Proficiency Testing Validates Handwriting Identification

Kathie Koppenhaver

Certified Questioned Document Examiner and Diplomate

PROFICENCY TESTING

- Proficiency Testing measures the skill of professionals.
- In our case, it measures our ability to identify handwriting and determine if writing is genuine disguised or simulated.

PROFICENCY TESTING

- The Forensic Science Foundation has conducted proficiency testing through Collaborative Testing Services for over 25 years.
- They provide testing for many different skills, not just document examination.
- They were the first to offer proficiency testing to document examiners.
- They have two tests for document examiners, one on handwriting and one on other aspects of document examination.

PROFICENCY TESTING

- The Forensic Expertise Profiling Laboratory (FEPL) an unit of the Handwriting Analysis and Research Laboratory of LaTrobe University in Australia offered comprehensive testing for document examiners from 2001 to 2008. The test was discontinued after 2008.

PROFICENCY TESTING

ST²AR

Furthering Forensic Science

Skill-Task Training Assessment & Research, Inc.

- This organization has not updated its website and apparently is no longer offering testing.

School of Human Biosciences Forensic Expertise Profiling Laboratory

- The Forensic Expertise Profiling Laboratory was established by Dr. Bryan Found and Dr. Doug Rogers.
- They tested the examiners ability to identify handwriting as genuine, disguised or simulated on over 2000 samples.

Dr. Bryan Found

PROFICENCY TESTING

- In 1989 Bryan Found started graduate studies in the Neurosciences program at La Trobe University. Bryan was also employed as a Forensic Document Examiner at the Victoria Police Forensic Science Centre (VFSC). Bryan's academic interest was in the relationship between forensic handwriting identification expertise and the fields of neuropsychology and motor control.

PROFICENCY TESTING

- In 1990 Bryan met Dr. Doug Rogers, a Senior Lecturer in Neurosciences, and thus began their long-term research collaboration. In 1993 Bryan, then Head of the General Crime Section of the Document Examination Branch at the VFSC, was awarded a national scholarship to commence a PhD, within the Handwriting Analysis & Research Laboratory, in the field of theoretical and analytical approaches to forensic handwriting examination.

PROFICENCY TESTING

- FEPL's objective was to characterize skill and expertise associated with human perceptual and cognitive processes related to forensic opinion formation. In other words, skill in handwriting identification.

PROFICENCY TESTING

- *Exorcise of Ignorance* stated there was no proof that document examiners could identify handwriting.
- They stated that studies were needed to support handwriting identification.
- This is one of the reasons for which FEPL was created although no lay people were tested for comparison with document examiners' opinions.

PROFICENCY TESTING

- The assault on the validity of handwriting identification originated with Michael Risinger, J.D., Mark Denbreaux, J. D., and Michael Saks, Ph.D. who wrote *Exorcise of Ignorance* stating that there is no scientific basis for the identification of handwriting.

PROFICENCY TESTING

- *Does Handwriting Identification Expertise Exist?*
- Pages 731 – 792 of the Pennsylvania Law Review (not a peer reviewed publication).
- They cited some Collaborative Testing results as proof that document examiners cannot identifying handwriting.

PROFICENCY TESTING

- These professors have marketed their services as experts on experts. They would go to court and testify that handwriting identification is unreliable.
- However, they have been disqualified as experts on examiners in many cases.

PROFICENCY TESTING

- Professors Saks and Stalmach testified in the Starcyzpycel Case that handwriting had never been proven to be unique to an individual and therefore capable of being identified. These professors stated that they could not find any literature to support the premise that handwriting could be identified.

PROFICENCY TESTING

- Handwriting identification was first challenged in the Starzecpyzel Case.
- A two-day hearing was held by the court with Mary W. Kelly defending document examination.
- She could not defend handwriting examination.

PROFICENCY TESTING

- She could not give any examples of how we make decisions regarding handwriting identification.
- She could not state methodology.
- She could not give any examples of methods used to make decisions about handwriting.

PROFICENCY TESTING

- Judge McKenna stated in the Starzecpyzel decision that "*The Daubert hearing established that forensic document examination which clothes itself with the trappings of science, does not rest on carefully articulated postulates, does not employ rigorous methodology and has not convincingly documented the accuracy of its determinations.*"

PROFICENCY TESTING

- Judge McKenna ruled that hand-writing identification is a technical skill and not a science and that hand-writing identification is a skill that can be learned and therefore admissible as evidence.

PROFICENCY TESTING

- There are numerous other cases related to admissibility of expert testimony in the field of handwriting identification.

PROFICENCY TESTING

- **Factors affecting admissibility are**
  - whether the theory can or has been tested;
  - whether the theory has been subjected to peer review in publication;
  - the known or potential rate of error;
  - the extent of acceptance in the relevant scientific community.

PROFICENCY TESTING

- **whether the theory can or has been tested**
- Forensic validation studies have been reported by Kam, Fielding and Conan (1997), Kam, Wetstein and Conn (1994), Found, Sita and Rogers (1999) Kam, Gummadidala, Fielding and Conn (2001) and Sita, Found, Rogers (2002).
- These studies have provided support for the expertise claimed by practitioners, or at least those that have been tested within the trials, in terms of it being real and demonstrable.

PROFICENCY TESTING

whether the theory has been subjected to peer review in publication;

Published in the Journal of Forensic Document Examiners. Volume 12, Fall 1999 entitled “*The development of a program for characterizing forensic handwriting examiners’ expertise: Signature examination pilot study*” by Bryan Found, Jodi Sita and Doug Rogers

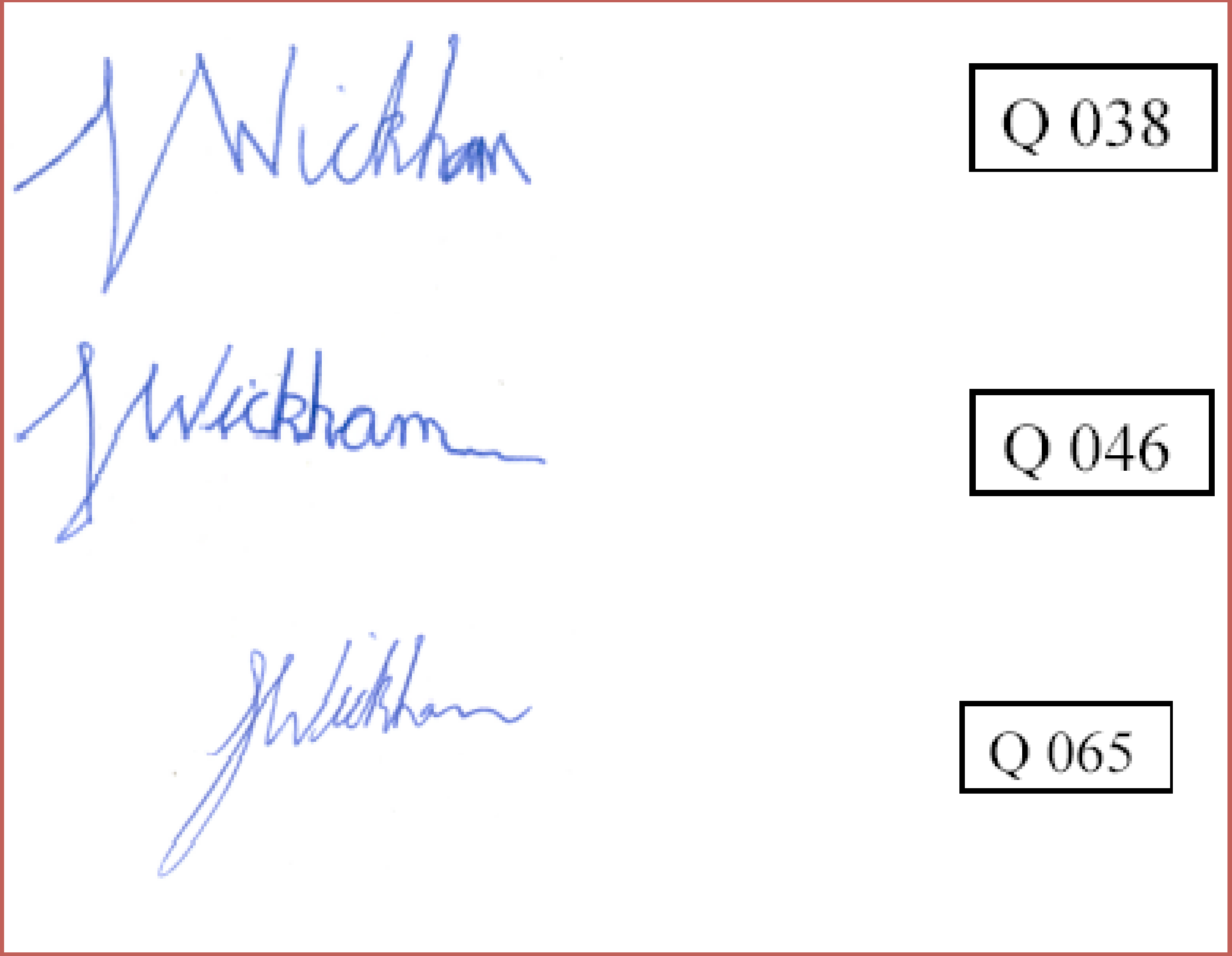
PROFICENCY TESTING

- The purpose of the testing was to demonstrate that handwriting can be identified. In order to prove this, Dr. Bryan Found and Dr. Doug Rogers from LaTrobe University established the Forensic Expertise Profiling Laboratory and began testing in 2001.

PROFICENCY TESTING

- Testing consisted of two tests per year.
- First test consists of the comparison of signatures.
- Second test involves the comparison of handwriting.

PROFICENCY TESTING



PROFICENCY TESTING

Over the next 8 years, the tests were administered with the following number of comparisons for each year.

- 2001 – 500 questioned handwriting samples,
  - 250 signatures and 250 handwriting samples,
- 2002 – 400 questioned handwriting samples,
  - 200 signatures and 200 handwriting samples
- 2003 – 200 questioned handwriting samples,
  - 100 signatures and 100 handwriting samples
- 2004 – 200 questioned handwriting samples,
  - 100 signatures and 100 handwriting samples.

PROFICENCY TESTING

- 2005 – 200 questioned handwriting samples,
  - – 100 signatures and 100 handwriting samples
- 2006 – 106 questioned handwriting samples,
  - – 100 signatures and 6 handwriting samples
- 2007 - 105 questioned handwriting samples,
  - – 100 signatures and 5 handwriting samples.
- 2008 – 105 questioned handwriting,
  - – 100 signatures and 5 handwriting samples.
- Total of 2016 handwriting samples

PROFICENCY TESTING

- **the known or potential rate of error**
- Overall group results for 2002

A total of 12,200 opinions were expressed by the group. Of these opinions 9,694 (79.5%) were correct, 93 (0.8%) were misleading. and 2413 (19.8%) were inconclusive.

PROFICENCY TESTING

- 2003 Results
- A total of 5600 opinions were expressed by the group.
- Of these opinions 3663 (65.4%) were correct, 321 (5.7%) were misleading, and 1616 (28.9%) were inconclusive.

PROFICENCY TESTING

- 2004 Results
- A total of 2000 authorship opinions were expressed by the group.
- Of these opinions 1402 (70.1%) were correct, 23 (1.2%) were misleading, and 575 (28.8%) were inconclusive.

PROFICENCY TESTING

- 2005 Results
- A total of 2600 authorship opinions were expressed by the group.
- Of these opinions 2080 (80.%) were correct, 80 (3.1%) were misleading, and 575 (16.9 %) were inconclusive.

PROFICENCY TESTING

- 2006 Results
- A total of 162 authorship opinions were expressed by the group.
- Of these opinions 130 (80.2%) were correct, 87 (4.3%) were misleading, and 25 (15.4 %) were inconclusive.

PROFICENCY TESTING

- 2007 Results
- A total of 2500 authorship opinions were expressed by the group.
- Of these opinions 2365 (94.62%) were correct, 45 (1.8%) were misleading, and 90 (3.6 %) were inconclusive.

PROFICENCY TESTING

- 2008 Results
- A total of 2700 authorship opinions were expressed by the group.
- Of these opinions 871 (32.3%) were correct,154 (5.7.%) were misleading, and 1675 (62.0 %) were inconclusive.
- Overall average is 71.73.
- Excluding 2008, average is 78%.

PROFICENCY TESTING

- In addition, individual scores are given using a number to protect the identity of individuals.
- This enables test results to be published while maintaining privacy of participants.

	Case number				
	1	2	3	4	5
Real answer	5	1	5	1	5
Participant Codes					
23/22	3	3	4	3	4
24/26	3	3	4	3	4
83	5	1	5	1	5
93/97	4	3	4	2	5
95/96	3	3	5	1	5
99/92	3	3	4	3	5
103	5	5	4	1	5
107/120	3	3	4	3	4
125	5	4	2	1	5
130	4	3	5	3	5
137/113	3	3	4	3	4
138	5	3	4	3	5
148	4	3	2	1	2
155	5	5	4	1	5
162	5	3	5	1	5
163	4	3	5	1	5
167	1	2	1	1	5
177	4	3	4	2	3
184	4	3	4	2	3
190	4	3	2	1	5
191	5	5	2	1	5
194	3	3	3	2	4
299	3	3	3	2	5
84T	3	2	4	1	5

PROFICENCY TESTING

- Since 2000, FDEs from the following countries have participated.

  +Australia + Canada + Germany

  +Hong Kong + Italy + New Zealand

  +Sweden + The Netherlands

  + United Kingdom + USA.

My proficiency scores

- Total of 2016 handwriting samples
- 1826 correct responses
- 82 incorrect answers
- Accuracy rate is 96%
- Error rate is 4.00%
- Highest number of correct responses overall excluding inconclusives.

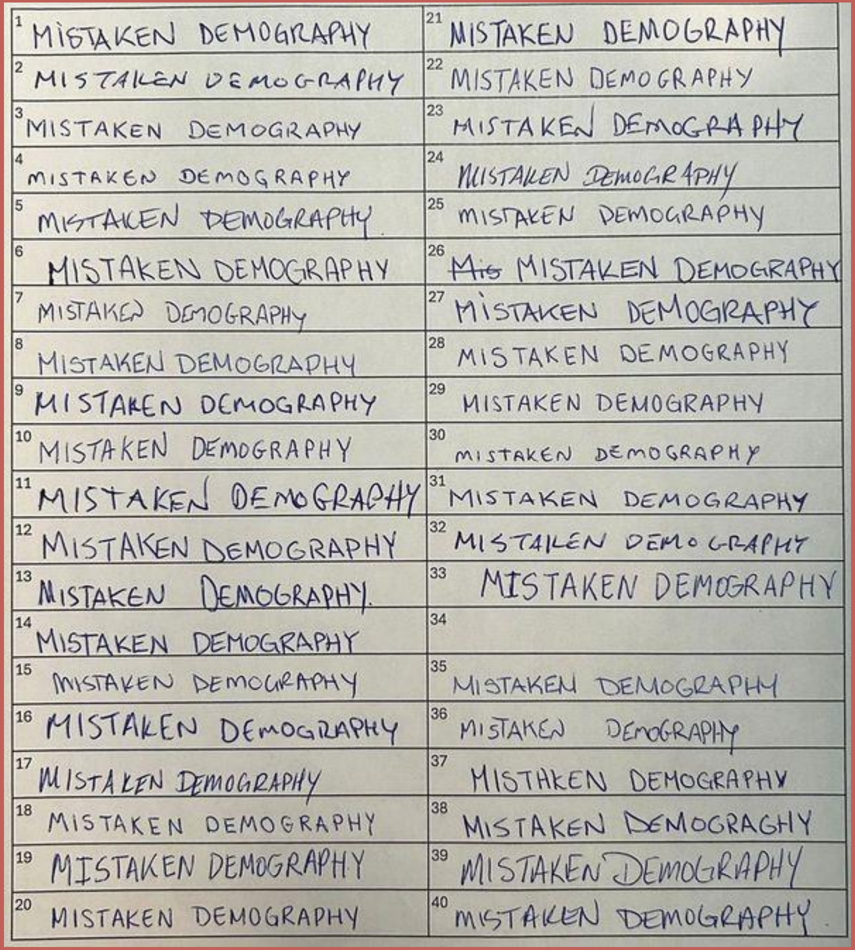
PROFICENCY TESTING

- IADE is requiring all members to participate in proficiency testing.
- Nathalie Bureau has the test created.
- The test is available to anyone.
- Hopefully we can get lay people to participate for comparison purposes.

PROFICENCY TESTING

- It is advantageous for all of us to participate in proficiency testing.
- We all need to know how well we can identify handwriting.
- We will be questioned in court on our rate of accuracy.
- It is a learning exercise.

PROFICENCY TESTING

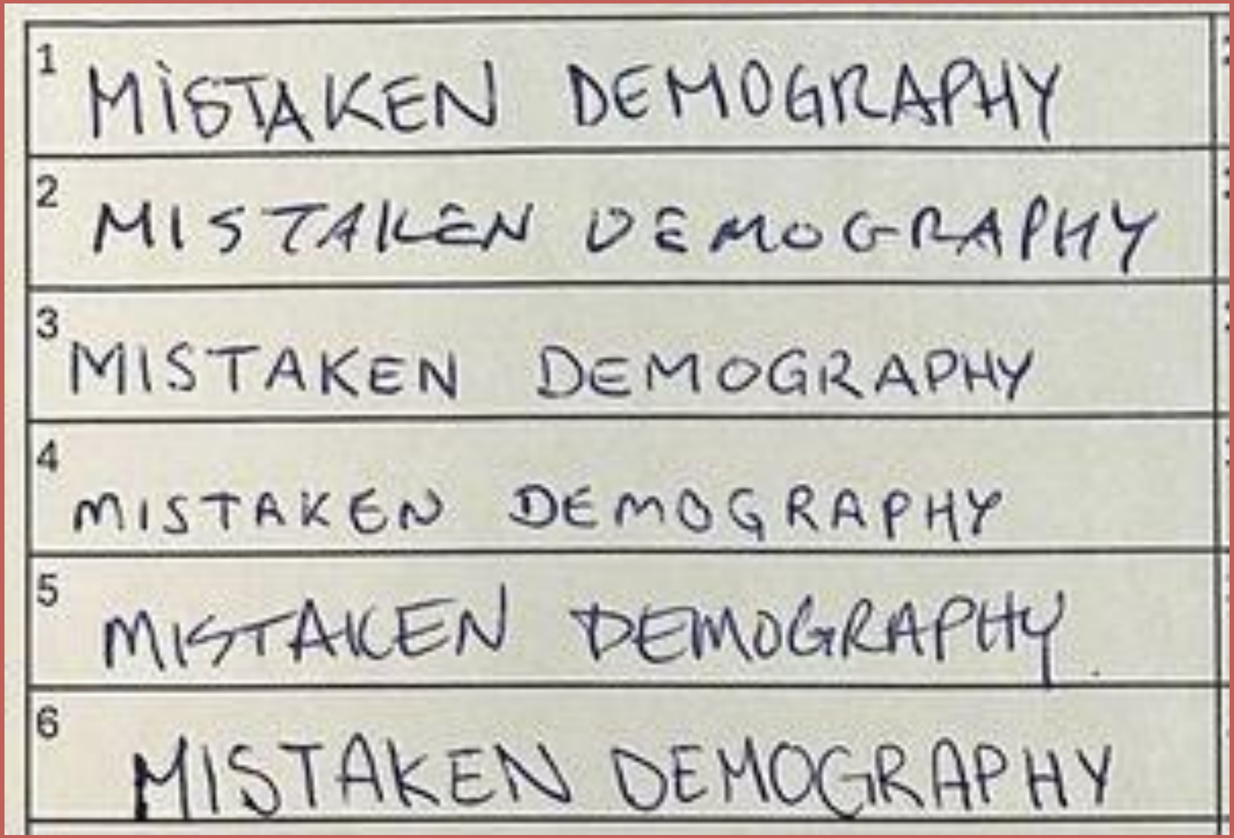


1	MISTAKEN DEMOGRAPHY	21	MISTAKEN DEMOGRAPHY
2	MISTAKEN DEMOGRAPHY	22	MISTAKEN DEMOGRAPHY
3	MISTAKEN DEMOGRAPHY	23	MISTAKEN DEMOGRAPHY
4	MISTAKEN DEMOGRAPHY	24	MISTAKEN DEMOGRAPHY
5	MISTAKEN DEMOGRAPHY	25	MISTAKEN DEMOGRAPHY
6	MISTAKEN DEMOGRAPHY	26	~~Mis~~ MISTAKEN DEMOGRAPHY
7	MISTAKEN DEMOGRAPHY	27	MISTAKEN DEMOGRAPHY
8	MISTAKEN DEMOGRAPHY	28	MISTAKEN DEMOGRAPHY
9	MISTAKEN DEMOGRAPHY	29	MISTAKEN DEMOGRAPHY
10	MISTAKEN DEMOGRAPHY	30	MISTAKEN DEMOGRAPHY
11	MISTAKEN DEMOGRAPHY	31	MISTAKEN DEMOGRAPHY
12	MISTAKEN DEMOGRAPHY	32	MISTAKEN DEMOGRAPHY
13	MISTAKEN DEMOGRAPHY.	33	MISTAKEN DEMOGRAPHY
14	MISTAKEN DEMOGRAPHY	34	
15	MISTAKEN DEMOGRAPHY	35	MISTAKEN DEMOGRAPHY
16	MISTAKEN DEMOGRAPHY	36	MISTAKEN DEMOGRAPHY
17	MISTAKEN DEMOGRAPHY	37	MISTAKEN DEMOGRAPHY
18	MISTAKEN DEMOGRAPHY	38	MISTAKEN DEMOGRAGHY
19	MISTAKEN DEMOGRAPHY	39	MISTAKEN DEMOGRAPHY
20	MISTAKEN DEMOGRAPHY	40	MISTAKEN DEMOGRAPHY

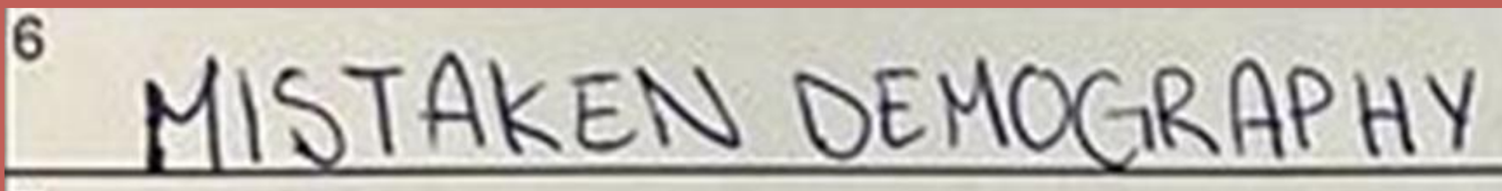
PROFICENCY TESTING

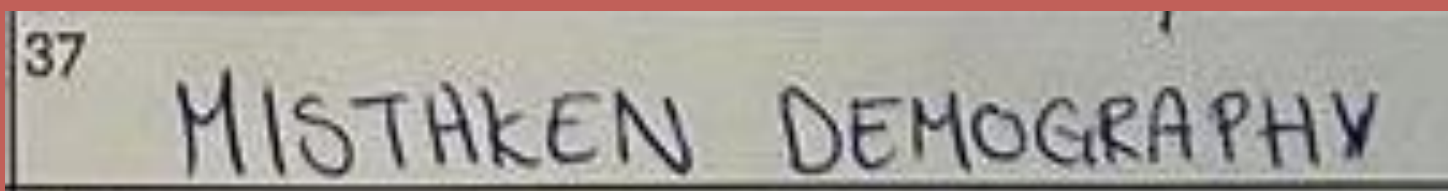
- Enlarge the words.
- Print out a copy of the words.
- Cut them apart.
- Start with obvious words that are somewhat unusual.

PROFICENCY TESTING



PROFICENCY TESTING





PROFICENCY TESTING

- I recommend that you go through the test more than once.
- I complete the test and set it aside.
- I go back and start over to see if I make any changes that differ from my first review.

PROFICENCY TESTING

- If asked in court if you passed the test.
- If you took the test, you passed it.
- The purpose of the test is to help you improve your ability to understand handwriting.
- I have learned a lot from the tests by reviewing the answers