<div align="center">**The Research Behind *Cracking the Code***</div>

HISTORY

Cracking the Code was developed over a period of seven years. The project was conceived at the Literacy 2000 Towards Reintegration Conference held in Ottawa, Canada-where Rick McAtee was invited to speak. He discussed the relationship between self-esteem, behavior, and lack of literacy skills. Asked to prove this connection, he was challenged to use a Federal Institution where inmates were reading far below grade level. The project, called Turning a New Page, spanned the next three years and focused on 1) motivating and empowering the reluctant reader, 2) creating a positive attitude, 3) explicit instruction, and 4) fluency. In 2002, the project was featured on an ABC special broadcast, "Reading: Your ABC's to Success." In 2003, the success of the project was documented in the <u>Journal of Adolescent and Adult Literacy</u>, "Life and Literacy: Struggling Readers in Prison." In 2004, Turning a New Page (now a company) used the information and data obtained from the older reluctant readers (ages 21-65) to create materials intended for use by instructors outside the prison system.

RESEARCH BASE

A key area of difficulty for the older struggling reader was the inability to decode words. The research conducted by Carnine, Carnine, and Gertsen (1984) and Lesgold and Curtis (1981) concluded that one characteristic of poor readers is weak decoding skills. Weak decoding skills play a major role in how a student progresses in reading. Additionally, work in cognitive psychology suggests that humans have a limited amount of mental energy (Kahneman, 1973). It thus follows that if decoding requires most of a reader's mental energy, there is little left for higher level comprehension.

An individual who has difficulty reading avoids reading at all costs. It is clear that a fluent reader builds word recognition and vocabulary based on the amount of time spent engaged in reading. Stanovich (1986) referred to this as the "Mathew Effect" – the "rich get richer" (readers improve and read more) and the "poor get poorer" (poor readers avoid reading thus losing ground and never moving forward.)

Research indicates that poor readers lack a repertoire of reading strategies, relying on rote memorization; they have relatively low self-esteem and attribute their failure to chance and/or teacher bias (Rowley, 2007). Turning a New Page encountered a major block in working with the older struggling reader. They were reluctant to try when they had repeatedly failed over the years. Thus, repeating the same instructional methodology that they had seen for years was out of the question. The issue of self-esteem played a key role in enhancing the progress and success of the inmates.

Research also indicates that explicit instruction is the most beneficial for struggling students (Adams, 1990; Chall, 1996; Evans and Carr, 1985; Honig, 1995). Poor readers need to be explicitly shown the patterns found in words. Unlike a good reader, struggling readers are unable to generalize patterns to unfamiliar words. This phenomenon is directly related to the number of words a poor reader encounters over time versus the number of words a good reader will encounter. The generalization of familiar patterns to unfamiliar words will only take place once the patterns are identified and internalized. Again, the number of words a student encounters greatly influences the recognition of those letter patterns.

Supporting the previous research, eye-movement studies suggest that readers process the letters that make up words, and that reading is a "letter mediated" process (Just and Carpenter, 1987; McConkie and Zola, 1987). Brain based research, too, found that the brain is constantly looking for patterns; however, when it cannot find the pattern, the brain dismisses the information as meaningless (Coward, 1990). This explains why a poor reader will abandon phonics. Students are taught rules that do not seem to apply to the words they come across on a daily basis. Good readers encounter enough words that the rules make sense, and the exceptions are common enough that they are able to internalize the patterns, applying them when necessary. The poor reader, on the other hand, does not read enough words to distinguish the exceptions from the rules.

"CRACKING THE CODE"

Turning a New Page confirmed these findings while working with the inmates and later with students in middle and high schools. Recognizing the need for readers to quickly decode in order to build fluency and comprehension was the driving force behind the creation of "Cracking the Code." "Cracking the Code" addresses the research. It is "letter mediated" and built on patterns; it builds self-esteem by beginning with the participant meeting with success and adding a new skill only after the participant demonstrates automaticity; it is unique in design and approach, separating it from a participant's past failures; it utilizes explicit instruction that is completely scripted and assessed daily. The scope and sequence shows how readers are taught to recognize the patterns found in words that were once just viewed as exceptions to the rules.

"Cracking the Code" was also piloted in an elementary setting. A report by Dr. Lynnette Brunderman (2007), "Cracking the Code: Decoding Really Does Influence Comprehension," quantified the progress struggling readers made using the program.

Turning a New Page identified the need for students to be explicitly taught the visual component that was missing and preventing them from reading fluently. Student test scores showed they had poor vocabulary and comprehension. Classroom participation showed the students understood and comprehended what they heard. The disconnect was in the visual aspect and not the verbal or auditory.

Basically, students had good vocabulary and comprehension skills. What was missing was the visual ability to identify words when they were written. Without the visual, testing will show students do not know or understand the words. It will recommend vocabulary development and teaching comprehension strategies. This will not enable the student who is missing the visual capability to recognize words to improve. Students are not reading the words they already know. "Cracking the Code" is the first intervention that addresses the visual component struggling readers must have in order to move forward and read fluently.

For further information, please check out our website, **www.turninganewpage.com**

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