

# FAQ's

## Write-on Handwriting™

**Q Why teach handwriting?**

**A** Students are expected to copy assignments from the board, take notes and write test answers – legibly. Because students are graded on written output, not on what they might know, difficulty in any of these areas impacts achievement. Furthermore, because handwriting is visible, students compare the quality of their handwriting to that of their peers. Students with strong academic potential but poor handwriting frequently perceive themselves as low achievers.

**Q Is handwriting important given the widespread use of computers and keyboards?**

**A** Yes. Legible handwriting is still required in the classroom and is expected by teachers. Furthermore, as students learn handwriting, they are building other developmental skills such as sequential memory and fine motor ability. These fundamental skills assist students in other essential academic areas such as math.

**Q Has scientific research uncovered better methods by which handwriting should be taught?**

**A** Yes. Traditionally, handwriting has been taught as an art, but research now allows us to teach handwriting based on scientific research. Handwriting is a basic motor skill, like riding a bike or walking, but advances in motor skill learning have not been incorporated into the process of teaching handwriting. To become proficient at a motor skill, a student must acquire muscle memory.

**Q What is muscle memory and why is it so important?**

**A** Muscle memory allows an action to be automatic and mechanical — it does not require active thinking. Research shows that if a student has to think about how to write a letter, his or her ability to spell or write an answer is hindered. When proper handwriting becomes a muscle memory, a student is free to devote all active thinking to the ideas that he or she is trying to express. Forming the letters requires no thought; it just “happens.” Muscle memory is developed through a two-step process: motor pattern mastery and pattern repetition.

**Q How is a motor pattern mastered?**

**A** To master a motor pattern (such as “how to write the letter *p*”), a student must have a visual image of the pattern and knowledge of the sequential steps by which the pattern is formed. When learning the motor pattern, a student needs individualized supervision and immediate feedback to ensure that he or she has correctly visualized and sequenced the pattern.

**Q What is pattern repetition?**

A Through repetition, the reproduction of a motor pattern evolves — from intense, careful, purposeful practice to an easily reproduced, automatic written pattern. Repetition of the pattern leads to muscle memory, which means that active thinking is no longer required to produce the pattern. In the context of handwriting, this means that rather than dedicating a portion of active thinking to the question of “how to write the letter *p*,” a student can focus entirely on the question of “how to spell the word *apple*” and rely on his or her muscle memory to express the thought in writing.

**Q Has this research been incorporated into *Write-On Handwriting*™?**

A Yes. *Write-On Handwriting*'s software applications are the first and only tools that emphasize motor pattern mastery. To date, the only instructional tools available on the market have been worksheets, which work well for supervised practice (pattern repetition) but do not provide the visual and sequential instruction necessary for initial training in proper letter formation (motor pattern mastery).

**Q How do the *Powerful Printing*™ and *Conquering Cursive*™ software programs provide motor pattern instruction?**

A Within each of the print and cursive handwriting software, letters are grouped based on the initial pencil stroke. This way, students are not required to memorize 52 print letter patterns and 52 cursive letter patterns in a disconnected and disorderly manner. They build skill using just 5 lower case print patterns, 5 capital letter print patterns, 7 lower case cursive patterns and 7 capital letter cursive patterns. The software demo (available through the website or on CD-ROM by request) shows how visual, auditory, written and kinesthetic cues are used to provide visual and sequential pattern instruction.

**Q Can you learn handwriting using a computer mouse?**

A Yes. Learning handwriting — the motor patterns underlying proper letter formation — does not require special hardware. Any input device (mouse, stylus, finger or pen on interactive board) will work. The first step to muscle memory — motor pattern mastery — is about acquiring a visual and sequential understanding of the pattern. Pencil manipulation becomes important in the next step — pattern repetition.

**Q Do teachers need both the digital workbooks (software) and the paper workbooks?**

A Yes. The *Write-On Handwriting* software provides individualized instruction and immediate feedback, and builds motor memory. The paper workbooks is where students then take pencil to paper and, through repetition, convert pattern mastery to muscle memory. Handwriting becomes fluid, legible and automatic.

**Q Does *Write-On Handwriting* provide tools for pattern repetition?**

A Yes. After mastering the motor patterns underlying the proper formation of letters, students transition from the digital workbooks to *Write-On Handwriting*'s paper workbooks. This is where they take pencil to paper and, through repetition, convert pattern mastery to muscle memory. Handwriting becomes fluid, legible and automatic.

**Q With teachers busy focusing on skills such as math and reading, how will they have time to teach handwriting?**

A The handwriting software are student-guided instructional programs, freeing up the teacher to concentrate on other subject areas such as math and reading. The computer provides the individualized supervision and immediate feedback that teachers rarely have the time to provide while teaching handwriting. The digital workbooks are the tutors, and the paper workbooks provide practice.

**Q How long does a typical lesson take?**

A Just twenty minutes a day! Each *Write On Handwriting* lesson incorporates five to ten minutes of computer work where students receive instruction and practice. Students then practice newly acquired skills in their paper workbooks for another five to ten minutes.

**Q Is the software standards-based?**

A Yes. Most Language Arts State Standards include legible print and cursive handwriting with proper spacing as a standard for grades K-3. Please visit our website at [epsbooks.com](http://epsbooks.com) for more research and standards information.

**Q Can *Write-On Handwriting* be used with a SMART Board or interactive white board?**

A Yes. *Write-On Handwriting* is compatible with interactive white boards and is accredited by Smart Technologies, the company that produces the SMART Board.

**Q Does *Write-On Handwriting* work with Touch Screens or Touch Windows?**

A Yes. *Write-On Handwriting* software is interactive therefore it will work with a variety of input devices (touch screen, mouse, pen, or stylus).

**Q What are the system requirements for the software?**

A PC: Windows 98 and greater MAC: OSX and greater. The software applications run in Flash Player.

**Q Does *Write-On Handwriting* have a demo version of the *Powerful Printing™* and *Conquering Cursive™* handwriting software?**

A Yes. Please visit our website at [epsbooks.com](http://epsbooks.com) for online demonstrations.