

**Board of
Forensic Document
Examiners**

Study Guide

General Knowledge Examination

**and information on the
performance exercises**

Published for BFDE Examination

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Board of Forensic Document Examiners

Study Guide: General Knowledge Examination

This guide has been prepared to help individuals direct their study for the written examination. The references selected are from publications, traditional reference books, and the works of selected authors that contain current research and/or information on a specific subject. We have generally not included papers distributed at conferences/seminars simply because they are not readily available to those who did not attend. However, if a presenter has given permission for distribution of copies to test applicants, then such papers may be used as references. It is not the Board's intention to establish any of the cited authors as authoritative; the general knowledge necessary to pass the written examination can be acquired from many other sources and from basic training in forensic document examination.

The scope of the examination is defined in the *Forensic Document Examiners Task Inventory*. This guide parallels the nine sections in the inventory so that individuals with limited time at their disposal can prioritize their study. The references are listed in alphabetical order, not in the order of importance. The same reference may be listed in more than one section, if the information is relevant to more than one topic.

All questions in the examination are multiple choice. Sample questions are provided at the end of each section. The questions encompass subjects and information used by forensic document examiners routinely or on occasion. We recommend that if an individual does not routinely deal with any one of the listed areas, then a review of the literature is in order.

Test development is a continual process. As questions are reviewed and updated to reflect current information, research and technology, additions (or deletions) will be made to the Study Guide.

Forensic Document Examiners Task Inventory

A. DEMONSTRATING DOCUMENT EXAMINER FOUNDATION SKILLS

- 1 Demonstrate Knowledge of Handwriting Methodology
- 2 Demonstrate Knowledge of Handwriting/Hand Printing Identification
- 3 Demonstrate Knowledge of Inks
- 4 Identify Various Writing Instruments
- 5 Demonstrate Knowledge of Fonts and Type Styles
- 6 Demonstrate Knowledge of Paper
- 7 Demonstrate Knowledge of Printing Devices
- 8 Demonstrate Knowledge of Forms and Letterhead (case relevant)
- 9 Demonstrate Knowledge of Comparative Analysis Techniques
- 10 Demonstrate Professionalism

B. GATHERING EVIDENCE

- 11 Maintain Chain of Custody (evidence handling)
- 12 Collect Standards of Comparison (handwriting/signature)
- 13 Collect Standards of Comparison (other media)
- 14 Verify Accuracy of Document Data
- 15 Analyze Document Formatting

C. ANALYZING HANDWRITING

- 16 Examine Cursive Writing (including signatures)
- 17 Examine Hand Printing (alpha and numeric)
- 18 Recognize Influences on Handwriting Skills
- 19 Identify Letter Design Influences
- 20 Recognize Disguised Handwritten Images
- 21 Examine Graffiti
- 22 Determine Line Sequence and Direction of the Writing Movement

D. ANALYZING FALSIFIED DOCUMENTS

- 23 Determine Document Altering Techniques
- 24 Identify Counterfeited/Fabricated Documents

E. ANALYZING FEATURES OF PAPER AND MEDIA

- 25 Identify Watermark Characteristics
- 26 Identify Types and Characteristics of Paper
- 27 Identify Physical Characteristics of Paper
- 28 Assess Production Characteristics of Paper
- 29 Assess Physical Condition of Paper (current)

F. ANALYZING IMPACT AND NON-IMPACT IMAGES

- 30 Analyze Copy Machine Images
- 31 Analyze Latent Images
- 32 Analyze Fax Images
- 33 Analyze Printer Images
- 34 Analyze Typewriter Images
- 35 Analyze Imaging Devices (i.e., rubber stamps, auto pens, embossing seals)
- 36 Analyze Non-Impact Pre-Print Images
- 37 Analyze Credit Card/Check Security Features

G. USING LAB INSTRUMENTS

- 38 Use Microscope and Magnifiers
- 39 Use Videospectrum Devices (such as infrared and ultraviolet - including filters)
- 40 Use Electrostatic Detection Device
- 41 Use Photography (Polaroid, digital, and 35mm)
- 42 Use Light Sources (including various filters)
- 43 Use Digital Image Equipment
- 44 Use Photocopier
- 45 Use Measuring Devices
- 46 Other Equipment (applicable to document problems)

H. EVALUATING EVIDENCE AND PRESENTING CASE FINDINGS

- 47 Evaluate Results of all Analyses Performed
- 48 Express Opinion/Assign Level of Certainty (e.g. know levels per ASTM standard)
- 49 Prepare Reports (verbal and written)
- 50 Prepare for Testimony (including exhibits)

I. DEMONSTRATING KNOWLEDGE OF LEGAL PROCEDURES

- 51 Define Legal Terminology
- 52 Demonstrate Knowledge of Types of Legal Proceedings
- 53 Recognize Legal Precedents (regarding document examination issues)

Section A — Document Examiner Foundation Skills

“A Sequential Multiple Approach to Determining the Relative Age of Writing Instruments”,

Richard L. Brunelle, International Journal of Forensic Document Examiners, Vol. 1, No. 2

April 1995

Classification and Identification of Modern Office Copiers, James H. Kelly (1983)

The American Board of Forensic Document Examiners

Chapter: Copying Processes

Chapter: Individual Characteristics

Code of Professional Responsibility

Board of Forensic Document Examiners

“Contemporary issues in forensic handwriting examination: a discussion of the key issues in the wake of the Starzecpyzel decision”, Bryan Found and Doug Rogers

Journal of Forensic Document Examination, Vol. 8, 1995

Reporting Procedures

Detecting and Deciphering Erased Pencil Writing, Ordway Hilton (1991)

Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-05723-0

Chapter 2: Pencil Writing and How it is Erased

Chapter 5: Photographic Methods of Decipherment

“Documentation of forensic handwriting comparison and identification method: A modular approach”, Bryan Found and Doug Rogers, Journal of Forensic Document Examination , Vol. 12, 1999

Module 3: The Determination of whether specimen and questioned entries are comparable

Module 6: The Assessing of Handwriting Complexity

Module 9: The Simulation Process

Module 10: Line Quality and Skill

“Dynamics of the Writing Movement: Physical Modelling and Practical Applications”, H. J.J. Hardy

Journal of Forensic Document Examination, Vol. 5, 1992

Evidential Documents, James V. P. Conway

Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-00324-4

Chapter: Evidential Signatures

Chapter: The Identification of Handwriting

Chapter: Hand Printing and Numerals

Examination and Identification of Photocopies and Photocopiers, John S. Gorajczyk

23 AM JUR POF3d 621, Lawyers Cooperative Publishing, Rochester, NY

Section 5: Photocopy Process

Section 16: Photocopier

Section A — Document Examiner Foundation Skills

Forensic Examination of Ink and Paper, Richard L. Brunelle and Robert W. Reed
Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-04935-1

Chapter 1: Introduction
Chapter 4: Writing Instruments: Definitions and Nomenclature
Chapter 8: The Forensic Examination of Inks
Chapter 9: The Dating of Ink
Chapter 12: Watermarks
Chapter 13: Methods for the Forensic Examination of Paper

Forensic Handwriting Identification: Fundamental concepts and principles, Ron N. Morris
Academic Press, San Diego, CA ISBN 0-12-507640-1

Chapter 1: The Physiology of Writing
Chapter 5: The Features of Writing
Chapter 6: Qualities of Writing
Chapter 8: Relative Speed of Writing
Chapter 12: Some General Observations About Handwriting Identification

Fundamentals of Document Examination, Edna W. Robertson
Nelson-Hall Co., Chicago, IL ISBN 0-8304-1238-7

Chapter 10: Primary Qualities and Characteristics of Handwriting
Chapter 14: Environmental Conditions that Affect Handwriting

Handwriting Identification: Facts and Fundamentals, Roy A. Huber and A. M. Headrick
CRS Press, Boca Raton, FL ISBN 0-8493-1285-X

Chapter 3: The Discrimination of Handwriting
Chapter 6: The Discrimination and Identification of Writing
Chapter 8: The Extrinsic Factors Influencing Handwriting
Chapter 9: The Intrinsic Variables of Handwriting

Identification of Handprinting and Numerals, Allan R. Keown
24 AM JUR POF3d 687, Lawyers Cooperative Publishing, Rochester, NY

C. Basic Printing and Number Construction

“Intra-individual changes in handwriting features depending on handwriting velocity”, Petra Halder-Sinn and Karin Funsch, *Journal of Forensic Document Examination*, Vol. 11, 1998

“Methodological Aspects of Handwriting Identification”, H.J.J. Hardy
Journal of Forensic Document Examination, Vol. 8, 1995

Questioned Documents (Second Edition), Albert S. Osborn
Nelson-Hall Co., Publisher, Chicago, IL ISBN 0-88229-190-4

Chapter VIII: Movements, or Manner of Writing, Line Quality and Alignment in Writing
Chapter IX: Pen Position, Pen-Pressure, and Shading
Chapter XIII: Variation in Genuine Handwriting

Questioned Documents: A Lawyer’s Handbook, Jay Levinson
Academic Press, Boca Raton, FL ISBN 0-12-445490-9

Chapter 3: Typewriters

Section A — Document Examiner Foundation Skills

Scientific Examination of Questioned Documents, Ordway Hilton
Elsevier North Holland, Inc., New York City, NY ISBN 0-444-00628-1
(same chapters in the 1993 edition)

Chapter 1: Preliminary Considerations
Chapter 2: Definition of Terms
Chapter 9: Identification of Signatures and Detection of Forgery

Medical Dictionary

Words relating to diagnostic conditions that affect handwriting
(e.g. agraphia, aphasia, dygraphia, dyslexia)

Suspect Documents, William R. Harrison (Second Edition)
Sweet & Maxwell, London, England, Frederick A. Praeger, New York, NY

Chapter: Chapter 9: Handwriting

“Temporal features of handwriting: challenges for forensic analysis”, Arnold J.W.M.Thomassen
and Gerard P. Van Galen, Journal of Forensic Document Examination, Vol. 10, 1997

Chapter 3: Writing Instruments used to prepare documents
Chapter 4: Alternations in Documents

“Touch-ups in authentic writing”, Darlene Hennessy
Journal of Forensic Document Examination, Vol. 10, 1997

Section B — Gathering Evidence

Evidential Documents, James V. P. Conway
Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-00324-4

Chapter: Evidential Signatures
Chapter: Handwriting Investigations
Chapter: Anonymous Letters

Examination and Identification of Photocopies and Photocopiers, John S. Gorajczyk
23 AM JUR POF3d 621, Lawyers Cooperative Publishing, Rochester, NY

Section 21: Taking of photocopy standards

Examination of Questioned Documents (Revised Edition), Ordway Hilton
Elsevier North Holland, New York, NY ISBN 0-444-00628-1
(same chapter in the 1993 edition)

Chapter 14: Preparation and Collection of Handwriting Standards

Forensic Handwriting Identification: Fundamental concepts and principles, Ron N. Morris
Academic Press, San Diego, CA ISBN 0-12-507640-1

Chapter 15: Obtaining Handwriting Samples

Forensic Signature Examination, Steven A. Slyter
Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-06541-1

Chapter 5: Materials for Comparison

Law of Disputed and Forged Documents, J. Newton Baker
The Michie Company, Charlottesville, VA

Chapter VI: Standard of Comparison, pages 75-100

Questioned Documents (Second Edition), Albert S. Osborn
Nelson-Hall Co., Publisher, Chicago, IL ISBN 0-88229-190-4

Chapter XVII: Simulated or Copied Forgeries

“The taking of handwriting samples in cases of claimed assistance in writing”, Manfred Hecker
Journal of Forensic Document Examination, Vol. 1&2, 1988

The Scientific Examination of Documents: Methods and Techniques, David Ellen (Second Edition)
Taylor and Francis, Bristol, PA ISBN 0-7484-0580-1

Chapter 5: Handwriting—The Collection of Samples

Section C — Analyze Handwriting

“Changes in a forgers handwriting pressure related to original writer’s dynamics, Jodi C. Sita and Doug Rogers, Journal of Forensic Document Examination, Vol. 12, 1999

“Documentation of forensic handwriting comparison and identification method: A modular approach”, Bryan Found and Doug Rogers, Journal of Forensic Document Examination, Vol. 12, 1999

Module 6: The Assessing of Handwriting Complexity
Module 9: The Simulation Process

“Dynamics of the Writing Movement: Physical Modelling and Practical Applications”, H. J.J. Hardy
Journal of Forensic Document Examination, Vol. 5, 1992

Evidential Documents, James V. P. Conway
Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-00324-4

Chapter: Evidential Signatures

Forensic Handwriting Identification: Fundamental concepts and principles, Ron N. Morris
Academic Press, San Diego, CA ISBN 0-12-507640-1

Chapter 1: The Physiology of Writing

Forensic Signature Examination, Steven A. Slyter
Charles C. Thomas, Publisher, Springfield, IL

Chapter 2: Signatures
Chapter 3: Elements of Comparison

Fundamentals of Document Examination, Edna W. Robertson
Nelson-Hall Co., Chicago, IL ISBN 0-8304-1238-7

Chapter 14: Environmental Conditions that Affect Handwriting
Chapter 15: Internal Conditions that Affect Handwriting
Chapter 10: Primary Qualities and Characteristics of Handwriting

“Handwriting and signatures of the visually impaired”, Tull, Pat
Journal of Forensic Document Examination , Vol. 5, 1992

Handwriting Identification: Facts and Fundamentals, Roy A. Huber and A. M. Headrick
CRS Press, Boca Raton, FL ISBN 0-8493-1285-X

Chapter 2: A Handwriting Compendium for Document Examiners
Chapter 3: The Discrimination of Handwriting
Chapter 6: The Discrimination and Identification of Writing
Chapter 8: The Extrinsical Factors Influencing Handwriting
Chapter 9: The Intrinsical Variables of Handwriting

Identification of Handprinting and Numerals, Allan R. Keown
24 AM JUR POF3d 667, Lawyers Cooperative Publishing, Rochester, NY

“Intra-individual changes in handwriting features depending on handwriting velocity”,
Petra Halder-Sinn and Karin Funsch, Journal of Forensic Document Examination, Vol. 11, 1998

The Mysterious motor function of the basal ganglia; The Robert Wartenberg Lecture”, C.D. Marsden,
Neurology 23 May 1982. (Search PubMed or any medical database)

Section C — Analyze Handwriting

Law of Disputed and Forged Document, J. Newton Baker (Second Printing)
The Michie Company, Charlottesville, VA ISBN

Chapter XVI: Mental Condition Indicated by the Character of Handwriting

“Light and Electron Microscopy Approaches to Sequence of Writing Problems,
Joseph G. Barabe, et al, Journal of Forensic Document Examination, Vol. 9, 1996

“Methodological Aspects of Handwriting Identification”, H.J.J. Hardy
Journal of Forensic Document Examination, Vol. 8, 1995

“Multiple Sclerosis and its effect on handwriting”, Patricia Girouard
Journal of Forensic Document Examination, Vol. 13, 2000

“Parkinson’s disease and graphic disturbances”, Vickie L. Willard
Journal of Forensic Document Examination, Vol. 10, 1997

Questioned Documents (Second Edition), Albert S. Osborn
Nelson-Hall Co., Publisher, Chicago, IL ISBN 0-88229-190-4

Chapter VIII: Movements, or Manner of Writing, Line Quality and Alignment
Chapter XIII: Variation in Genuine Writing

Scientific Examination of Questioned Documents, Ordway Hilton
Elsevier North Holland, Inc., New York City, NY ISBN 0-444-00628-1
(same chapter in the 1993 edition)

Chapter 9: Identification of Signatures and Detection of Forgery

Medical Dictionary

Words relating to diagnostic conditions that affect handwriting (e.g. agraphia, aphasia, dygraphia, dyslexia)

Suspect Documents, William R. Harrison (Second Edition)
Sweet & Maxwell, London, England, Frederick A. Praeger, New York, NY

Chapter 10: Disguise
Chapter 11: Forged Signatures (Deficiencies in signatures caused by ill-health)

“Temporal features of handwriting: challenges for forensic analysis”, Arnold J.W.M. Thomassen
Gerard P. Van Galen, Journal of Forensic Document Examination, Vol. 10, 1997

“The objective static analysis of spatial errors in simulation”, Bryan Found, Doug Rogers and
Hermann Metz, Journal of Forensic Document Examination, Vol 12, 1999

The Scientific Examination of Documents: Methods and Techniques, David Ellen (1993 and 1997)
Taylor and Francis, Bristol, PA ISBN 0-7484-0580-1

Chapter 3: Handwriting: accidental and deliberate modification of handwriting
Chapter 4: The purposes and principles of scientific examination,

“The taking of handwriting samples in cases of claimed assistance in writing”, Manfred Hecker
Journal of Forensic Document Examination, Vol. 1&2, 1988

“The Effects of Alterations to Documents”, Steven A. Slyter
29 AM JUR POF 3d 549, Lawyers Cooperative Publishing, Rochester, NY

“Touch-ups in authentic writing”, Darlene Hennessy
Journal of Forensic Document Examination, Vol. 10, 1997

Section D — Analyze Falsified Documents

Detecting and Deciphering Erased Pencil Writing, Ordway
Charles C. Thomas, Publisher

Chapter 3: Has there been an erasure?

“Distinguishing Between Relative Ink Age Determinations and the Accelerated Aging Techniques”,
Larry F. Stewart, et al., International Journal of Forensic Document Examiners, Vol. 2, No. 1, Jan/Mar 1996,

Examination and Identification of Photocopies and Photocopiers, John S. Gorajczyk
23 AM JUR POF3d 621, Lawyers Cooperative Publishing, Rochester, NY

Forensic Examination of Ink and Paper, Richard L. Brunelle and Robert W. Reed
Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-04935-1

Chapter 1: Introduction

Chapter 8: The Forensic Examination of Inks

Chapter 9: The Dating of Ink

“Passport Forgeries - What to look for”, Ernie Munden, et al.
International Journal of Forensic Document Examiners, Vol. 1, No. 3, July 1995,

Scientific Examination of Questioned Documents, Ordway Hilton
Elsevier North Holland, Inc., New York City, NY ISBN 0-444-00628-1
(same chapters in the 1993 edition)

Chapter 3: Instruments and Materials Used to Prepare Documents, pages 33-48

Chapter 11: Typewriting

“Some observations on the morphology of a ball-point pen stroke”, P.S. Hung, et al.
IJFDE, Vol. 1, No. 1, Jan 1995

Suspect Documents, William R. Harrison (Second Edition)
Sweet & Maxwell, London, England, Frederick A. Praeger,, New York, NY

Chapter 10: Disguise

The Effects of Alternations to Documents, Steven A. Slyter
AM JUR POF3d 549, Lawyers Cooperative Publishing, Rochester, NY

The Scientific Examination of Documents: Methods and Techniques, David Ellen
Taylor and Francis, Bristol, PA ISBN 0-7484-0580-1

Chapter 7: The materials of handwritten documents—substances and techniques,

Chapter 9: Incidental marks and other scientific examinations,

Section E — Analyzing Features of Paper and Media

“Determining the Sequence of Folds and Writing”, Allan R. Keown
Journal of Forensic Document Examination, Vol. 6, 1993

Forensic Examination of Ink and Paper, Richard L. Brunelle and Robert W. Reed (1984)
Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-04935-1

Chapter 12: Watermarks

Chapter 13: Methods for Forensic Examination of Paper

Chapter 11: Partial Compendium of Paper Industry Terms

specifically, the kinds of paper/paper finishes encountered in business documents
and terms relating to watermarks

Fundamentals of Document Examination, Edna W. Robertson
Nelson-Hall, Inc., Publisher, Chicago, IL ISBN 0-8304-1238-7

Chapter 20: Paper and Watermarks

Section F— Analyze Impact and Non-Impact Images

Classification and Identification of Modern Office Copiers, James H. Kelly (1983)
American Society of Questioned Document Examiners , Publisher

Chapter: Brief History
Chapter: Copying Processes
Chapter: Preliminary Examinations
Chapter: Individual Characteristics

Examination and Identification of Photocopies and Photocopiers, John S. Gorajczyk
23 AM JUR POF3d 621, Lawyers Cooperative Publishing, Rochester, NY

Sections 1-4
Section 16

Questioned Documents: A Lawyer's Handbook, Jay Levinson
Academic Press, Boca Raton, FL ISBN 0-12-445490-9

Chapter 3: Typewriters
Chapter 4: Printers
Chapter 7: Printing (commercial printing)

Rubber Stamp Examination: A Guide for Document Examiners, Gary Herbertson
Wide Line Publishing, Colorado Springs, CO

Chapter 2: History and Manufacturing of Rubber Stamps
Chapter 3: Typical Unwanted Characteristics
Chapter 4: Manufacturer of Forgeries
Chapter 5: Forensic Methods of Examination
Chapter 7: Known Standards: Collecting Samples of a Stamp

The Scientific Examination of Questioned Documents, Ordway Hilton
Elsivier North Holland, Inc., New York City, NY
(same chapter in the 1993 edition)

Chapter 11: Typewriting Identification

The Scientific Examination of Documents: Methods and Techniques, David Ellen
Taylor and Francis, Bristol, PA ISBN 0-7484-0580-1

Chapter 9: Incidental marks and other scientific examinations,

"Where did this fax come from?", Rob Shilhanek
Journal of Forensic Document Examination , Vol. 10, 1997

Section G — Using Laboratory Instruments

“An Electrostatic Imaging Technique for the Detection of Indented Impressions on Documents”,
D. J. Morantz, et al., Forensic Science International, 13 (1979)

“Applications of Experimental Variables to the use of the Electrostatic Detection Apparatus”,
Journal of Forensic Science, Vol. 28, 1983

Applied Infrared Photography (Publication M-28), Kodak. If unable to locate through a photographic store/dealer, contact Kodak at 1-800-242-2424 x 19 for further information.

Classification and Identification of Modern Office Copiers, James H. Kelly (1983)
American Society of Questioned Document Examiners , Publisher

Chapter: Copying Processes

Detecting and Deciphering Erased Pencil Writing, Ordway Hilton (1991)
Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-05723-0

Chapter 3: Has there been an erasure
Chapter 5: Photographic Methods of Decipherment

“Electrostatic Detection Apparatus (ESDA): Is it Really Non-destructive to Documents?”
Diane K. Tolliver, Forensic Science International, 44, 1990

Forensic Examination of Ink and Paper, Richard L. Brunelle and Robert W. Reed)
Charles C. Thomas, Publisher, Springfield, IL ISBN 0-398-04935-1

Chapter 2: History of the Development of Writing Inks
Chapter 5: Printing Inks
Chapter 8: The Forensic Examination of Inks
Chapter 12: Watermarks
Chapter 13: Methods of Forensic Examination of Paper

Fundamentals of Document Examination, Edna W. Robertson)
Nelson-Hall Co., Chicago, IL ISBN 0-8304-1238-7

Chapter 5: Methods of Examination

“Importance of absolute humidity in the operation of the electrostatic detection apparatus”.
M. L. Pearse and J.S. Brennan, Forensic Science International, 83 (1996)

“Light and Electron Microscopy Approaches to Sequence of Writing Problems,
Joseph G. Barabe, et al, Journal of Forensic Document Examination, Vol. 9, 1996

“Optimum Conditions for Examination of Documents using the Electostatic Detection Appartus (ESDA) Device to Vizualize Indented Writing”, Michael G. Noblett, Elizabeth L. James,
Journal of Forensic Science, Vol. 28, No 3

Scientific Examination of Questioned Documents, (Revised Edition) Ordway Hilton
Elsevier North Holland, Inc. ISBN 0-444-00628-1

Chapter 3: Instruments and Materials Used to Prepare Documents

Section G — Using Laboratory Instruments

“Some parameters Affecting the Quality of ESDA Results”, I.J. Reibeling and H.J. Kobus,
Journal of Forensic Science (1994)

The Effects of Alternations to Documents, Steven A. Slyter
American Jurisprudence POF3d 549, Lawyers Cooperative Publishing, Rochester, NY

The Scientific Examination of Documents: Methods and Techniques, David Ellen
Taylor and Francis, Bristol, PA ISBN 0-7484-0580-1

Chapter 9: Incidental marks and other scientific examinations

Chapter 7: The Materials of handwritten documents—substances and techniques

Thoughts for Digital Document Examination, Richard T. McEvoy, Jr.
Forensic Imaging, Inc., Victor, NY

Paper accompanying a workshop titled Computer Applications for Document Examiners, presented at AFDE, October 26, 2000. Available as a .pdf from the BFDE.

Section H — Evaluating Evidence and Presenting Case Findings

ASTM Standard E 1658, American Society for Testing and Materials

Code of Professional Responsibility, Board of Forensic Document Examiners

“Contemporary issues in forensic handwriting examination: a discussion of the key issues in the wake of the Starzecpyzel decision”, Bryan Found and Doug Rogers
Journal of Forensic Document Examination, Vol. 8, 1995

Reporting Procedures

Examination and Identification of Photocopies and Photocopiers, John S. Gorajczyk
23 AM JUR POF3d 621, Lawyers Cooperative Publishing, Rochester, NY

Forensic Signature Examination, Steven A. Slyter
Charles C. Thomas, Publisher, Springfield, IL

Chapter 10: Opinion—Levels of Certainty
Chapter 13: Testimony—Trials and Depositions

Fundamentals of Document Examination, Edna W. Robertson
Nelson-Hall Co., Chicago, IL ISBN 0-8304-1238-7

Chapter 20: Paper and Watermarks

Questioned Documents: A Lawyer’s Handbook, Jay Levinson
Academic Press, Boca Raton, FL ISBN 0-12-445490-9

Chapter 4: Printers

The Scientific Examination of Documents, David Ellen (Second Edition)
Ellis Horwood Limited — Halsted Press (John Wiley & Sons) New York, Toronto

Chapter 4: Handwriting — the purpose and principles of scientific examination, pages 46-68

The Scientific Examination of Questioned Documents, Ordway Hilton
Elsevier North Holland, Inc., New York City, NY ISBN 0-444-00628-1
(same pages in the 1993 edition)

Chapter 11: Typewriting Identification

Section I —Demonstrating Knowledge of Legal Procedures

Black's Law Dictionary

West Publishing Co., St. Paul, MN (available at law libraries and local libraries)

Legal Terms commonly used by legal professionals when conversing with a document examiner

affidavit	impeach	privilege (various kinds of)
codicil	in camera	probate
collateral issue	indictment	probative value
cross examination	interpleader action	proffered testimony
declaration	judicial notice	pro bono
defendant	learned treatise	recross
direct examination	motion in limine	redirect
directed verdict	nolle	stipulate
examination-in-chief	nolo contendere	subpoena
exculpatory	plaintiff	subpoena duces tecum
grand jury	prima facie	summary judgement
hypothetical question	precedent	suppression hearing
		ultimate issue

The Comprehensive Forensic Services Manual, Steven A. Babitsky, James J. Mangraviti, and Christopher J. Todd, (2000) SEAK, Inc., Falmouth, MA

Chapter 2: Fundamental Elements of a Law Suit

Chapter 3: The Discovery Process

Chapter 4: Anatomy of a Civil Trial

Chapter 5: Evidence

Chapter 6: Qualifications

Chapter 13: The Expert Deposition

Chapter 15: Cross-Examination

How to Excel During Cross-Examination, Steven Babitsky and James J. Mangraviti, Jr. (Equires) SEAK, Inc., Falmouth, MA (1997)

Federal Rules of Evidence Opinions and Expert Testimony, Rules 701-706

Daubert v. Merrell Dow Pharmaceuticals 509 US 579 (1993), 43 F.3d 1311, 113 S. Ct. 2786

Frye v. USA 64 App.D.C. 46 (1923), 293 F. 1013

Kumho Tire Co., LTD., et al. v. Patrick Carmichael et al. 131 F.3d 1433, 119 S. Ct. 1167, 1169 (1999)

USA v. Starzecpysel 880 F. Supp.2d 1027 (1995)

US v. Campbell 732 F2d 1017 (1984)

An Internet search will produce sites publishing decisions or visit law library.

Additional references

Scientific Examination of Questioned Documents, Jan Seaman Kelly & Brian Lindblom
Taylor and Francis Group

Chapters

14 -Typography

14 - Typewriters

18 - Facsimile Machines

23 - Conventional Printing

23 - Paper Examinations

31 - Cameras, Scanners and Image Enhancement

Document Examination Performance Exercise

Handwriting Examinations

Handwriting comparison examinations may include signatures or text and can be cursive or printing. The test taker will be provided the questioned posed for the examination and photographs of the signatures. The signatures will have been extracted from documents and arranged as on a court exhibit board. A form on which to write answers is provided. The test taker will provide an opinion along with a list the features that form the basis of the opinion. The test grader has a model answer sheet which is used for reference in grading.

Grading

Due to minor differences in vocabulary as a result of regional expressions or training, alternative choices for the descriptive words are written into the model answers used by the test grader. For example: one examiner may refer to “top of the letters” pattern while another may refer to the “apex of the letters”. The grader will know that both terms apply to the same indicators. The term used to describe the actual signatures of an individual that are provided for comparison may be described as “exemplars”, “knowns”, “specimens” or “standards of comparison”. Allowances are made for such differences in vocabulary. If the grader encounters a term not found in the model answer, an inquiry will be made to the contact on the Board to determine if the test taker’s word is sufficiently similar to the model answer to be considered correct. The test taker’s name is not disclosed, upon such inquiry.

There will be certain key characteristics (writing features) that must be included when providing the features forming the basis of an opinion. These features must be mentioned for the answer to be correct. The features list does not have to be in a specific order. There is not a specific number of features that must be listed in each examination, because each writing is individualized and the number of identifying or eliminating features for each will be different. The test taker should list all of the features that would be important to demonstrate the basis of his or her opinion to the jury.

Each examination must receive a passing grade.

Equipment

The proctor and test taker are provided a list of equipment that can be used during the examination. Only those items named will be permitted in the examination room.

Other Types of Examinations

Other examinations will be from areas of work usually encountered by a document examiner. A typical case question will be posed, the case documents will be provided, and, if for example the case required latent image development, the latent image would be provided. In such cases, the examiner must describe in great detail the equipment used and the process of using that equipment to obtain the results provided. The examiner must then, based on the case question, evaluate the evidence and render an opinion along with the supporting data for that opinion. The test grader has a model answer sheet which is used for reference in grading.

