id=EJ1272481](https://eric.ed.gov/?q=impact+of+teacher+content+knowledge+on+student+learning&ft=on&ff1=dtySince_2017&id=EJ1272481)

Dewsberry, B. & Brame, C. (2019). Inclusive teaching. *CBE-Life Sciences Education*, 18 (2). <https://www.lifescied.org/doi/full/10.1187/cbe.19-01-0021>

Fisher, D.; Frey, N. (2018). The long view of “visible learning’s” impact. *Education Sciences*, 8(174).

[https://eric.ed.gov/?q=visible+learning&ft=on&ff1=dtySince\\_2017&id=EJ1201031](https://eric.ed.gov/?q=visible+learning&ft=on&ff1=dtySince_2017&id=EJ1201031)

Keller, M., Neumann, K., & Fischer, H. (2016, Dec 29). The impact of physics teachers' pedagogical content knowledge and motivation on students' achievement and interest. *Journal of Research in Science Teaching*. <https://doi.org/10.1002/tea.21378>

Orcutt, J.M. & Dringus, L.P. (2017). Beyond being there: Practices that establish presence, engage students, and influence intellectual curiosity in a structured online learning environment. *Online Learning*. 21(3), 15-35 2017

<https://eric.ed.gov/?id=EJ1154155>



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

Page 2 of 7

**NBCT Stack**

Last Revised on Mar 17, 2022

# Resources

## Articles

[A list of 107 effective classroom teaching strategies.](#)

[Active learning strategies.](#)

[How the five core propositions look in practice: The architecture of accomplished teaching.](#)

[Learning intentions and success criteria in your classroom.](#)

[Succeeding with differentiation.](#)

[What teachers should know and be able to do.](#)

[Why should assessments, learning objectives, and instructional strategies be aligned?](#)

## Videos

[Learning intentions and success criteria.](#)

## Submission Guidelines & Evaluation Criteria

To earn the micro-credential, you must receive a passing score in Parts 1 and 3, and be proficient for all components in Part 2.

### Part 1. Overview Questions (Provides Context)

(50-100 words)

Please use the suggested word count as a guide to answer the following contextual questions. This will help our assessor understand your current context for working on this micro-credential.

Please do not include any information that will make you identifiable to your reviewers.

1. What are the ages and grade(s) of students featured? What is the subject matter of the class featured?
2. Describe the demographic characteristics of your school (i.e. rural/urban, EL, socioeconomic, etc.).



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

Page 3 of 7

**NBCT Stack**

Last Revised on Mar 17, 2022

3. What relevant characteristics of this class influence instructional planning (e.g., ethnic, cultural, linguistic diversity, range of abilities, personality of class)?
4. What relevant characteristics of the children with exceptionalities influence your planning for students, including those receiving special education services or identified as gifted and talented? Give any other information that might help assessors “see” the class featured.

**Passing:** Response clearly and completely addresses each question. Writing is organized and easy to understand.

## Part 2. Work Examples/Artifacts/Evidence

To earn this micro-credentials please submit the following three artifacts as evidence of your learning.

*\*Please do not include any information that will make you or your students identifiable to your reviewers.*

### **Artifact 1: Mastery of Learning Intentions**

Using the Mastery of Learning Intentions template provided (see the Resources section), please answer the following questions (700-word limit):

1. Unit: What is the unit title, and give a brief description of the essential understanding(s) of the unit.
2. Learning Intentions: What specific knowledge will the students master by the end of this unit?
3. Interdisciplinary Standards: Which interdisciplinary academic standards will be highlighted in this unit? (Please do not use only numbers; the standard can be paraphrased if necessary.)
4. Connecting Learning Intentions to Standards: Demonstrate your understanding of the academic standards by explaining how the learning intentions align with the academic standards.

### **Artifact 2: Annotated Bibliography and Justification**

Create an annotated bibliography of 3-5 educational resources for instructional strategies that would be effective for this unit.

1. List annotated bibliography (APA format)
2. In less than five sentences for each citation, offer justification of how the strategy is aligned with the learning intentions and standards identified in Artifact 1.



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

Page 4 of 7

**NBCT Stack**

Last Revised on Mar 17, 2022

### **Artifact 3: Student Artifacts and Analysis**

(200-word limit)

Upload two different work products from the featured unit that provide evidence of student mastery of learning intentions. Work products can be formative or summative; i.e. exit ticket, writing sample, teacher created assessment, etc. Analyze how the artifacts reflect the high-impact instructional practices that the educator used during instruction.

### Part 2. Rubric

	<b>Proficient</b>	<b>Basic</b>	<b>Developing</b>
<b>Artifact 1: Mastery of Learning Intentions</b>	Educator draws on detailed knowledge of content and pedagogy when selecting attainable learning goals, instructional strategies, and appropriate, thought-provoking instructional resources that support the goals and promote positive outcomes.	Educator draws on knowledge of content and pedagogy when selecting learning goals, instructional strategies, and appropriate, instructional resources that support the goals and outcomes.	Educator inconsistently draws on knowledge of content and pedagogy when selecting learning goals. Instructional strategies and instructional resources do not directly support the goals and outcomes.



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

Page 5 of 7

**NBCT Stack**

Last Revised on Mar 17, 2022

<b>Artifact 2: Annotated Bibliography and Justification</b>	<p>Educator communicates persuasively about the pedagogical decisions and resources used to design the instructional unit.</p> <p>Educator uses clear, consistent, and convincing evidence that justifies how instructional strategies align with the learning intentions and chosen standards.</p>	<p>Educator communicates the pedagogical decisions and resources used to design the instructional unit.</p> <p>Educator uses evidence that justifies how instructional strategies align with the learning intentions and chosen standards.</p>	<p>Educator communicates the pedagogical decisions and resources used to design the instructional unit.</p> <p>Educator lacks evidence that justifies how instructional strategies align with the learning intentions and chosen standards.</p>
<b>Artifact 3: Student Artifacts and Analysis</b>	<p>Artifacts and analysis provide clear, consistent, and convincing evidence that teacher monitors and evaluates students' learning and illustrates high-impact instruction.</p>	<p>Artifacts and analysis provide evidence that teacher monitors and evaluates students' learning.</p>	<p>Artifacts and analysis provide little evidence that teacher monitors and evaluates students' learning.</p>

### Part 3 Reflection

150-200 words)

Use the word count as a guide to write a personal reflection about your work on this micro-credential. For tips on writing a good reflection review the following resource:

[How Do I Write a Good Personal Reflection?](#)



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

Page 6 of 7

**NBCT Stack**

Last Revised on Mar 17, 2022

*Please do not include any information that will make you identifiable to your reviewers.*

Reflect on student learning and the effectiveness of your instructional design and strategies. Please address the following guiding questions:

1. How did you ensure that students mastered the learning intentions?
2. What concerns or issues arose from this reflection?
3. What next steps will you follow to address these concerns or issues? Use student examples and *What Teachers Know and Should be Able to Do* to support your claim(s). (See Resources section)

**Passing:** Reflection provides evidence that this activity has had a positive impact on both educator practice and student success. Specific examples are cited directly from personal or work related experiences to support claims. Also included are specific knowledge of students and the implications of data-driven instruction.



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

Page 7 of 7

**NBCT Stack**

Last Revised on Mar 17, 2022