Students with disabilities often experience particular difficulties with handwriting, and these problems can hinder their development both in school and in postsecondary settings. This paper addresses three issues: (1) the possibility of a prejudicial and potentially lasting first impression, based on the individual's handwriting; (2) the lack of corrective handwriting instruction after the elementary grades; and (3) the variety of methods available to improve a student's handwriting. These issues are discussed in the context of the following topics: handwriting problems, the importance of writing, the absence of instructional commitment to handwriting, and instructional considerations such as print versus cursive skills acquisition and skills maintenance. The importance of an ongoing and consistent program of handwriting instruction is stressed, especially for students with disabilities who need to fight negative first impressions. (Contains 26 references.) (DB)
Handwriting and Students with Disabilities:
Overcoming First Impressions

Roy Greenland, M.Ed.
Roanoke Schools

-and-

Edward A. Polloway, Ed.D.
Lynchburg College

Running Head: Handwriting

Send Correspondence to: Edward A. Polloway
School of Education and Human Development
Lynchburg College
Lynchburg, Virginia 24501
804-522-8381/8383
Abstract

Handwriting problems can be a common and significant problem in school. Students with disabilities often experience particular difficulties in this area and these problems can hinder their development both in school and in postsecondary settings. The problem of first impressions is discussed and instructional remedies are presented.
Handwriting: Overcoming First Impressions

A common correlation that can be observed in some elementary classrooms is between a individual’s handwriting and that student’s academic success. This observation, in turn, has raised suspicions that poor handwriting ability is related in some fashion to not only educational performance, but also to performance in other aspects of life. This would be especially true in situations of first impression: Does an employer disregard sloppy and/or illegible applications? Does a teacher initially regard a student with poor handwriting as academically inferior? Are job promotions impeded? Are credit applications reviewed from a less favorable perspective?

Declining rates of legibility are common observations in the literature and in the popular press. For example, in a study of 250 executives, 41% indicated that the quality of handwriting is declining (Maines, 1992). This view adds emphasis to the urgency of learning legible handwriting skills before graduation from high school.

Polloway and Smith (1982) identified three reasons why the inability to communicate through handwriting of a reasonable quality may place individuals at a major disadvantage. First, in school, a majority of the academic assignments are done using handwriting. Deficiencies can diminish the chances for success, and create teacher bias. Second, employers want employees that can write legibly. Poor legibility on the application presents a negative image to potential employers. Third, legibility is also needed for writing personal letters, mail orders, and completing various forms.

Three foci form the foundation of this paper. First, attention is given to the possibility of a prejudicial and potentially lasting first impression, based on a person’s handwriting.
Second, after the elementary grades, there is very little corrective handwriting instruction given. Third, even though substantive research is lacking, there are a number of methods that have been devised to improve a student’s handwriting which could assist in avoiding the handicapping effects associated with first impressions of poor handwriting. The paper begins with a discussion of problems in handwriting.

**Handwriting Problems**

It should be noted initially that not all children with disabilities have poor handwriting. However, when problems exist, they may range from difficulty in writing one’s own name to being able to successfully use writing in a postsecondary setting (Wallace, Cohen, & Polloway, 1987).

Many children are developmentally delayed or learning disabled for reasons that also may relate to their handwriting skills. For example, they may have deficits in attention or visual memory, or, they may have physiological problems that inhibit fine motor skills. In addition, they may be more susceptible to the effects of poor teaching or simple carelessness (Wallace et al., 1987). It is no mystery that the act of writing combines fine motor skills, sequencing, language, memory, attention, thinking skills, and visual-spatial abilities. Because all of these may come into play at the same time, handwriting may be quite difficult, especially for those students with learning disabilities. Negative feelings about one’s own handwriting may add to the problem (Levine, 1990).
Graham (1989), in discussing the assessment of handwriting using the Test of Written Language (TOWL), reported that letter formation, spacing, and neatness contributed significantly to the test administrator's prediction of scores and students with learning disabilities, as a group, scored lower on the TOWL. The fact that examiners had predicted a poor score could lead them to give an individual student a score lower than deserved.

Levine (1990) not only noted the connection between handwriting, legibility, and disability, he also used legibility as a basis for helping to define the disability. The disability may be in the fine motor skill area but there may be other debilitating factors that divert the student's attention away from the writing process. Handwriting problems may be magnified by poor teaching or by teacher indifference.

The Importance of Writing

Few people can anticipate getting ahead in life without making a positive first impression. Everything counts, from how you look (Jackson, 1978) to how you write (Rohmann, 1992). Handwriting on an application usually gives a potential employer the first impression of an applicant. A written assignment is quite often the first impression given to a teacher. A poor first impression may set the tone for all that follows.

As Graham (1992) aptly stated about writing in general, "... writing has increasingly become a critical occupational skill. Successful performance in a variety of occupations requires the ability to write in a clear ... manner" (p. 137). He might have well said writing is a
critical life skill. However, as true as it may be that writing is an important skill on the job, the point is moot if one cannot get a job due to illegible writing on the application.

Numerous articles have been written for employers and applicants about writing on the job application. For example Gershon (1987) and Rohmann (1983) reported on strategies that employers could use to evaluate job applicants based on their handwriting. Monroe (1984) described for job applicants the styles of handwriting that should be avoided on an application and the ones that are most likely to impress an employer. Further, to experience growth, fulfillment, and longevity on the job, it may not be sufficient just to be employed and put in the requisite time. The employee may also need to continue to impress with his/her handwriting skills (Maines, 1992).

Writing is not merely an occupational hazard for those with learning disabilities. Their poor handwriting can label them in various other situations, whether it be in the schools, among their friends, by their parents or by themselves. There may be no avoiding the initial impression poor handwriting can cause for students with learning disabilities, whether that impression is generated by others or by the students themselves.

**Absence of Instructional Commitment**

Although Graham (1992) was referring specifically to written expression, the same concern can be asserted about handwriting:

Both the popular press and many educators have voiced the concern that schools do not do enough (or enough of the right things) to promote students’ literacy growth.... I am especially concerned about the.... writing instruction that students classified as
All students suffer when handwriting is not taught correctly and frequently. This is especially true in regard to students with learning disabilities. If handwriting is such a critical skill (Polloway & Smith, 1992), then why is it so neglected (Dyer, 1992), especially among older students (Hammill & Bartel, 1990)?

One reason may be that most teachers assume that children learn to form letters merely by looking at them and writing them repeatedly (Dyer, 1992). A related notion is that teachers may neither comprehend the importance of direct instruction in handwriting nor know how to do it, or perhaps both (Polloway & Smith, 1992). A third reason may be that teachers have the know-how and understand the why, yet chose to not do it because of the time and attention required.

A lack of handwriting instruction in the past should not be a basis for continuing to ignore it. Handwriting should not only be taught throughout the primary and middle grades; encouragement and monitoring should continue into the secondary schools. In addition, teachers should use checklists and records to monitor progress. Teaching handwriting should be done both directly and through incidental instruction. If basic handwriting skills are not taught, then students are left to their own devices, and they may thus fail to learn appropriate techniques; consequently their legibility will suffer (Farris, 1991). If legibility suffers, then the students are put at a greater disadvantage in school, at work, and in daily living. Thus, students, especially those with learning disabilities, will be on their own to fight off first impressions created by their poor handwriting.
Instructional Considerations

Print vs. Cursive

If the goal is to avoid negative first impressions, then the instructional techniques used should cover the styles of writing required in a first impression setting. Typically, when filling out any type of form, one of the first instructions given is to print. At the end of the form is a line or box that requires a signature (i.e., cursive). When completing many assignments for school, the students are asked to write in cursive. As long as people are required to utilize, and are judged by, both styles of writing, then teachers have an obligation to teach legible handwriting in both styles.

To avoid the problem of transferring from print to cursive, some have suggested that print be dropped altogether. This view cites the natural flow of cursive as an extension of scribble, the natural breaks between the words, and ease of reading due to the breaks between words (e.g., Cotton, 1991). However any visual scan of cursive can illustrate that it can be just as hard, if not harder, to read because spacing may be inappropriate and the letters may not be correctly formed. Further, if students only learn cursive, what do they do when the forms require print?

Of the numerous possible reasons for teaching cursive only, there are about as many reasons against it (Moore, 1986). These collectively make for an interesting point-counterpoint. First, it is claimed that cursive is easier to forge than print. However, some experts maintain that print is more variant than cursive, thus more difficult to forge. Second, some people believe that cursive is faster than print. But, research has not conclusively proven that printing
is necessarily slower than cursive. Three, cursive is seen as required for a legal signature. This, too, is erroneous since an "X" has long been established sufficient to authenticate any legal document. Four, it has been asserted that cursive is more individualistic than print. One needs only to look at the various styles of print to see how individualistic it can be. Fifth, some parents pressure their children to write in cursive, because it is seen as a grown-up thing to do. But, if it is the grown-up thing to do, then why do most forms adults fill out state at the top to print? Finally, it is claimed that cursive helps students who are learning disabled, because with the linkage of letters, the child is able to avoid reversals, adjust spacing, and distinguish words. This is probably the most legitimate reason for teaching cursive.

Skills Acquisition

While no single approach to teaching handwriting has demonstrated clear superiority, all effective programs have three things in common. First, they require students to verbalize rules about letter formation. Second, students are given opportunities for self-evaluation with multiple forms of feedback. Third, copying letters is valued more than tracing letters (Polloway & Smith, 1992; Wood, Webster, Gullickson, & Walker, 1987).

Graham and Miller (1980) have recommended that all effective programs for poor handwriters include 12 elements:

1. Handwriting is taught directly, not incidentally;
2. Instruction should consider students' "range of diversity" (p. 5);
3. Instruction is planned, monitored, and modified using frequent assessments;
4. Flexible instruction is used (i.e., use what works);
5. Handwriting habits are taught in short, daily sessions;
6. Students overlearn skills in isolation and then apply them in a meaningful context;
7. Sloppy, slovenly work is not accepted or condoned;
8. Teachers and students have positive attitudes;
9. Teachers use incentives, success, and enthusiasm;
10. Teachers write in a "model hand" (p.6);
11. Students actively participate in their remedial program; and,
12. Teachers realize students develop their own personal idiosyncrasies and help them maintain a "consistent legible style" (p. 6).

Skills Maintenance

Once a child has been taught an adequate style of handwriting, should handwriting instruction be discontinued? The answer seems apparent but, in practice, the value of continued instruction has often been ignored, especially in the higher grades. Teachers may assume handwriting was taught in elementary grades and that the students will independently maintain good handwriting skills just by doing the writing required for daily assignments. As noted by Alston and Taylor (1987), "practice does not make perfect, it only makes permanent" (p. 127). If a student's handwriting is illegible, the secondary teacher perhaps assumes the fault lies with the elementary programs. Teachers then place the burden of improving handwriting solely on
the student. Instead of instructing or modeling, teachers may write "illegible" or "can't read - re-write" on the assignment.

If a teacher cannot read a student’s handwriting, then that teacher should assume some responsibility to remediate the problem. But, the problem should not come down to the need for remediation, and the teacher should not be the only responsible party. The whole school should take responsibility for maintaining legible handwriting (Alston & Taylor, 1987).

Polloway and Patton (1993) stated that the goal of the maintenance stage of learning is "... to retain both accuracy and fluency with the skill. Consequently the teacher must periodically evaluate retention and again use direct instruction ... to maintain both accuracy and speed." (p. 22). While penmanship clearly tends to deteriorate with time, relatively infrequently are the importance of repetition to enhance retention stated in reference to handwriting.

The first step in developing a handwriting maintenance program is to evaluate the handwriting of each student. There will be some students who are not disabled that need remediation and there will be some that will not (Ruedy, 1983).

Next, a program must be established for remediating the problems and for maintaining legibility. It is not a simple task to keep track of all students' handwriting, progress, and needs. One way to do so is for the teacher to maintain checklists and anecdotal records (Farris, 1991). The student should be involved in the process from the beginning (e.g., sharing recommendations with the students along with the models, exercises, and record sheets and making each student share responsibility for the program (Ruedy, 1993).
Alston and Taylor (1987) have suggested a four step approach to handwriting maintenance. First, the whole school must become involved. Teachers are to monitor, praise, and instruct. Second, each class should have occasional writing sessions to practice handwriting. Work should be displayed to encourage and to motivate the students. Third, allowances should be made for those with chronic or severe handwriting problems. These students should be instructed on the basics (e.g., grip, posture, paper position), as well as letter formation (e.g., size, shape, reversals, spacing). They should also be taught a style that lends itself to speed. Finally, group lessons should be included. One approach is to create groups, perhaps labeled as handwriting clubs, which would write and publish, with awards for style, improvement, and legibility. The groups would experiment with the conditions that affect writing such as writing instruments and types of lined paper. They could also compete in the area of ornamental writing, such as calligraphy.

The need for student self-evaluation and correction should not be overlooked especially given that legibility needs to be generalized from special education settings to general education classrooms (Blandford & Lloyd, 1987). The greatest improvement occurs when students are taught to evaluate their own handwriting and encouraged to improve (Farris, 1991). This can take the form of self-grading, where students are encouraged to find their own mistakes and make corrections. Teacher modeling and tangible models for comparison also may be needed (Bing, 1988). One way to encourage and motivate students to gain the most from their efforts is to make legibility a part of the grade. The teacher should allow for individuality, as long as legibility survives (Ruedy, 1983).
Finally, teachers should not repeat the error that may have allowed handwriting to deteriorate initially and assume students will maintain good handwriting with a limited maintenance commitment. Teachers should continuously check and monitor each student’s progress to make sure the goal of legibility is maintained. Manning (1986) gives three cautions regarding this point. First, teachers should not demand perfection since perfection is too labor-intensive and will distract the child from the focus of the lesson, which may lead to the frustration of being illegible and uneducated. Second, teachers should not avoid teaching handwriting just because they are embarrassed about their own poor handwriting. Finally, teachers should never show impatience; given that it may have taken several years for the child to develop illegible handwriting, it will take time to correct it.

Discussion

Handwriting, whether manuscript or cursive, often gives others a lasting first impression of one’s abilities and potential. When the first impression indicates a disability, such an identification can have a lasting negative effect on students. Jobs that individuals who are disabled could easily do may be denied. Participation in other opportunities may be limited and a general negative label could be attached. It may be socially acceptable, even glamorized, to have illegible handwriting if one is a doctor, but nevertheless it may be problematic if one has a disability.

To avoid such negativism, handwriting should remain an instructional focus for teachers.
Both cursive and manuscript should be taught often, consistently, and throughout the formative school years. While it may be relatively unimportant which general method is used, it is especially important that a consistent program is used and adjusted for the individuality of the students. An improvement in handwriting is an excellent way for those with disabilities to fight negative first impressions.
References


