**Cognitive Matrix Planning Sheet (adapted from Hess, et al. 2009)**

This matrix combines Bloom’s Cognitive and Psychomotor Domains, Marzano’s and Costa’s Critical Thinking Domains, and Webb’s Levels of Complexity with suggested actions, question stems, and products. It’s a tool for planning Orff teaching experiences in line with Common Core State Standards. See Gerry Petersen-Incorvaia’s article, “Practical Strategies: Aligning Orff Schulwerk and Common Core State Standards” in the spring, 2014 issue of *The Orff Echo* for more information.

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| **Thinking Processes** | **Content** | **Complexity of Thinking Processes and Content** |
| **Bloom’s** **Critical Thinking and *Psychomotor* Domains** | **Marzano’s Critical Thinking** | **Costa’s** **Critical Thinking** | **Webb’s Complexity of Content** | **Actions** | **Questions** | **Products** |
| **Creating and *Composing*** | **Evaluating** | **Demonstrates Mastery of Knowledge Learned** | **Recall and Reproduction** | **Basic Skills and Concepts** | **Strategic Thinking and Reasoning** | **Extended Thinking** | **Designing****Constructing****Planning****Producing****Inventing****Devising****Making** | **• Judge the value of . . .?****• Can you defend your position about . . .?****• Do you think . . . is a good or a bad thing?****• How would you have handled . . .?****• What changes to . . . would you recommend?****• How would you feel if . . .?****• How effective are . . .?** | **Film****Story****Project, Art Project****New game****Song****Media product****Advertisement** |
| **Evaluating/ Evaluation and *Improvising*** | **Generating** | **Checking****Hypothesizing****Critiquing****Experimenting****Judging****Testing****Detecting****Monitoring** | **• Why not compose a song about . . .?****• Can you see a possible solution to . . .?****• If you had access to all resources how would you deal with . . .?****• Why don’t you devise your own way to deal with . . .?****• What would happen if . . .?****• Can you create new and unusual uses for . . .?****• Can you write a new recipe for a tasty dish?****• Can you develop a proposal which would . . .?** | **Debate****Panel****Report****Evaluation****Investigation****Verdict or Conclusion****Persuasive****Speech** |
| **Analyzing/ Analysis and Synthesis and *Varying*** | **Analyzing** | **Practice Knowledge Learned** | **Comparing****Organizing****Deconstructing****Attributing****Outlining****Structuring****Integrating** | **• If . . . happened, what might the ending have been?****• How was this similar to . . .?****• What do you see as other possible outcomes?****• Can you compare your . . . with that presented in . . .?****• What are some of the problems of . . .?****• Can you distinguish between . . .?****• What were some of the motives behind . . .?****• What was the turning point in the game . . .?** | **Survey****Database****Mobile****Abstract or Report****Graph****Spreadsheet****Checklist****Chart or Outline** |
| **Applying/ Application and *Refining*** | **Applying/****Integrating** | **Implementing****Carrying out****Using****Executing** | **• Could this have happened in . . .?****• Can you group by characteristics such as . . .?****• What factors would you change if . . .?****• What questions would you ask of . . .?****• From the information given, can you develop a set of instructions about . . .?****• Would this information be useful if you had a . . .?** | **Simulation****Sculpture or Illustration****Demonstration, Presentation****Interview****Performance****Journal** |
| **Understanding/****Comprehension and *Accommodating*** | **Organizing** | **Introduction of Knowledge** | **Interpreting****Exemplifying****Summarizing****Inferring****Paraphrasing****Classifying****Comparing****Explaining** | **• Can you write a brief outline . . .?****• What do you think might happen next . . .?****• Who do you think . . .?****• What was the main idea . . .?****• Can you distinguish between . . .?****• What differences exist between . . .?****• Can you provide an example of what you mean . . .?****• Can you provide a definition for . . .?** | **Summary****Collection****Explanation****Show and tell****Quiz****List****Label****Outline** |
| **Remembering/****Knowledge and *Perceiving/Patterning*** | **Knowing** | **Recognizing****Listing****Describing****Identifying****Retrieving****Naming****Locating****Finding** | **• How many . . .?****• Who was it that . . .?****• Can you name the . . .?****• Who spoke to . . .?****• Can you tell why . . .?****• Find the meaning of . . .?****• What is . . .?****• Which is true or false . . .?** | **Quiz****Definition****Fact****Worksheet****Label****List****Workbook****Reproduction** |

SOURCE: GERRY PETERSEN-INCORVAIA