



Scientific Association of Forensic Examiners Standards

**Guide for Examination of Handwritten
or Hand-Printed Material**

1. Scope

- 1.1. This guide provides an overview of the recommended process to utilize in comparing or contrasting handwritten material, which includes cursive writing, printing, signatures, and numerals.
- 1.2. The recommended procedure is applicable whether the examiner is comparing questioned writing to known exemplars, or comparing two or more questioned writings to determine if they are of common authorship.
- 1.3. The examination procedure may vary according to the examiner's specific assignment, the material in question, and/or the material provided for comparison.
- 1.4. This guide may not include all aspects of unusual or uncommon circumstances related to handwriting examination and comparison. It is the responsibility of the user of this guide to employ common sense in adopting appropriate practices relevant to their individual handwriting examination assignments.

2. Definitions

Allograph—The overall style of a given writing, e.g. cursive, printing, numerals or initials.

Cursive—Writing in which the individual letters of words are generally joined together.

Disguise—Deliberate alteration of one's writing with the intention of changing established characteristics.

Distorted Writing—Writing whose appearance looks unnatural, due to either voluntary (e.g., disguise or simulation) or involuntary (e.g., physical condition or writing condition) factors.

Exemplars—Authentic specimens from known sources.

Handwriting—A person's writing created with a utensil such as a pen or pencil. The term encompasses both hand-printing and cursive styles.

Hand-printing—Any disconnected style of writing in which letters are executed separately. Commonly refers to the manuscript style normally taught to students before they advance to cursive writing. It also includes block printing (printing in all capital letters).

Individual Characteristics—Features in an individual's handwriting which are highly personal or peculiar and therefore identifiable as having been written by that person.

Internal consistency—Continuity of the letters, spacing, alignment, rhythm, proportions, and other characteristics of the handwriting.

Known—Authentic specimens from known sources.

Natural Variation—Variability within an individual's handwriting. Normal or unusual deviations found among repeated specimens of one's writing.

Questioned (disputed)—A signature or body of writing that is under scrutiny as to origin or authenticity.

Signature—A person's name, or a mark representing it, written personally on a letter or other document.

Significant Differences—Individualizing characteristics that are structurally divergent between handwritten items, outside the range of variation of the writer, and that cannot be reasonably explained.

Significant Similarities—Individualizing characteristics in common between two or more handwritten items.

Simulation—A fraudulent writing (usually a signature) executed by attempting to copy or draw the characteristics of another's handwriting.

3. Examination Procedure

- 3.1. The examiner should document all examination procedures and pertinent observations.
- 3.2. The examiner is to determine the scope of the assignment (questioned compared to known, questioned compared to unknown, etc.)
- 3.3. Consideration of Questioned (Disputed) Material

- 3.3.1. Determine whether questioned items are original and, if not, request the original(s).
 - 3.3.2. When originals are not available, consider whether the quality of the material is sufficiently clear and legible. If not of acceptable quality, discontinue the examination.
 - 3.3.3. Consider whether the questioned writing is sufficient to display the writer's individual characteristics. If material is insufficient, discontinue the examination.
 - 3.3.4. If the questioned writing is distorted in any way, determine whether the distortion may be due to simulation, disguise, unnatural writing conditions, health factors, medications, etc. When distortion is present, ask the client to provide as much information as possible regarding the circumstances under which the disputed writing was allegedly written, the physical and mental state of the writer, and the possible use of any drugs or medications at the time of writing.
 - 3.3.5. Where medication is involved, request documentation or confirmation of the type of medication, dosage, and when ingested prior to producing the writing.
 - 3.3.6. If more than one type of writing (printing, cursive, signatures, initials) is disputed, separate the writing into groups.
 - 3.3.7. Arrange all questioned writing chronologically.
 - 3.3.8. Examine all questioned writings to determine whether they are consistent with one another. If inconsistent, there may be evidence of disguise or more than one writer.
 - 3.3.9. Examine the questioned writing for typical indicators of potential simulation, e.g. poor line quality; an awkward, drawn appearance; disrupted rhythm; hesitations; unnatural pen lifts; tremor; blunt initial and terminal strokes.
- 3.4. Consideration of Known Material (Exemplars)
- 3.4.1. Determine whether non-original material is sufficiently legible and clear. If not of acceptable quality (too light or too dark, poor microfiche copies, faded or low resolution images, etc.), discontinue the examination.

- 3.4.2. Exemplars should be relatively contemporaneous (2-3 years) with the material in question and written *prior to the questioned writing* to avoid the argument that the signature or writing could have later changed.
 - 3.4.3. Contemporaneous exemplars from after the date of the questioned writing may be obtained in addition to the exemplars that predate the questioned writing. These exemplars demonstrate whether the known writing is consistent across the date of the questioned writing.
 - 3.4.4. Exemplars must be of the same allograph (type) as the writing in question; signatures must be compared to signatures, handwriting to handwriting, hand-printing to hand-printing, initials to initials, numerals to numerals, etc. If exemplars are not of the same type as the questioned writing, discontinue the examination.
 - 3.4.5. There is no specific number of exemplars required, but they must be sufficient in number to determine the writer's normal patterns of natural variation.
 - 3.4.6. Exemplars should contain the same or similar phrases, words and/or letters as the questioned material. Exact wording is ideal; similar word or letter sequences is next best.
 - 3.4.7. Exemplars must be verifiable as having been written by the contributor. Official or notarized documentation is preferable where available.
 - 3.4.8. When provided with a limited number of comparison standards, request more exemplars. If none are available, conduct the examination to the extent possible and include in the report that the examination was limited by a small number of exemplars.
 - 3.4.9. Arrange all exemplars chronologically with respect to the date(s) of the material in question.
 - 3.4.10. Conduct an intra-comparison of the exemplars to determine whether any are inconsistent with the others. Discard those that are obviously inconsistent, unless there is a logical explanation for the inconsistencies, e.g. unusual writing conditions, injury, haste or carelessness, etc.
 - 3.4.11. Examine all features of the collective exemplars in an attempt to determine the contributor's handwriting habits and variables.
- 3.5. Comparison of Questioned and Known Material

- 3.5.1. When the contributor's handwriting habits and variables have been established, conduct a side-by-side comparison of the questioned and known material to determine whether they reflect the same habits and variables. Note any significant similarities and/or differences. (Among the features* to be considered are: alignment; capital letters; connecting strokes; degree of connectedness; degree of embellishment or simplification; dots (formation and placement); individual letter formations; initial strokes; layout; letter combinations; letter proportions; line quality; loop formations; margins; paragraph construction; pen lifts; pressure patterns; punctuation and diacritics; signs and symbols; size; slant (slope); spacing (line, letter, word); stroke direction; terminal strokes; unusual letter formations; writing speed.)
- 3.5.2. Evaluate the significance of any differences and similarities between the questioned and known writings, individually and in combination. Additionally, evaluate physical, medical, environmental, and/or mechanical factors that might have affected the writing, as well as any limitations if present.
- 3.5.3. Reach opinion(s) based on the evaluation and analysis of the questioned and known material.
- 3.5.4. Report findings and opinions according to SAFE's Guide for Expressing Conclusions and Reporting Opinions for Handwriting Examination.

* Note: This is not intended to be a complete list of the many possible writing features one might encounter in the examination process.