Handwriting/Hand Printing Examinations

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Handwriting/Hand Printing Examinations

1 INTRODUCTION

This procedure is intended to be utilized by trained personnel to ensure consistency and transparency of methods employed during the examination of handwriting and hand printing evidence received in the Questioned Documents Unit (QDU).

2 SCOPE

These procedures will be used by a forensic document examiner to conduct examinations of items containing handwriting and/or hand printing, Redacted for purposes of determining the authenticity and/or origin of the examined handwriting and/or hand printing.

3 EQUIPMENT

- 150-watt tungsten halogen light, or comparable equipment
- 30-watt transmitted light box, or comparable equipment
- Hand magnifier (minimum magnification, 4X)
- Stereomicroscope (minimum magnification, 6.3X), or comparable equipment

4 PROCEDURE

- If both questioned and known writing have been received at the same time, the questioned writing will be assessed in the following steps prior to assessing the known writing.
- All steps in this procedure will be performed utilizing proper lighting and magnification sufficient to allow fine detail to be distinguished, as needed.

4.1 Analysis

For assistance in understanding the flow of the analysis process, please see the Analysis Process Map below.

A. Visually examine the questioned and/or known item(s) to determine whether the writing is original writing.
B. If the writing is original, determine if the writing is freely and naturally prepared through visual and microscopic examination.

Redacted

Redacted

- If the writing is too distorted for a handwriting comparison, discontinue handwriting examinations and report accordingly.
- If the writing is determined Redacted refer to the appropriate procedure as necessary and/or report accordingly.

E. If the writing is or appears to be freely and naturally prepared, analyze the class and distinguishing characteristics to determine if there is a sufficient quantity and quality of writing for comparison purposes.

Redacted

- If possible, assess the skill level and range of variation exhibited in each item.
- If a sufficient number of distinguishing characteristics are not present discontinue handwriting examinations and report accordingly.

F. Determine if there is more than one style of writing within the questioned and/or known writing.
- Note in the examination records if there are inconsistencies or unexplained handwriting characteristics present within the bodies of writing.
- It may be necessary to contact the contributor for authentication.

G. Determine if there is sufficient comparability and contemporaneousness of the questioned and known writing to conduct a comparison.
- In the absence of exact wording between items, the same letter combinations and/or similar words are sufficient for comparison purposes.

- For example, if the questioned writing contains the word “there”, comparing this to the words “the” and “are” in the known writing is acceptable.

- If the writing is not sufficiently comparable, this procedure may be discontinued at the analysis stage. Ensure all other pertinent examinations Redacted have been completed and report accordingly.
  - If comparability in wording or letter combinations is the limitation, request comparable known writing, providing adequate instructions.
- If the writing sufficiently comparable, continue to the Comparison phase.

4.2 Analysis Process Map

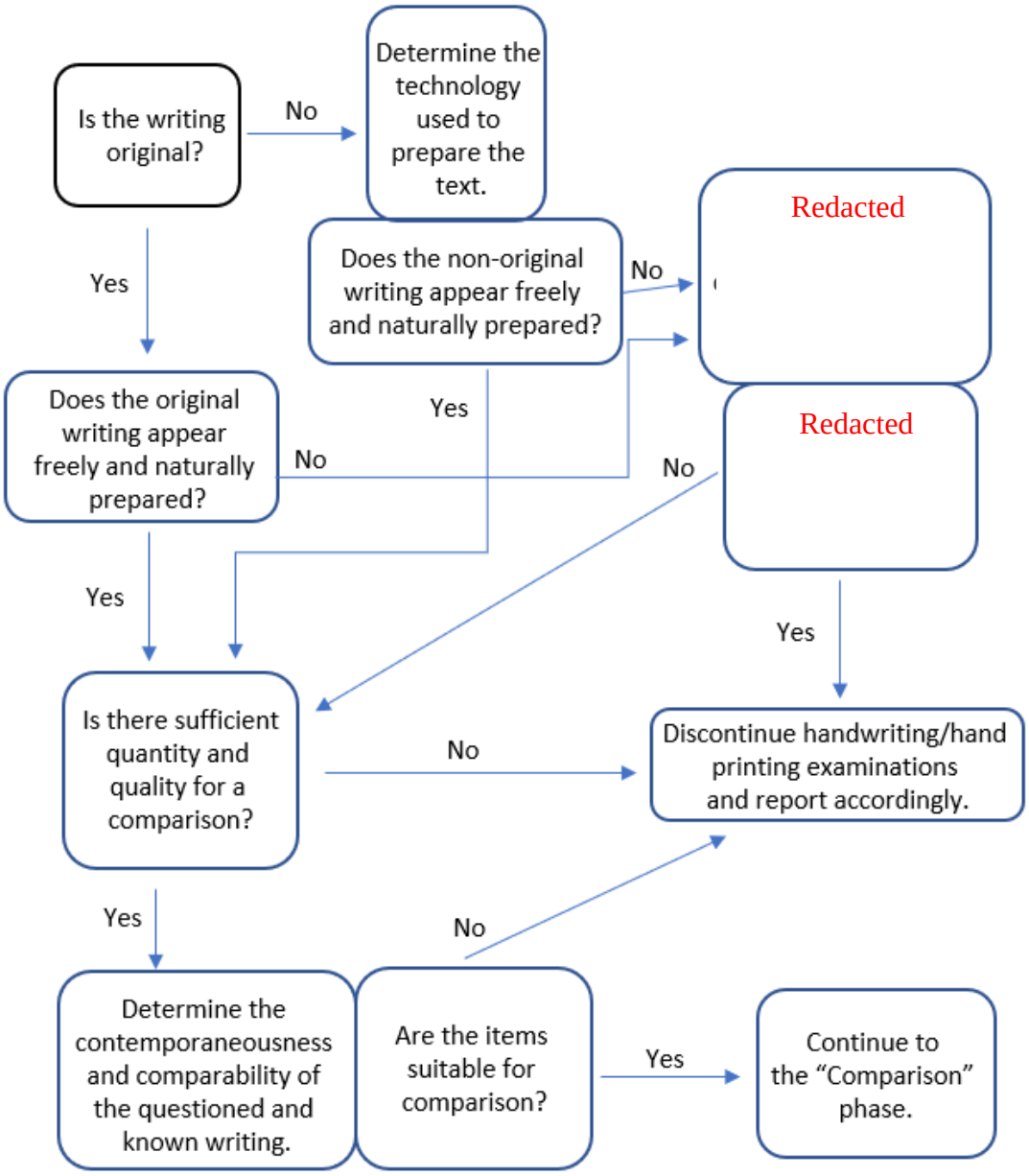

Figure 1: Analysis Phase of Handwriting/Hand Printing Examinations

4.3 Comparison

A. Conduct a side-by-side comparison with exclusively questioned or questioned and known items using the following symbols in the examiner's work notes to record the various characteristics observed in the handwriting/hand printing that will be used in the formulation of examiner findings/opinions:

	Indicating an unexplained characteristic, unexplained variation, inconsistency, or an accidental characteristic
	Indicating a similarity, consistency, natural variation, or characteristics in common
	Indicating a difference

B. Assess the combination of distinguishing and class characteristics observed in the questioned writing and attempt to account for those characteristics based on the available known writing.
   - It is possible that characteristics present in the known writing may not be observed in the questioned writing. This is acceptable, often expected and does not preclude a 'source identification' or 'source exclusion'.
   - Determine if the variation and skill level in the questioned writing are within the limits set by the known writing.

4.4 Evaluation

A. Evaluate the similarities, differences, unexplained characteristics, and limitations to determine their significance independently and in combination.
B. Form a conclusion based on results of the above analyses, comparisons, and evaluations.
C. Once examinations have been completed, reports may include one or more of the following types of conclusion(s), opinion(s), and other findings, as applicable:
   - Source identification
     - 'Source identification' is an examiner's conclusion that two or more bodies of writing were prepared by the same writer. This conclusion is an examiner's opinion that 1) the observed quality and quantity of similar characteristics are such that the examiner would not expect to see that same combination of characteristics repeated in a body of writing prepared by another writer; 2) there are no significant dissimilarities to conclude that the bodies of writing were not prepared by the same writing; and 3) there are no significant limitations with the items examined or the circumstances considered (e.g., the writer's skill level, sufficient number of known standards).
     - The basis for a 'source identification' conclusion is an examiner's opinion that the observed similar characteristics provide extremely strong support for the proposition that the bodies of writing were prepared by the same writer and extremely limited or no support for the proposition that the writings were prepared by different writers.

        - A ‘source identification’ is the statement of an examiner’s opinion (an inductive inference) that the probability that a different writer prepared the questioned body of writing is so small that it is negligible.
    - Support for common source
        - ‘Support for common source’ is an examiner’s conclusion that two or more bodies of writing may have been prepared by the same writer. This conclusion is an examiner’s opinion that 1) the bodies of writing exhibit a prevalence of similar characteristics to indicate they may have been prepared by the same writer; 2) there are insufficient dissimilar characteristics to indicate that the bodies of writing may not have been prepared by the same writer; and 3) the bodies of writing have limitations that prevent the examiner from providing a ‘source identification’ conclusion. The degree of ‘support for a common source’ may range from limited to strong.
        - The basis for a ‘support for common source’ conclusion is an examiner’s opinion that the observed similar characteristics provide limited to strong support for the proposition that the bodies of writing may have been prepared by the same writer and insufficient support for the proposition that the writings may have been prepared by different writers.
    - Inconclusive
        - ‘Inconclusive’ is an examiner’s opinion that no determination can be reached as to whether two or more bodies of writing were prepared by the same writer or by different writers.
        - The basis for an ‘inconclusive’ conclusion is an examiner’s opinion that the bodies of writing have limitations that prevent the examiner from providing any conclusion regarding probable authorship.
    - Support for different sources
        - ‘Support for different sources’ is an examiner’s conclusion that two or more bodies of writing may not have been prepared by the same writer. This conclusion is an examiner’s opinion that 1) the bodies of writing exhibit a prevalence of dissimilar characteristics to indicate they may not have been prepared by the same writer; 2) there are insufficient similar characteristics to indicate that the bodies of writing may have been prepared by the same writer; and 3) the bodies of writing have limitations that prevent the examiner from making an ‘exclusion’ conclusion. The degree of ‘support for different sources’ may range from limited to strong.
        - The basis for a ‘support for different sources’ conclusion is an examiner’s opinion that the observed dissimilar characteristics provide limited to strong support for the proposition that the bodies of writing may have been prepared by different writers and insufficient support for the proposition that the writings may have been prepared by the same writer.

- Source exclusion
    - ‘Source exclusion’ is an examiner’s conclusion that two or more bodies of writing were not prepared by the same writer. This conclusion is an examiner’s opinion that the bodies of writing exhibit different handwriting characteristics and there are no significant limitations with the items examined or the circumstances considered (e.g., the writer’s skill level, sufficient number of known standards, eliminating the possibility of alternative writing styles).
    - The basis for a ‘source exclusion’ conclusion is an examiner’s opinion that the observed different characteristics provide extremely strong support for the proposition that the bodies of writing were prepared by different writers and extremely limited or no support for the proposition that the writings were prepared by the same writer.
- A statement regarding the submitted writing, such as its lack of suitability for comparison and/or observations made (e.g., tracing, distortion).

D. If a ‘source identification’ conclusion is rendered between a body of questioned writing and the known writing of a particular individual, no other handwriting comparison conclusions will be reported concerning the aforementioned body of identified questioned writing and any other known writers.

E. If an opinion is reached and it is determined that additional known writing may be beneficial, instructions will be provided within the report describing how to obtain comparable known writing.

4.5 Records

- Ensure all notes, data, and observations used to support the conclusions derived from the examination are recorded in the examination records.
    - These records may include any of the following items:
        - Reference information
        - Image files
        - Printouts or photographs
        - Overlays
        - Drawings or images
        - Notations of characteristics observed

5 LIMITATIONS

- A conclusion provided during testimony or in a report is ultimately an examiner’s decision and is not based on a statistically derived or verified measurement or comparison to all other bodies of writing.
- When offering a ‘support for common source’ conclusion, the examiner shall explain the limitations that prevented a ‘source identification’ conclusion. Likewise, when offering a ‘support for different sources’ conclusion, the examiner shall explain the limitations that prevented a ‘source exclusion’ conclusion.
- The factors that may affect the examination process and/or the results rendered include:

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6 SAFETY

Standard precautions should be followed for the handling of chemical and biological materials. Chemical and biological materials that are hazardous or potentially hazardous will be maintained and examined in specifically designated areas within QDU space. QDU personnel may refer to the FBI Laboratory Safety Manual for additional guidance.

7 REVISION HISTORY

Revision	Issued	Changes
10	01/14/2022	Section 4.1 and 4.2 – Clarified analysis phase of comparison in section 4.1 and added section 4.2. Updated technical procedure into new template.
11	12/01/2022	Section 4.1D and 4.1E – Inserted the word handwriting prior to examinations. Section 4.1D – Added third bullet. Section 4.1E and 4.3B – Removed the word individual. Section 4.4C - Added the second two bullets. Made additional edits for grammar and clarity.