

OSAC RESEARCH NEEDS ASSESSMENT FORM



Title of research need:

Validation of standard for the expression of source opinions in forensic document examination (OSAC 2022-S-0034)

Keywords:

document examination, source determination, opinion scale

R&D Need Rank:

Low, Medium, High

High

SAC Approved Date:

June 9, 2025

Submitting subcommittee(s):

Forensic Document Examination

Research Need Summary:

The purpose of these research needs is to build a stronger scientific foundation for forensic science standards. The information provided herein will help to evaluate and strengthen existing standards, and/or fill any standards related gaps. In the space below, please provide a brief narrative of the need to be addressed. This should include:

- The identity of any specific standards that would be affected/improved/evaluated
- A discussion on gaps that exist within the standards or standards related gaps that need to be filled
- How this work would fill those gaps
- An overview of any current or past research efforts that may be relevant to this effort
- A discussion regarding how this research might improve current laboratory capabilities and/or forensic services within the criminal justice system
- Any relevant references

At the time of publication of OSAC 2022-S-0034 *Standard for the Expression of Source Opinions in Forensic Document Examination*, no standardized opinion scale with associated validation data exists for source determination. Standardization of handwriting opinion terminology was first proposed in 1991 with nine suggested terms. Forensic document examiners (FDEs) may choose to use all nine, or a subset of seven, five, or three, based upon the policies and procedures of both private practitioners and government laboratories. A validation of the best range of opinions demonstrating accuracy across use by FDEs is necessary to align the opinion scale for source determination so that it is understood by FDEs and laypersons who rely on expert opinions and reports.

Key bibliographic references relating to this research include:

- McAlexander T.V., Beck, J., and Dick, R., "The Standardization of Handwriting Opinion Terminology," *Journal of Forensic Science*, Vol 36, No. 2, March 1991, pp. 311–319.
- OSAC 2022-S-0034 *Standard for the Expression of Source Opinions in Forensic Document Examination*, OSAC Proposed Standard, Forensic Document Examination Subcommittee, July 2024.
- SWGDOC Standard Terminology for Expressing Conclusions of Forensic Document Examiners, ver. 2013-2. <https://www.swgdoc.org/>
- ASTM E1658-08, *Standard Terminology for Expressing Conclusions of Forensic Document Examiners* (Withdrawn 2017).

Improving current laboratory capabilities:

Validation of the number of opinions and the best terminology to express an opinion would support the use and effectiveness of a standardized opinion scale for use by all FDEs, whether in private practice or a government laboratory; as opposed to the current practice of 9 opinions and the option for laboratories to

use all 9 or a subset thereof (e.g., 7, 5).

Improving the scientific basis for the subcommittee:

Standardization of opinion terminology would solidify its use across the forensic document discipline and for a variety of source determination examinations.

Improving services to the criminal justice system:

Any research that can further validate forensic science will be a positive to the criminal justice system. Better scientific research will yield better standards. Better standards will be more widely accepted in courts of law. When testifying in courts that recognize the standards, examiners who follow the standards will spend less time defending their science and more time testifying to the evidence involved in the case.

This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.