Frog Street Pre-K

Instructional Strategies Research



Frog Street Pre-K

A comprehensive, bilingual curriculum for three and four year olds
2015

Research for Instructional Strategies in Frog Street Pre-K

Lesson Structure: Focus, Develop, Practice, Reflect

Finding: Information (data) forms a predictable path as it makes it way through the brain and into long-term learning (Sousa, 2005).

Bilingual Instruction

Finding: Promote development of second language so child is biliterate and bicultural through a focus on linguistic, academic, cognitive, emotional, social and physical needs in separate instructional contexts. (Thomas & Collier, 2002)

ELL Instruction

Finding: Promote academic proficiency in spoken and written English (Tabors, 2004)

Finding: A child develops conversational English in about two years, but it takes five to seven years for a child to develop academic language (Cummins, 2001)

Strategies for phonological awareness, introduction of alphabet, written expression, oral language

Phonological Awareness

Finding: Phonological awareness skills have predictive relationship with later measures of literacy development (National Early Literacy Panel, 2008)

Alphabet Knowledge

Finding: Optimize memory for learning sets of information and overcoming obstacles to forgetting (Pashler, 2006)

Finding: Effectiveness of letter learning is increased when children distinguish letter shapes from a set of 2 to 4 letters (McGee, 2007)

Vocabulary/Oral Language

Finding: There is a strong positive relationship between reading comprehension and vocabulary (Coyne, Simmons & Kame ennui, 2004)

Finding: Size of vocabulary in Kindergarten is a predictor of reading success (Scarborough, 2001) Finding: Gaps in vocabulary are most successfully addressed during the preschool years (Biemiller, 2006) (Cunningham, 1997)

Finding: Direct vocabulary instruction includes teaching individual words and word learning strategies. (National Early Literacy Panel, 2008)

Written Expression

Finding: A substantial connection for automaticity in name writing to literacy skill development (Bloodgood, 1999) (National Early Literacy Panel, 2008)

Use of Small Group Instruction

Finding: Large, positive effects were usually achieved in small-group, intentional instructional activities (National Early Literacy Panel, 2008)

Peer teaching

Finding: The highest rate of retention occurs when children teach their peers (Sousa, 2005).

Hands-on practice

Finding: Hands-on explorations contribute not only to the understanding of abstract concepts but also to four critical thinking skills essential to learning: making distinctions, recognizing relationships, organizing systems, and taking multiple perspectives. Higher level thinking starts with touch (Cabrera & Cotosi, 2010).

Inclusion of daily music and movement

Finding: Physical movement enhances brain functions (Cabrera & Cotosi, 2010, Hannaford, 2008).

Repetition

Findings: Repetition strengthens neurological connections. Six repetitions in 30 days create master (Sousa, 2005).

Use of multiple learning styles in activities

Finding: Learning styles differ greatly across situations (Scott, et al, 2010).

Singing daily

Finding: Singing increases the flow of oxygen which stimulates thinking (Deutsch, 2010, Jensen 2005).

Finding: Singing increases endorphins which in turn lowers stress (Jensen 2005).

Finding: Singing enhances the brains awareness of patterns (Jensen, 2005, Sousa 2005).

Inclusion of problem solving activities

Finding: The window of opportunity (developmental timetables) for wiring problem-solving skills occurs during preschool years (Ramey & Ramey, 1999, Jensen, 2005).

Read-Aloud Time

Finding: Interactive read-aloud times (dialogic) result in gains in vocabulary (Hargrave & Sénéchal, 2000), comprehension strategies, story schema and concept development (Wasik & Bond, 2001) Finding: Taking words to definitional level increases comprehension and language development (Collins, 2004)

Use of books that are also songs

Finding: Brain areas governing music and language overlap (Deutsch, 2010).

Conscious Discipline strategies

Finding: The window of opportunity for wiring social and emotional intelligence is between birth and four (Ramey & Ramey, 1999).

Finding: Reducing stress allows the brain to function in a more logical state (Jensen, 2005)

Finding: Appropriate social strategies are learned by modeling and by providing examples (Sousa, 2005, Goleman, 2006).

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