Task Number: 2012-035

Article Title: Explaining the Concept of Sufficiency to Non-Practitioners

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<u>Article's Subject Matter</u> Knowing when there is sufficient information available to make an individualization is a difficult concept to explain to a layperson. John Black tries to come up with some simple ways that a latent print examiner can explain this idea to someone who does not have any experience doing fingerprint comparisons.

Key Points in Article

The first analogy is to a teacher evaluating a student. According to Black, teachers use their training and experience to determine when students have "sufficient" knowledge. He says that a teacher will know when a student has grasped the material as opposed to one who has memorized things for an exam (!).

The second analogy is to a mechanic fixing a tire. According to Black, the mechanic knows when the tire is "sufficiently" repaired.

The third analogy is to a farmer who has to know the sufficient amount of water, fertilizer, and pesticide that are needed to keep his crops growing properly.

According to Black, using analogies like this in court will make it clearer to juries, judges, and lawyers exactly what is meant when a fingerprint examiner says that there is sufficient detail available to identify a suspect.

Fallacies and Issues

• I don't believe that these examples are true analogies to a fingerprint comparison. A teacher has tests to use to evaluate students for "sufficiency". You could even say that teachers count points (50%) to determine sufficiency. A further check is to observe how the student does in the next grade. The mechanic example talks about using a soap solution to check if the tire is repaired "sufficiently". If bubbles are seen, the mechanic tries again – The soap solution is used to test for sufficiency, rather than relying on the mechanic's training and experience alone. In the farmer analogy, it could be argued that this is the closest to doing an experiment over and over again, as opposed to

- students all being different from year to year and tires requiring repair in different areas. However, again there is a test for sufficiency in seeing if crops grow well or not.
- I believe that readers who accept Black's argument and try to use these "analogies" in court will be confusing the jury or the judge, because these examples are not the same as a fingerprint examiner trying to decide when there is enough detail for an identification. Those who do not accept Black's arguments may themselves be confused trying to figure out what he is trying to say.