Thank you very much for your support and kind cooperation!
- Audri K. Kowalyk B. Ed.

Forensic Document Analysis

The **forgery** of documents is a common type of crime in which forensic document analysis would be used to help find the culprits. Examples of documents that may be forged include cheques, ransom notes, threatening letters, a written confession, and suicide notes.

The field of Forensic Document Analysis is a broad one as there are many unique concepts related to this field. Techniques used in this unique field include **handwriting analysis** or **graphology**, **typescript analysis, paper analysis, ink analysis and statement analysis profiling**. In this reading, you will focus upon handwriting analysis, also know as graphology.

Handwriting Analysis/Graphology Basics:

Each person has a unique personal handwriting style; this is what the handwriting analysis or graphology focuses upon. If you are trying to determine who wrote a something on a document, there are many features to look for that make one's handwriting unique. When you begin to analyze a piece of handwriting, you should consider focusing upon three major handwriting features:

Acquisition of SLOPE -   The slope or angle of one's handwriting is distinct and tends to be 'fixed' from person to person. This can be quite noticeable when one writes upon unlined paper. Some people find it easy to write at a consistent slope on unlined paper, while others find it very difficult to write evenly on unlined paper. If the slope changes it is likely the writer did this deliberately. Thus, when getting a sample of writing from someone for comparison, blank paper should be used.

SIZE of Handwriting -   In general, the size of one's letters remains consistent when one is writing. Some people write in larger print while some people write smaller. The over-all size of one's writing should be noted when analyzing handwriting. Good penmanship tends to show a strong consistency in letter size, while those with a lack of pen control show variation in the size of their writing. Often the letters created in deliberately disguised writing (such as in a forgery) tend to be larger than normal.

Letter DESIGN -   There tends to be greater variation in the design of more 'complex' letters such as **q, j, g, y, e, m, s**. Notice that many of these complex letters have 'tails', which can vary significantly from person to person. There tends to be less variation in 'simple' letters such as **o, c, u, t, v, and l.** As well, the capital letters at the beginning of a sentence tend to be unique in appearance.

Analyzing Student Handwriting

Name: _____ Date: _____

Scenario: After a long day of school, Mrs. Landsbury was tidying up her room when she came across three notes *(next page)*. Each of the notes was filled with negative comments about and serious threats towards a new student in the class named Abby Hansen. In order to determine who wrote each of the notes, Mrs. Landsbury asked each student in her class for a writing sample (*see samples below*).

Analyze the student handwriting samples, compare them with each of the three notes on the next page and then try to identify the student who wrote each note.

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Student:	Writing sample:
Audrey	*The quick brown fox jumped over the lazy dogs.*
Billy	The quick brown fox jumped over the lazy dogs.
Candy	*The quick brown fox jumped over the lazy dogs.*
Doug	The quick brown fox jumped over the lazy dogs.
Edith	The quick brown fox jumped over the lazy dogs.
Fred	The quick brown fox jumped over the lazy dogs.
Gina	**The quick brown fox jumped over the lazy dogs.**
Howard	**The quick brown fox jumped over the lazy dogs.**
Irene	The quick brown fox jumped over the lazy dogs.
Jen	The quick brown fox jumped over the lazy dogs.
Kena	The quick brown fox jumped over the lazy dogs.
Larry	The quick brown fox jumped over the lazy dogs.

<u>Note #1:</u>

Abbys feet stink and her arms are hairy and she walks like a camel. Shes dum to!

Note #1 was most likely written by: _____.

<u>Note #2:</u>

Abby watch your back! You are so going to get it afterschool.

Note #2 was most likely written by: _____.

<u>Note #3:</u>

I cant beleive what a big fat mouth Alby has! Lets shut her mouth for Good today at lunch.

Note #3 was most likely written by: _____.

RANSOM NOTE SWAP

Name: _____ Date: _____

In this group activity you will attempt to identify who wrote various different ransom notes.

Part 1:   - Organize into a group of four students.
- Your teacher will then pass to each group a piece of blank paper upon which each student will print his/her name and then write the following sentence which contains every letter of the alphabet:

The quick brown fox jumped over the lazy dogs.

- Once everyone in the class has provided a handwriting sample, your teacher will give each group gets a copy of all samples *(i.e. quick photocopy or each student writes several copies at one time)*.

Part 2:   - Discreetly choose two people in your group to write out a <u>ransom note</u> on a blank piece of paper. Each note should say something different and be four sentences in length *(no swear words or vulgar language!)*
- Place the name of each person who wrote the notes on two separate pieces of paper.
- Place the ransom note, together with the author's name on a separate piece of paper, into two separate envelopes. *Do not seal these envelopes* before giving them to your teacher.

Part 3:   - Your teacher will then <u>assign a number</u> to each envelope, <u>remove the names</u> from each envelope (but keep the ransom note inside), and then <u>redistribute</u> the envelopes. Each group should get two ransom notes.

Part 4:   - Get one <u>piece of paper</u> for your group and write down the number of suspects. Provide a space beside each suspect number for a name.
- Using the handout with student handwriting samples, take '10-ish' minutes to identify the suspect who wrote each of the notes.
- Remember to focus upon such things as <u>acquisition of slope</u>, <u>letter size</u> and <u>unique letter structure</u>.

Part 5:   - When your teacher informs you that your group's time limit is up, pass your two envelopes to another group.
- Rotation of the envelopes will continue until every group has seen each ransom note.

Part 6:   - How many notes did your group match to the correct suspect ? *You will correct these in class or you will hand in your list - your teacher will decide*!

KEY = <u>Analyzing Student Handwriting</u>

Note #1 = Jen   Note #2 = Kena   Note #3 = Irene