**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