Toolbox

Chapter 1: Blueprint for Deeper Learning

Design Thinking (Makerspace, CTAE / STEM / STEAM)

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| --- | --- | --- | --- | --- |
| **Foundation for Learning** | | | | |
| **Title:** | | | | |
| **Grade/Course:** | **Subject:** | | | **Duration:** |
| Focus Standards: | | | | |
| **Skills:** | **Concepts:** | | | **Bloom’s Level:** |
|  |  | | |  |
| **DOK 1:** | **DOK 2:** | | **DOK 3:** | **DOK 4:** |
| **Learning Goals:**  **I am learning to . . .** | | **Success Criteria:**  **I will be successful when I can . . .** | | |

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| **Real-World Problem and Task Overview** |
| Real-World Problem/Challenge/Issue: |
| **Overview of Learning Tasks (1-2 sentences with aligned standard codes):** |
| **Task 1: Empathize:**  **Task 2: Define:**  **Task 3: Ideate:**  **Task 4: Prototype and Test:** |

Adapted from www.dschool.stanford.edu by Dr. Lissa Pijanowski   
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| **Construction of Knowledge: Phase I** | | | **Check Expected Level of Rigor/Relevance** | |
| **Driving Question:** | | | 🞎 C | 🞎 D |
| 🞎 A | 🞎 B |
| Phase I  Empathize:  I have a challenge.  How do I approach it? | Understand the challenge, prepare research, gather inspiration, gain empathy for someone else | | **Strategies:** | |
| **Task Closing:** |  | | | |
| **Instructional Resources (Print/Digital):** | **Teacher Resources:** | **Student Resources:** | | |
| **Learner Considerations:**  **(Special Ed, ELL, etc.)** |  | | | |

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| **Inspection and Feedback** | | | |
| **Assessment/Task:(Show What You Know)** | | | |
| **Success Criteria:** | **Not Yet** | **Meets** | **Feedback:** |
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| **Construction of Knowledge: Phase II** | | | **Check Expected Level of Rigor/Relevance** | |
| **Driving Question:** | | | 🞎 C | 🞎 D |
| 🞎 A | 🞎 B |
| Phase II  Define and Reframe the Problem:  I learned something.  How do I interpret it? | Tell stories, search for meaning, reflect on new insights, frame new opportunities | | **Strategies:** | |
| **Task Closing:** |  | | | |
| **Instructional Resources: (Print/Digital)** | **Teacher Resources:** | **Student Resources:** | | |
| **Learner Considerations:**  **(Special Ed, ELL, etc.)** |  | | | |

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| **Inspection and Feedback** | | | |
| **Assessment/Task: (Show What You Know)** | | | |
| **Success Criteria:** | **Not Yet** | **Meets** | **Feedback:** |
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| **Construction of Knowledge: Phase III** | | | **Check Expected Level of Rigor/Relevance** | |
| **Driving Question:** | | | 🞎 C | 🞎 D |
| 🞎 A | 🞎 B |
| Phase III Ideate:  I see an opportunity.  What do I create? | Generate ideas (think outside the box), refine ideas, share solutions, get feedback | | **Strategies:** | |
| **Task Closing:** |  | | | |
| **Instructional Resources: (Print/Digital)** | **Teacher Resources:** | **Student Resources:** | | |
| **Learner Considerations:**  **(Special Ed, ELL, etc.)** |  | | | |

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| **Inspection and Feedback** | | | |
| **Assessment/Task: (Show What You Know)** | | | |
| **Success Criteria:** | **Not Yet** | **Meets** | **Feedback:** |
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| **Construction of Knowledge: Phase IV** | | | **Check Expected Level of Rigor/Relevance** | |
| **Driving Question:** | | | 🞎 C | 🞎 D |
| 🞎 A | 🞎 B |
| Phase IV Prototype  and Test:  **I have an idea. How do I build it?** | Make prototypes, test it out, observe how it  works and if it solves the problem or meets  the need, get feedback | | **Strategies:** | |
| **Task Closing:** |  | | | |
| **Instructional Resources: (Print/Digital)** | **Teacher Resources:** | **Student Resources:** | | |
| **Learner Considerations:**  **(Special Ed, ELL, etc.)** |  | | | |

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| **Inspection and Feedback** | | |
| **Assessment/Task: (Show What You Know)** | | |
| **Success Criteria:** | **Points** | **Feedback:** |
|  | \_\_\_\_\_ of \_\_\_\_ |  |
|  | \_\_\_\_\_ of \_\_\_\_ |  |
|  | \_\_\_\_\_ of \_\_\_\_ |  |
|  | \_\_\_\_\_ of \_\_\_\_ |  |
|  | \_\_\_\_\_ of \_\_\_\_ |  |
| **Total** | \_\_\_\_\_ of \_\_\_\_ |  |

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| **Reflection on Design and Learning** |
| **Teacher Reflection:** |
| **Student Reflection:** |
| **Considerations for Redesign:** |



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