Core Function	Personalized Learning: Cognitive Competency	Effective Practice	Intentionally addressing students' accessible background knowledge to facilitate new learning

Indicator: All teachers include vocabulary development (general vocabulary and terms specific to the subject) as learning objectives. (C8)

Explanation: Vocabulary is one of the most important determinants of reading success in children. Children who have limited vocabularies during early childhood are likely to fall further behind in reading comprehension without intervention. Direct, explicit, vocabulary instruction has been shown to improve word learning and reading comprehension, helping to close the gap between at-risk children and their typical peers. Instruction should include relating vocabulary to students' background knowledge, helping students develop elaborated word knowledge, encouraging active involvement, and fostering student independence with vocabulary acquisition.

Questions: Why is vocabulary instruction important? What are the best practices for vocabulary instruction?

Why is vocabulary instruction important?

There is a growing sense of urgency to enhance vocabulary development in the primary grades through instruction and intervention that specifically target vocabulary growth (Biemiller, 2001). Vocabulary has long been recognized as a strong determinant of reading success. Young children who enter school with limited vocabulary knowledge are at greater risk for later reading difficulties, particularly, reading comprehension difficulties (Catts, Fey, Zhang, & Tomblin, 2001) and a vocabulary gap only grows larger in the early grades (Biemiller & Slomin, 2001). It appears that vocabulary growth is largely determined by parental practices, particularly before third grade (Biemiller, 2003).

Vocabulary, in addition to word-identification, is the major factor that limits reading comprehension (Becker, 1977; Biemiller & Slonin, 2001; Chall & Conard, 1991; Cunningham & Stanovich, 1997). According to Becker (1977), word-identification on its own is not sufficient in helping disadvantaged children to reach reading comprehension beyond grade level two. Further, he notes that disadvantaged children's declining reading comprehension in grades 3 and 4 largely results from lack of adequate vocabulary knowledge. Biemiller (2003) summarizes it thus, "simple vocabulary knowledge and word identification skill account for almost the entire variance seen in reading comprehension" (p.325).

The development of vocabulary is a life-long process. Teaching vocabulary throughout the schools years is not just a learning process for those struggling with or learning the English language, but also for all students as they master new content and skills (Sniad, 2016).

What are the best practices for vocabulary instruction?

Direct, explicit vocabulary instruction has been shown to help young children who are at risk for later language and vocabulary difficulties and perhaps begin to close the vocabulary gap (Cuticelli, M., Coyne, Ware, Oldham, & Rattan, 2015). Marulis and Neuman's 2010 meta-analysis of 67 studies and 216 effect sizes sought to better understand the

impact of explicit vocabulary training on word learning. Results indicated an overall effect size of .88, demonstrating, on average, a gain of nearly one standard deviation on vocabulary measures. Further, Stahl and Fairbanks (1986) calculated a mean effect size of .97 in their meta-analysis of the effects of explicit vocabulary instruction on comprehension of passages containing taught words.

Features of effective vocabulary instruction and intervention for at-risk students include (a) direct, explicit instruction that includes extensive teacher modeling; (b) teacher and material scaffolding that carefully controls the level of task difficulty (e.g., moving from easier to more difficult tasks throughout the instruction); and (c) numerous practice opportunities with immediate and specific feedback (Coyne, McCoach, & Kapp, 2007; Vaughn, Gersten, & Chard, 2000). Further, Stahl & Fairbanks (1986) suggest that the most effective vocabulary teaching methods in the included studies had both definitional and contextual information in their programs and give the students more than one or two exposures to the to-be-learned words.

This explicit and direct instruction with plenty of practice with vocabulary should include practices that

- Help students relate new vocabulary to their background knowledge (e.g., through pre-reading vocabulary-building exercises)

- Help students develop elaborated word knowledge (e.g., help students express word meanings in various ways through drawing pictures or creating other non-linguistic representations, creating metaphors and analogies, creating graphic organizers and using vocabulary learning logs);

- Provide for active student involvement in learning new words (e.g., having students create a visual word wall using pictures that represent various concepts being taught); and,

- Help students acquire new vocabulary independently (e.g., teach students what to do when they encounter an unfamiliar word, and increasing word exposure through supplemental reading). (Carr & Wixson, 1986, as cited in Lent, 2012, pps. 58-59)

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