



# Standards for Members of the American Handwriting Analysis Foundation

## **A. Purpose**

The purpose of this document is to provide a foundation for the development and evaluation of a set of standards for education, training, and practice in graphology. The intent of these standards is to improve the quality of teaching and learning in the scientific discipline and profession of graphology.

## **B. Definition of Terms**

The term *standards* is defined as *specifications or criteria for conduct, performance, or services in graphology and related areas*. These standards are considered mandatory for AHAF members and are accompanied by the enforcement mechanism of the AHAF Code of Ethics.

### *(1) Terminology*

The proposed standards are defined in clear lay terms.

### *(2) Rationale*

A rationale is provided for choice of terminology used in the standards.

### *(3) Scope of Application and Need*

There is a clearly defined scope of application.

### *(4) Development process*

There is a clear description of the process by which the standards were developed. These include (a) a description of who participated in the document development, how they were selected, and their qualifications relative to the substantive area(s) of the standards; (b) a description of the development process, including the extent to which various drafts were reviewed and a final consensus reached; and (c) a delineation of issues in the standards about alternative views that were held and how those were resolved.

### *(5) Implementation*

Implementation of Standards

### *(6) Disseminating Standards*

There is clear indication of what committee(s) will be responsible for disseminating the standards, once adopted, and how this will be implemented.

### *(7) Maintaining Currency of Standards*

There is clear indication of what committee(s) will serve as the record-keeping body for correspondence and documents related to the development of the standards and will be

### *(7) Maintaining Currency of Standards*

There is clear indication of what committee(s) will serve as the record-keeping body for correspondence and documents related to the development of the standards and will be responsible for maintaining their currency. A date is specified by which time the standards will be reviewed and updated. This date should not exceed ten years from the time of their approval.

### *(8) Content of Standards*

### *(9) Clarity and Internal Consistency of Text*

A definition of terms is included, particularly when terms are not commonly used or when common usage varies or is imprecise. Definitions may be provided in a glossary of terms. Throughout the standards, terminology is used consistently.

### *(10) Validity of Standards*

The substance of the standards is not arbitrary but has a reasoned basis, e.g., based on scholarly literature related to the science and practice of graphology with implications for education and training, accepted principles within the profession, or other exercise of sound professional judgment.

## **Format for Standards**

It is recommended that documents proposing standards for education and training in graphology be organized in the following way: A.1.(a). Records or other documentation related to the standards development process may be appended to the standards.

## **Section A. Introduction**

An introductory section that provides a background on why and how the standards were developed. This section is organized according to the following criterion areas:

1. Terminology used and rationale for proposed standards and guidelines
  - (a) use of term standards
  - (b) rationale for use of terms
2. Scope of application and need for standards
  - (a) Scope of application for standards
  - (b) Need for standards
3. Process of developing standards
  - (a) Participants and process in developing standards

## **Section B. Implementation and Maintenance of Standards**

Standards for education and training in graphology have committee or organizational sponsors responsible for their initial development, for their dissemination upon adoption, and for maintaining their currency. These functions are described in this section.

1. Plan for disseminating standards.
2. Plan for maintaining currency of standards.

## **Section C. Content of the Proposed Standards**

Each standard is stated clearly with supporting text for clarification and supporting documentation where appropriate. The standards are consistent with the following criteria:

1. Clarity and internal consistency of text.
2. Validity of standards or guidelines.

## **Section D. References**

## **Section E. Appendices (as needed)**

### **SUMMARY**

The introductory section of this document defines the scope of the document as AHAF policy, and provides definitions and context for education and training guidelines and standards. It is followed by an outline of the process by which the standards are to be reviewed and acted upon by AHAF.

The third section of this document is organized into five domains of criteria: A) terminology used and rationale for the use of terms; B) purpose of the standards, including their intended scope; C) the process by which they were developed, including information about participants; D) plans for their dissemination, implementation and maintenance; E) the standards content, its clarity, internal consistency and validity.

# Standard for Minimum Training of Individuals Engaged in Handwriting Analysis for Personality Assessment Applications

## 1. Scope

- 1.1 This standard provides minimum requirements and procedures that should be used for the fundamental training of handwriting analysts.
- 1.2 This standard may not cover all aspects of training for the topics addressed or for unusual situations.

## 2. Referenced Documents

- 2.1 *AHAF Standards:*
  - Standard for Analysis Procedure
  - Standard for Terminology Relating to Analysis of Handwriting

## 3. Terminology

- 3.1 *Definitions or terms specific to this standard:*
- 3.2 *Graphology, n*—the study of handwriting for the purpose of identifying personality characteristics. May be used interchangeably with “handwriting analyst.”

## 4. Significance and Use

- 4.1 The following procedures are grounded in the generally accepted body of knowledge and experience in the field of handwriting analysis. By following these procedures, a trainee can acquire the scientific, technical, and other specialized knowledge and skill required to reliably perform the work of a handwriting analyst.

## 5. Minimum Requirements for Education

- 5.2.1 An earned baccalaureate degree or equivalent from an accredited college or university. Equivalency to be determined by Education Committee.
- 5.3 *Requirements for Trainers:*
  - 5.3.1 The trainer shall be a professional handwriting analyst;
  - 5.3.2 Have successfully completed the equivalent of a minimum of 24 months training.
  - 5.3.3 Have been trained in the areas of instruction detailed in this guide (Section 7); and
  - 5.3.1.4 Have at least five years of post-training experience as a professional handwriting analyst.
  - 5.3.1.5 All of the above should be documented.
  - 5.3.1.6 The trainer should have successfully completed a course in instructor development.
- 5.4 *Requirements for the Trainee:*
  - 5.4.1 An earned baccalaureate degree or equivalent from an accredited college or university. Equivalency to be determined by Education Committee.
  - 5.4.2 Documented successful completion of a form discrimination test, which will ensure that the analyst is able to recognize and differentiate various parts of handwriting and discriminate between handwriting and background (the page).

## 6. Equipment

- 6.1 *Training Materials and Equipment:*
  - 6.1.1 Access to texts, periodicals, monographs, and other professional literature in the field.
  - 6.1.2 Access to appropriate equipment (Section 8)
  - 6.1.3 Magnifiers and other tools (Section 8)

## 7. Procedure

- 7.1 The training program shall be the equivalent of a minimum of 24 months training under the supervision of a trainer.
  - 7.1.1 The training program shall be successfully completed in a period not to exceed four years.
  - 7.1.2 The trainer will set an objective for each area of instruction, which might include an examination, written test, oral test, practical exercise, in order to measure the trainee's knowledge.
  - 7.1.3 The trainer may grant credit for prior training or experience in subject areas (Section 8) when the trainee can demonstrate and document such training or experience.
  - 7.1.4 The trainer will maintain a training record for each trainee, documenting the following:
    - 7.1.4.1 Instruction in each topic area.
    - 7.1.4.2 A bibliography of relevant literature studied.
    - 7.1.4.3 Examinations (which might include written or oral test and practical exercise).
    - 7.1.4.4 Outside training, webinars, courses, conferences, or workshops attended.
    - 7.1.4.5 Research conducted.

## 8. Syllabus

- 8.1 A formal written training program will include specific topics of instruction administered in a format and time period outlined by the trainer. The minimum specific topics are:
  - 8.2 *Introduction and History of Handwriting and Graphology*
    - 8.2.1 Ethics
    - 8.2.2 Literature in the field
    - 8.2.3 The Scientific method
  - 8.3.1 Procedures and protocols
  - 8.3.2 Relationship of graphology to other disciplines, including psychology, medicine, forensics.
  - 8.3.3 The laws of graphology
- 8.4 *Examination Procedures:*
  - 8.4.1 Procedures and protocols
- 8.5 *Instruments and Equipment:*
  - 8.5.1 Procedures and protocols
  - 8.5.2 Magnifiers
  - 8.5.3 Measuring systems and tools
  - 8.5.4 Computers and peripherals, computer software
- 8.6 *Factors affecting handwriting (internal and external)*
  - 8.6.1 Physical, mental, emotional health, age

- 8.6.2 Writing conditions (position, substrate, etc.)
- 8.6.3 Copybooks of the world
- 8.6.4 Individualization of handwriting
- 8.6.5 Effect of education/lack of education on handwriting
- 8.6.6 Writing instruments, paper, ink
- 8.6.7 Effect of pen hold on handwriting
- 8.7 *Handwriting*
- 8.8.1 Handwriting style (cursive, printing, signatures, numerals, other written signs)
- 8.8 *Applications for handwriting analysis*
- 8.8.1 Legal concerns
- 8.8.2 Third-party analysis
- 8.8.3 Employment analysis
- 8.8.4 Relationship compatibility analysis
- 8.8.5 Graphotherapy
- 8.9 *Practical experience:*
- 8.9.1 Supervised casework
- 8.9.2 Supplemental education (e.g., courses, seminars, conferences, webinars, technical visits, etc.)
- 8.9.3 Handwriting characteristics detailed in Standard for Analysis Procedure.

## **9. Keywords**

- 9.1 graphology, graphologist, handwriting analysis, training.

# Standard for Scope of Work for Handwriting Analysts

## 1. Scope

- 1.1 This standard describes the duties of handwriting analysts, also referred to as handwriting examiners, handwriting professionals, or graphologists.

## 2. Referenced Documents

- 2.1 *AHAF Standards:*
- 2.2 *Other Documents:*  
AHAF Code of Ethics

## 3. Job Description

- 3.1 The handwriting analyst performs analyses on marks, characters, letters, script, and forms written or drawn by hand, that may include handwriting, hand printing, and drawings to estimate personality traits. The analyst provides reports, either oral or written, for various applications to include but not be limited to pre-employment screening, relationship compatibility, to assist therapists.

## 4. General Duties

- 4.1 Handwriting analysts are sometimes known by the term “graphologists.” These terms may be used interchangeably. Handwriting analysis in this case refers only to one preparing personality profiles and not to forensic document examination, which is done for the purpose of determining authenticity of a signature or other handwriting.
- 4.2 The handwriting analyst answers questions about handwriting factors that may infer personality characteristics that pertain to work or personal situations.
- 4.3 Handwriting analysis often includes the use of psychological typologies such as MBTI and Enneagram to help place in context the character traits found in handwriting.
- 4.4 Problems may sometimes arise in the case of third-party analysis where the client has not obtained permission of the third party for the analysis of his or her handwriting. The AHAF Code of Ethics addresses this issue.
- 4.5 Equipment used in handwriting analysis may be limited to magnifying lenses, generally under 10x, and measuring tools, or the handwriting may be scanned into a computer for enlarged on-screen viewing.
- 4.6 Questions about behavior and personality are answered through the application of knowledge, skill, experience, and training, or education specific to handwriting analysis, as well as from other related fields, such as psychology, medicine, and the like.
- 4.7 The results of handwriting analyses are reported for use by human resource professionals, psychologists, educators, law enforcement, attorneys, individuals, etc. On occasion, these results may be presented in the form of expert testimony in a court of law, in which case the handwriting analyst explains the bases and reasons for the conclusions, and illustrates such conclusions through the use of demonstrative evidence.

# Standard for Evaluating Handwriting Using the Scientific Method

## 1. Scope

- 1.1 This standard establishes criteria for evaluating handwriting data and other relevant considerations, which constitute a basis for reaching scientific or technical opinions.
- 1.2 The recommendations in this standard are based on generally acceptable professional practice. Not all aspects covered under this standard may be applicable to every circumstance. Unusual situations may require additional consideration.
- 1.3 This standard is not intended to replace the handwriting analyst's education and experience, and should always be used along with the analyst's professional judgment.

## 2. Referenced Documents

- 2.1 *AHAF Standards:*  
Standard for Reporting Results  
Standard for Scope of Work

## 3. Significance and Use

- 3.1 Handwriting analysts are responsible for analyzing and synthesizing data found in handwriting and for reporting their conclusions. Any conclusions or opinions reported should be supported by the handwriting samples and presented in a form that is understandable to a layman (i.e., without the use of technical jargon).
- 3.2 This standard is intended to serve as a guide for the handwriting analyst in conducting an analysis based on the scientific method, which includes analyzing and evaluating the information found in the handwriting.

## 4. Evaluation Procedure

- 4.1 This section outlines basic principles of evaluation that are in agreement with accepted scientific practices.
  - 4.1.1 *Define the problem or questions under consideration*—The definition should include 1) the purpose of the analysis, 2) the issues being addressed.
  - 4.1.2 *Identification and Validity of Hypotheses:*
    - 4.1.2.1 State the criteria used in the evaluation.
  - 4.1.3 *Evaluation Techniques:*
    - 4.1.3.1 Prepare and maintain a record of analysis and deductions that can be quantified to a reasonable extent.

## 5. Data for Evaluation

- 5.1 The evaluation process is based on the information available.
- 5.2 List the available handwriting samples and their source.

## 6. Opinions

- 6.1 Conclusions should be drawn only after all available handwriting samples have been analyzed and evaluated. Any conclusions drawn should be consistent with accepted professional, scientific, or logical principles and can be defended in a court of law if necessary.

## **7. Report**

- 7.1 Report any opinions and conclusions in accordance with the Standard for Reporting Results of Handwriting Analysis.

# Standard for Analysis of Handwriting

## .1 Scope

This standard provides procedures that should be used by handwriting analysts for the purpose of analyzing handwriting and interpreting the results in terms of inferences to personality characteristics.

- 1.2 These procedures apply to analysis for any type of application to include but not be limited to pre-employment screening, descriptions of personality characteristics, and relationship compatibility analysis.
- 1.3 These procedures include evaluation of the amount and quality of the writing sample to be examined.
- 1.4 This standard may not cover all aspects of unusual handwriting samples.

## 2. Referenced Documents

- 2.1 *AHAF Standards:*  
Standard for Scope of Work of Handwriting Analysts  
Terminology for Expressing Conclusions for Handwriting Analysts

## 3. Terminology

- 3.1 For definitions of terms in this standard, refer to Terminology for Reporting Results of Handwriting Analysis.

## 4. Significance and Use

- 4.1 The procedures outlined in this standard are grounded in the generally accepted body of knowledge in the field of handwriting analysis. By following these procedures, a handwriting analyst can reach a meaningful conclusion regarding the personality traits inferred by the handwriting features under consideration.

## 5. Limitations

- 5.1 Handwriting samples submitted for analysis may have limitations that could potentially interfere with the procedures in this standard. Those limitations should be noted and referenced.
- 5.2 Limitations may be categorized as limited in quantity or quality of the sample writing. For example, a few words of writing written on a scrap of paper, or a photocopy that is either faded or very dark, limits the analyst's ability to achieve an accurate result.

## 6. Equipment and Requirements

- 6.1 Light source(s) should be sufficient to display details that may not at first be obvious. Natural or fluorescent lighting may be utilized, and if necessary, transmitted lighting.
- 6.2 Magnification great enough to display the fine details that may not be seen with the naked eye alone. Generally, magnification between 2x and 10x is sufficient.
- 6.3 Measuring tools.
  - 6.3.1 A ruler using millimeters, callipers, or other measuring guides.

- 6.3.2 A compass or other guide to measure slant.
- 6.3.3 Digitizing tablets.

## 7. Procedures

- 7.1 The following procedures need not be performed in the order given.
- 7.2 Determine whether the materials are sufficient in quantity and quality to provide a professional opinion regarding the handwriting.
  - 7.2.1 *Style of writing*—if more than one writing style is submitted, group similar styles together. For example, if some of the sample is printed and some is cursive.
  - 7.2.1 If writing done over a period of years is submitted, group the samples according to date of execution.
- 7.3 Evaluate the writing space for the following:
  - 7.3.1 *Organization*—Determine how well the writing is organized on the page. Determine whether there is sufficient white space on the paper. (i.e., are the margins balanced, is there sufficient space between letters, words, lines? Or does the page look crowded?)
  - 7.3.2 *Margins*—are the margins balanced all around, or is one or more margin too broad or too narrow?
  - 7.3.3 *Spacing*—is there appropriate space between letters, words, lines?
- 7.4 Evaluate the writing form for the following:
  - 7.4.1 *Style*—Determine the overall writing style (e.g., copybook, simplified, elaborate, printed, etc.)
  - 7.4.2 *Naturalness*—Does the writing appear to flow naturally, or is it carefully drawn?
  - 7.4.3 *Simplification*—Determine whether the writing contains simplifications and if so, where they appear.
  - 7.4.4 *Originality*—Determine the degree of originality (i.e., type and degree of departures from copybook style).
  - 7.4.5 *Copybook writing*—If the writing is generally copybook style, how closely does it conform to copybook?
  - 7.4.6 *Persona*—If the writing is carefully drawn, does it fall under the category of “*persona writing*?”
- 7.5 *Initial and final strokes*—Determine degree to which initial and final strokes appear and their type.
  - 7.5.1 Determine whether the overall writing style is more linear or more curved or a balance of both forms.
  - 7.5.2 Determine the degree and balance of garland/arcade/angle/thread forms.
- 7.5 Evaluate the writing movement:
  - 7.5.1 *Rhythm*—Determine the proportion of contraction/release.
  - 7.5.2 *Size*—Determine the overall size of the writing: small, medium, large.
- 7.6 *Zones*—Determine zonal proportions and balance.
  - 7.6.1 *Pressure*—Determine primary and secondary pressure.
  - 7.6.2 *Primary Pressure*—Check the depth component.
  - 7.7 *Secondary Pressure*—Check upstrokes and downstrokes for light/dark pattern.
- 7.8 *Speed*—Determine overall speed.
- 7.9 *Slant*—Measure degree of slant.
- 7.10 *Baseline*—Measure baseline alignment and consistency.

- 8.0 *Personal Pronoun I*—Check the PPI for size, space, and form.
- 9.0 *Signature*—Check the signature for congruence to the balance of the text. Check form, size, placement, embellishments.
- 10. *Numbers*—Evaluate numbers for congruence with balance of text.
- 11.0 *Miscellaneous letter forms*—unusual letter forms that stand out from the text.
- 12.0 *Red flags*—Additional items that may point to pathological behavior (e.g., extremes in any area).

### **13. Reporting Opinions**

- 13.1 Refer to the Standard for Expressing Conclusions for Handwriting Analysts

# Standard Practice for Reporting Results of Handwriting Analysis

## 1. Scope

- 1.1 This standard covers the scope of information to be contained in formal written reports. Such reports express the opinions of the handwriting analyst with respect to the examination of items that may reasonably be expected to be the subject of a personality profile.

## 2. Referenced Documents:

- 2.1 *AHAF Standards:*
- 2.2 *Other Documents:*
- 2.2.1 AHAF Sample Report Formats

## 3. Significance and Use

- 3.1 This standard establishes those elements of the analysts report that will make the report understandable and useful to the recipient.

## 4. Report Content

- 4.1 This standard does not specify report format. However, the following information should be included in the report:
  - 4.1.1 *Descriptive Information*—The following information should be contained within the report, preferably in the introduction:
    - 4.1.2 Date the report was prepared and subject name or identifying number if the analyst uses a numbering system.
    - 4.1.3 Name, address, and affiliation of all person(s) whose professional opinions were relied upon for the report.
    - 4.1.4 A description of the item that was analyzed, such as an employment application, a personal letter, or an essay written for the purpose of analysis.
    - 4.1.5 A description of the scope of the examination undertaken for which the report is prepared. This may be an analysis for pre-employment screening, relationship compatibility, parent/child, custody issue, personal growth, etc.
  - 4.2 *Pertinent Facts:*
    - 4.2.1 Identify any facts and data that were relied upon in creating the personality profile. For example, it should be noted if the writer had was experiencing any known physical or emotional issues that might impact the handwriting sample.
  - 4.3. *Opinions and Conclusions*
    - 4.3.1 The report contains the opinions and conclusions of the analyst concerning the specific purpose for which s/he was engaged.
    - 4.3.2 The report contains the logic and reasoning of the expert by which his/her conclusions were reached.
  - 4.4. *Signature:*
    - 4.4.1 The analyst signs the report, along with any other party who has contributed to it.
    - 4.4.2 The analyst's qualifications may be appended to the report, if requested.

4.5 *Formats*

4.5.1 The report format is determined by the analyst. See AHAF sample report formats.

4.6 *Content*

4.6.1 Regardless of format, the report should be organized logically by sub-topics, such as Social Style, Thinking Style, Ego Strength, etc., although it is not necessary to have subheadings unless desired.

4.6.2 The report should follow a standard business style, using a commonly accepted font type and size such as Times New Roman or Arial 12 point.

4.6.3 The final report should be read with a critical eye for typographical errors and jargon, and to ensure that it makes sense and answers the presenting question.

# Standard Terminology Relating to the Practice of Handwriting Analysis

## 1. Scope

- 1.1 This terminology standard includes terms that relate to analysis performed by graphologists/handwriting analysts.

## 2. Referenced Documents

- 2.1 *AHAF Standards:*

## 3. Terminology

**air stroke**, *n*—a pen lift that continues in the same direction as the stroke on paper.

**angle**, *n*—two straight lines that join together.

**arcade**, *n*—a form that is rounded on top like an arch.

**arrangement**, *n*—the spatial pattern of handwriting on the page, created by the proportion of white space (paper) to the writing.

**ascender**, *n*—strokes that move into the upper zone.

**baseline**, *n*—the ruled or imaginary line upon which the writing rests.

**block printing**, *n*—printed writing using all capital letters.

**class characteristic**, *n*—characteristics that are common to a group of writers who have learned to write from the same copybook model.

**clothesline garland or shallow garland**, *n*—a shallow cup-shaped connective form.

**copybook**, *n*—a particular school model of handwriting that students learn to imitate.

**connectedness**, *n*—the degree to which letters are joined together.

**connecting stroke**, *n*—a line that joins letters together.

**connective forms**, *n*—the various shapes of the line that joins letters together (garland, arcade, angle, thread, and their sub-types, double bow and secondary thread).

**cross stroke/crossbar**, *n*—a stroke that intersects with other parts of a letter, such as a “t.”

**cursive**, *n*—writing in which the writing instrument remains on the page, joining most letters together.

**descender**, *n*—strokes that fall below the baseline.

**diacritic**, *n*—a sign, such as an accent or a cedilla, written above a letter. May include i dots.

**double bow**, *n*—a sinuous connective form.

**double-looped oval**, *n*—the letter “o” where a loop is made at the top of the letter on both left and right sides.

**double-joined oval**, *n*—the letters “o” and “a” where a stroke makes a complete circle before forming the letter.

**ductus**, *n*—the writing stroke. Literally, the channel through which the ink flows.

**elaboration**, *n*—the addition of extra strokes that do not improve the writing.

**final stroke**, *n*—the shape of the last stroke of a letter at the end of a word.

**form**, *n*—the shape or style of writing, e.g. copybook, simplified, elaborate, printed, etc.

**form level**, *n*—the overall quality of a handwriting sample.

**garland**, *n*—a connective form that is rounded on the bottom.

**gestalt**, *n*—the overall pictorial makeup of a writing sample.

**horizontal expansion**, *n*—comprised 20 characters and spaces.

**illegible**, *n*—the inability to easily read a word taken out of context.

**individual characteristic**, *n*—letter forms that depart from copybook norm.

**letter spacing**, *n*—the space between letters.

**ligature**, *n*—strokes that bind letters together.

**line quality**, *n*—the character of the ductus.

**line spacing**, *n*—the amount of space between lines.

**lower zone**, *n*—strokes that move below the baseline.

**loop**, *n*—a curved shape that bends around and crosses itself.

**manuscript printing**, *n*—printed writing formed with upper and lower case letters.

**margin**, *n*—the borders of the written text.

**middle zone**, *n*—lower case letters that include the vowels, the letters c,m,n,r,s,v,w, and parts of upper and lower zone letters that do not rise above the middle zone or fall below the baseline.

**movement**, *n*—the third dimension of writing, comprised of rhythm, speed and pressure as the writing instrument crosses the page.

**neglect**, *n*—the overall writing breaks down and becomes illegible.

**paraph**, *n*—a flourish after a signature, or underlining a signature.

**pastosity**, *n*—the ductus appears soft and doughy due to a long pen hold.

**persona writing**, *n*—the writing appears carefully drawn, rather than naturally executed.

**PPI**, *n*—the personal pronoun I.

**pressure**, *n*—the force exerted on the writing substrate by the writing instrument.

**primary thread**, *n*—letter forms that begin to break down due to speed, but are made with pressure.

**printing**, *n*—writing that is made by forming individual, unconnected letters.

**printscript**, *n*—a combination of printed and cursive writing.

**retracing**, *n*—the downstroke overlays the upstroke.

**rhythm**, *n*—the regular, repeated pattern of movement in upstrokes and downstrokes, especially as seen at the baseline.

**ruler writing**, *n*—handwriting produced with a ruler at the baseline, with or without a printed line.

**secondary expansion**, *n*—narrow letters with wide spaces between them.

**secondary thread**, *n*—a combination of all writing forms, done with light pressure and spread out so that it appears formless and illegible.

**sharpness**, *n*—the ductus is clean and clear on both sides; due to a short pen hold.

**signature**, *n*—the writing of a person’s name as a form of identification.

**simplification**, *n*—the removal of unnecessary strokes in writing.

**size**, *n*—may refer to the overall size of writing, or the proportions of middle zone height/width to upper zone height/width, or middle zone height/width to lower zone length/width.

**slant**, *n*—the degree to which a letter slopes in a particular direction when measured from the baseline. May refer to writing in any zone.

**speed**, *n*—the velocity at which writing is executed.

**trend**, *n*—the general direction in which the writing is moving.

**upper zone**, *n*—strokes that rise above the middle zone.

**word spacing**, *n*—the space between words.

**x-formation, *n***—forms that resemble the letter “x.” For example, the final stroke of a letter that inappropriately falls below the baseline and is crossed by the initial upstroke of the following letter.