OSAC RESEARCH NEEDS ASSESSMENT FORM

Title of research need: Hand printing complexity and comparability

Keyword(s): Hand printing, handwriting, handwriting comparisons, method verification

Submitting subcommittee(s): Forensic Document Examination

Date Approved: 

(If SAC review identifies additional subcommittees, add them to the box above.)

Background Information:

1. Description of research need:

Forensic Document Examiners, FDEs, conduct handwriting comparisons, whether glyphs that comprise the writing are classified as cursive, printed, or mixed, or complex, or simplistic. Prior research has begun to subdivide writing groups, and further research into complexity, comparability, and FDE expertise is needed. Additional basic and applied research would further the body of knowledge about handwriting, handwriting comparisons, and the differentiation between FDE and layperson capabilities to conduct comparisons.

2. Key bibliographic references relating to this research need:


8. Livingston, Orville B., A Handwriting and Pen-Printing Classification System For Identifying Law

3a. In what ways would the research results improve current laboratory capabilities?

Results would assist examiners in: understanding the intricacies of what they do in the “eye – brain” visual comparison process, explaining the training process to trainees, testifying in court, testifying in Daubert style challenges.

3b. In what ways would the research results improve understanding of the scientific basis for the subcommittee(s)?

Basic research would provide a means of articulating the complexity of attempting to classify each person’s writing with simplistic terms. Basic research could also potentially describe, in a gestalt view, some of the sub-processes that the human observer uses in the process of side by side comparisons. By way of application to FDE, applied research could further articulate the sub-processes involved in a side-by-side handwriting comparison.

3c. In what ways would the research results improve services to the criminal justice system?

Applied research could potentially serve as verification that printed writing is as identifiable as cursive writing. Any research that can further validate forensic examinations will be a positive to the criminal justice system.

4. Status assessment (I, II, III, or IV): IV

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<tr>
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<th>Major gap in current knowledge</th>
<th>Minor gap in current knowledge</th>
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<tbody>
<tr>
<td>No or limited current research is being conducted</td>
<td>I</td>
<td>III</td>
</tr>
<tr>
<td>Existing current research is being conducted</td>
<td>II</td>
<td>IV</td>
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This research need has been identified by one or more subcommittees of OSAC and is being provided as an informational resource to the community.

Approvals:

Version 1.1 / Date of Issue: 2.09.16 / Issuing Authority: Forensic Science Standards Board (FSSB)
1. Does the SAC agree with the research need? Yes ☒ No ☐
2. Does the SAC agree with the status assessment? Yes ☒ No ☐

If no, what is the status assessment of the SAC:

Approval date: 17-Mar-2016

(Approval is by majority vote of SAC. Once approved, forward to NIST for posting.)