



Indicator: The school's key documents explain the value of metacognitive competency and how it is enhanced through specific roles and relationships. (D5)

Explanation: Personal learning models emphasize a number of instructional strategies to enhance students' metacognitive competency and encourage management of their own learning. School documents such as teacher lesson plans, co-curricular planning documents, and school improvement plans should reflect the value of metacognitive competency for student learning, appropriate professional development in how to build students' skills, and specifically how school programming and staff target this effort.

Questions: What are the benefits of building students' metacognitive competency? How can school documents and planning reflect the value of building students' metacognitive competency?

What Are the Benefits of Building Students' Metacognitive Competency?

Learner-centered, or personalized learning refers to "a teacher's relationships with students and their families and the use of multiple instructional modes to scaffold each student's learning and enhance the student's personal competencies" (Twyman & Redding, 2015, p. 3). The student is actively involved with the teacher in co-constructing their individualized learning pathway, and often through technology the location, time and pace of learning may vary from student to student (Redding, in press). Metacognitive competency, one of four personal competencies within recent personalized learning frameworks¹ becomes critical for student success, particularly within personalized learning pedagogies, as students are responsible to some degree for managing their own learning. Metacognition refers to how students learn, and self-regulate learning and use of learning strategies (Redding, in press). Metacognitive strategy instruction is particularly imperative given many states' and districts' adoption of Common Core Standards, which require students to be able to use metacognitive learning strategies extensively in order to engage in higher-order processes such as researching and synthesizing information, and critically reading and evaluating texts (Conley, 2014).

How Can School Documents and Planning Reflect the Value of Building Students' Metacognitive Competency?

Twyman and Redding (2015) and others (e.g., Wolfe & Davis Poon, 2015) advocate teachers intentionally building metacognitive competencies into their teaching and lesson planning; for example, documenting explicitly how a lesson plan component promotes students' self-regulatory abilities, goal setting, and tracking of mastery. Lesson plans for teachers and relevant planning documents for co-curricular programming can serve to provide documentation of a school-wide commitment to building and enhancing students' metacognitive competency. Similarly other key school documents such as school improvement plans and parent literature about school programming can incorporate goals and objectives centered on enhancing students' metacognitive competency. These documents should

¹ Other personal competencies are Cognitive, Motivational, and Social/Emotional. For a complete description of a personalized learning framework see Redding, in press: http://www.centeril.org/2016handbook/resources/Redding_chapter_web.pdf

reflect the value the school places on metacognitive competency and how teachers and other staff contribute to efforts to ensure that students develop these critical skills. Research has shown that metacognitive instruction is not commonly observed within classrooms, and teachers often have limited knowledge about metacognition and how it can be enhanced (Wilson & Conyers, 2014). Wilson and Conyers argue that “without support for teaching about metacognition at the policy level, teachers may feel too pressed for time to fit this instruction into the already packed school day” (p. 2). School and district improvement plans may need to include targeted professional development that provides teachers with this knowledge and how they can teach and reinforce metacognition and students’ ability to manage their own learning. This type of professional development has been incorporated successfully within several recent studies (e.g., Seraphin, Philippoff, Kaupp, & Vallin, 2012; Dempsey, Beesley, Fazendeiro Clark, & Tweed, in press; Zubrzycki, 2015). Schools and their community partners should collaborate to develop and document plans to address metacognitive competency. Some recent initiatives involve partnerships between school systems and community educators to develop common plans to address student learning, including metacognitive-related strategies. For example:

In Seattle, the school system is scaling an approach that came out of research from the youth development field. The pilot involved collaboration between certified teachers, community educators, and youth-serving organizations to develop students’ creativity through arts education across schools from K-12. Through a review of the research, Seattle is focusing on six 21st century competencies, including creative thinking, critical thinking, communication, collaboration, perseverance, and growth mindset. The pilot provided joint professional learning for teachers and community educators, and baseline and cornerstone assessments (both formative and summative) with related observation tools. This approach has now been embedded in the district strategic plan to take it to scale, with a focus on what changes will be necessary to implement in other subject areas outside the arts and with new community partners. (Stewart, 2015)

Having teachers and co-curricular staff participate in professional development addressing how to enhance students’ metacognition and ability to manage their own learning, and engage in collaborative planning on how to

incorporate these components into their programs can provide students with opportunities to apply the strategies across multiple contexts, which may in turn enhance their capacity as self-regulated learners.

References and resources

- Arcaira, E., Vile, J. D., & Reisner, E. R. (2010). *Citizen Schools: Achieving high school graduation*. Policy Studies Associates, Inc. Retrieved from <http://www.policystudies.com/studies/?id=39>
- Bohnert, A., Fredericks, J. A., & Randall, A. (2010). Capturing unique dimensions of youth organized activity involvement: Theoretical and methodological considerations. *Review of Educational Research, 80*, 576-610.
- Cernal Nat, M., Walker, S., Bacon, L., Dastbaz, M., & Flynn, R. (2011). *Impact of metacognitive awareness on learning in technology enhanced learning environments*. Retrieved from https://www.academia.edu/1382675/Impact_of_metacognitive_awareness_on_learning_in_technology_enhanced_learning_environments
- Conley, D. (2014). *Learning strategies as metacognitive factors: A critical review*. Eugene, OR: Educational Policy Improvement Center.
- Dempsey, K., Beesley, A. D., Fazendiero Clark, T., & Tweed, A. (2016). Empowering students as partners in learning. In M. Murphy, S. Redding, & J. Twyman (Eds.), *Handbook on personalized learning for states, districts, and schools*. Retrieved from www.centeril.org
- Redding, S. (2016). Competencies and personalized learning. In M. Murphy, S. Redding, & J. Twyman (Eds.), *Handbook on personalized learning for states, districts, and schools*. Retrieved from www.centeril.org
- Seraphin, K. D., Philippoff, J., Kaupp, L., & Vallin, L. M. (2012). Metacognition as means to increase the effectiveness of inquiry-based science education. *Science Education International, 23*(4), 366-382.
- Stewart, V. (2015, December 17). Preparing students for the 21st century: International strategies. [Global learning Web log post]. Retrieved from http://blogs.edweek.org/edweek/global_learning/2015/12/preparing_students_for_the_21st_century_international_strategies.html
- Twyman, J., & Redding, S. (2015). *Personal competencies/Personalized learning: Lesson plan reflection guide*. Washington, DC: Council of Chief State School Officers. Retrieved from <http://www.centeril.org/ToolsTrainingModules/assets/personalizedlearninglessonplanreflection.pdf>

- Wilson, D., & Conyers, M. (2014). "The boss of my brain": Explicit instruction in metacognition puts students in charge of their learning. *Educational Leadership*, 72(2).
- Wolfe, R. E., & Davis Poon, J. (2015). *Educator competencies for personalized, learner-centered teaching*. Boston, MA: Jobs for the Future & the Council of Chief State School Officers. Retrieved from <http://www.ccsso.org/Documents/Educator-Competencies-081015-FINAL.pdf>
- Zubrzycki, J. (2015). Students 'self-assess' their way to learning: Can students learn more by assessing their progress? *Education Week*, 35(12), s12. Retrieved from <http://www.edweek.org/ew/articles/2015/11/11/students-self-assess-their-way-to-learning.html?qs=metacognitive+learning>