To the Committee and to Representative Underwood:

By now, in addition to submitting my previous testimony, I have read Representative Underwood's testimony about LD 78,

Handwriting matters — reading handwriting (including cursive handwriting) certainly matters — but does it matter whether we write in cursive too? The research is surprising — as is the way that the research has been handled by Representative Underwood or by the sources he quotes. I have taken some time to investigate those sources, among other matters to be addressed below.

For instance, Representative Underwood's main source about handwriting research (Dr. William Klemm) is in fact a veterinary surgeon at Texas A & M, who writes pretty freely on the subject of psychology in general and handwriting psychology in particular. Dr. Clem's material online, from which the Representative has rather freely quoted or paraphrased, proves (on investigation) to have misquoted or otherwise misrepresented literally every resource that was used or cited by Dr. Clem (and that therefore, intern, was trustingly reputed by Representative Underwood). The findings — which the Representative (following his source) describes as supporting cursive over the other forms of our handwriting — turn out (when the original citations are tracked and read). to say no such thing. The research uniformly supports handwriting over keyboarding, for several important purposes - but (just as consistently) the research gives no support specifically to cursive over any of the other ways to write by hand. Print handwriting, in the research as written and published (independently of Dr. Klemm's tendency towards misquotation and incorrect paraphrase), shares the benefits of cursive.

Additional (but verifiable) research has demonstrated, as it happens, that legible cursive handwriting averages no faster than printed handwriting of equal or greater legibility. (Sources for all cited research are listed below.)

Similar observations must be made regarding the research from Norway, (which the Representative also mentions8. Although the Representative describes this research, too, as specifically supporting the use of cursive penmanship, reading the original research (and considering the documented realities regarding handwriting instruction in the country where the research was done) reveals two important facts that the representative perhaps did not find it convenient to mention:

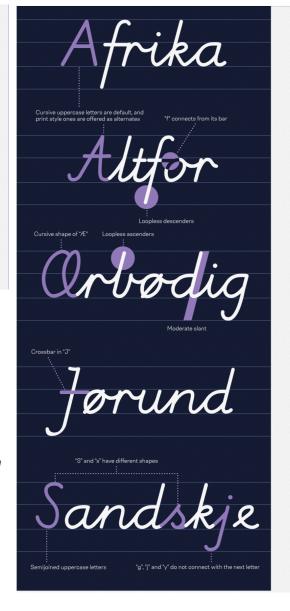
/1/ the Norwegian research, like other research noted in the testimony submitted by Representative Underwood, did not specifically address the question of whether cursive deserves any particular support over and above that given which should be given to handwriting of any kind. As in other research noted by the Representative, the handwriting method described as "cursive" in the Norwegian research was being compared, not against printed or other handwriting, but only against keyboarding. Therefore, although that research may well support the use of handwriting, it cannot be taken as a particular reason to mandate, specifically, cursive. specifically, wover or against any other form of our handwriting.

/2/ furthermore, the form of Handwriting, which is (which long has been) taught as cursive in Norway. (the country where the research was done) is a form that is usually regarded as "not cursive" by the advocates of cursive penmanship mandates in the USA. This is what cursive looks like in the schools of Norway:

## ABCDEFGHJJKLM NOPQRSTUVWXYZ ABCDEFGHIJKLM NOPQRSTUVWXYZ

Default and alternative uppercase letters in Norsk stavskrift

The above samples include, for instance, textbook material, which has been downloaded from the worldwide handwriting models research and documentation site primarium.info — a research venture which has been engaged, for several years, and documenting ultimately all the handwriting styles used in schools throughout the various nations that speak languages which use our alphabet in any form. Interestingly, when advocates of cursive mandates mention the research from Norway,



and I show them samples of what the students in that research were actually taught as cursive (the form of handwriting which is described as "cursive" when research from Norway is written in English or translated into English), the very same people who have urged me to attend to the Norwegian research, then generally perform an about-face and say: "no, no, that is something I am against! That is not cursive at all! To support a cursive mandate would be to exclude such handwriting!" It would be

interesting to see how, or whether, the Representative chooses to address this matter, should he be asked about it - and it will be equally interesting to know whether he was aware of these facts when he cheerfully recommended attention to the Norwegian research. (if the research is to be taken as saying anything is all about, specifically, cursive handwriting, it would be at least equally rational to consider this research as supporting the semi-joined and very print-like mode of cursive that is taught in the country where this research was done, and that is in fact taught in many other countries: as easily documentable through Primarium.info's large and continually expanding research database of handwriting textbook samples from around the world. If a specific form of cursive or other handwriting is to be mandated in the schools of Maine or anywhere else, it would be interesting to know whether the Representative would support the form that was actually used by the students who got those good results in the research to which he draws our attention?

Of further interest, whenever handwriting research is considered: research has also objectively documented that teaching and requiring cursive does <u>not</u> objectively improve (for instance) the reading, spelling, or language of students who have dyslexia or dysgraphia. In addition, we must consider the effects on all students: according to comparative studies of handwriting speed and legibility in different forms of writing, the fastest, clearest handwriters avoid cursive — although they are not absolute print-writers either. The highest speed and highest legibility in handwriting are attained by those who join only some letters, not all: joining only the most easily joined letter-combinations, leaving the rest unjoined, and using print-like shapes for letters whose printed and cursive shapes disagree.

## The New York Times York Times

— but the representative

has not mentioned the fact that reading cursive, simply reading is much easier and quicker to master than writing the same way too. Reading cursive, simply reading it, can be taught in just 30 to 60 minutes — even to five- or six-year-olds (including those with dyslexia) once they read ordinary print. This vital skill, thus taught, requires fat less expenditure (of time amd of effort and of finances), than mandating that every student of a given age must write that way too. (There's even an inexpensive textbook, now adopted by several school districts and teacher, which focuses specifically on the skill of reading cursive, whether or not 1 writes the same way cursive comprehension: the vital scale of reading, cursive handwriting, whether or not one writes that way. This resource, titled READ CURSIVE FAST, is available from links in the source-list below. Those who are rightly concerned with the vanishing skill of cursive reading may wish to visit those links for more information.) We don't need to produce a particular form of writing in order to learn how to read it. Nobody, for instance, mandates that children should learn to simulate the logo of

or even the type font used throughout its pages, in order to read the newspaper. Why not simply teach children to <u>read</u>

cursive — along with teaching other vital skills, such as a form of handwriting that is actually typical of effective handwriters?

Just as each and every child deserves to be able to read all kinds of everyday handwriting (including cursive), each and every one of our children deserves to learn the most effective and powerful strategies for high-speed high-legibility handwriting performance. When it comes to handwriting performance (speed legibility, speed, into maintaining eligibility at speed), research overwhelmingly is absent of support for cursive as we know it: if cursive is to be defined as conventionally: as using loop, rather ornamented letters, which differ from printed letters, with a requirement to join all of these from beginning through end of every word. As shown in the examples from Norway (which could be duplicated in many other countries, including most of the English-speaking nations), that is not the only way to get beyond playing unconnected printing when it comes to handwriting, That is not the only way to produce cursive.

Teaching material for practical handwriting abounds — and there are American sources, which can be relied on for this, when it comes to textbook selection. We might learn a bit from certain other countries (list on request) where such handwriting is taught as the standard UK and Europe, where such handwriting is taught as the standard either nationally or regionally or in specific schools and districts, — because not every country relies, for its cursive, on the accident-prone 100% joined in frequently looped style which is venerated and imposed by too too many North American educators. Some examples, in several cases with student work also shown, include: <a href="http://www.BFHhandwriting.com">http://www.BFHhandwriting.com</a>, <a href="http://www.handwritingsuccess.com">http://www.handwritingsuccess.com</a>, <a href="http://www.studioarts.net/calligraphy/italic/curriculum.html">https://www.studioarts.net/calligraphy/italic/curriculum.html</a>, <a href="https://www.studioarts.net/calligraphy/italic/curriculum.html">https://www.studioarts.net/calligraphy/italic/curriculum.html</a>, <a href="https://www.studioarts.net/calligraphy/italic/curriculum.html">https://www.studioarts.net/calligraphy/i

illuminatewords.teachable.com/p/teaching-real-script, https://hdl.handle.net/1880/118235, http://www.bvcg.ca/p/kids-handwrite.html, https://beautifulcalligraphy.com/good-handwriting-matters/, and https://readcursivefast.com/quick-start-seven/—these are all USA-published sources and resources. (Those seeking further field, may consider the following resources, all in the English language, and largely from English-speaking nations: https://sites.google.com/view/briem/handwritingj, http://www.HandwritingThatWorks.com,and http://www.italic-handwriting.org,)

Throughout the USA and Canada, educated adults increasingly quit cursive. In 2012, handwriting teachers across North America were surveyed at a conference hosted by Zaner-Bloser, a publisher of cursive textbooks. Only 37% wrote in cursive; another 8% printed. The majority — 55% — wrote with some elements resembling print-writing, others resembling cursive.

Most handwriting in the real world — 75% of the response totals, so far — consists of print-like letters with occasional joins. When even most handwriting teachers do not themselves use cursive, why glorify it?

Believe it or not, some of the adults who themselves write in an occasionally joined but otherwise print-like handwriting tell me that they are teachers who themselves still insist that their students must write in cursive, and/or who still teach their students that all adults habitually and normally write in cursive and always will.

Given the facts on our handwriting today, this is a little like teaching kids that our current president is Richard Nixon. What, I wonder, are the educational and psychological effects of teaching, or trying to teach,

something that the students can probably see for themselves is no longer a fact?

Cursive's cheerleaders (with whom I've had some stormy debates) sometimes allege that cursive has benefits which justify absolutely anything said or done to promote that form of handwriting. The cheerleaders for cursive repeatedly state (sometimes in sworn testimony before school boards and state legislatures) that cursive cures dyslexia or prevents it, that it makes you pleasant and graceful and intelligent, that it adds brain cells, that it instills proper etiquette and patriotism, or that it confers numerous other blessings which are no more prevalent among cursive users than among the rest of the human race. Some claim research support — citing studies that invariably prove to have been misquoted or otherwise misrepresented by the claimant.

So far, whenever a devotee of cursive claims the support of research, one or more of the following things has become evident as soon as others examined the claimed support:

/1/ either the claim provides no source,

or

/2/ if a source is cited, and anyone checks it out, the source turns out to have been misquoted or incorrectly paraphrased by the person citing it or

/3/ the claimant correctly quotes/cites a source which itself indulges in either /1/ or /2/.

Cursive devotees' eagerness to misrepresent research has substantial consequences, as the misrepresentations are commonly made — under oath — in testimony before school districts, state legislatures, and other bodies voting on educational measures. The proposals for cursive are, without exception so far, introduced by legislators or other spokespersons whose misrepresentations (in their own testimony) are later revealed — although investigative reporting of the questionable testimony does not always prevent the bill from passing into law, even when the discoveries include signs of undue influence on the legislators promoting the cursive bill? (Documentation on request: I am willing to be interviewed by anyone who is interested in bringing this serious issue inescapably before the public's eyes and ears.)

By now, you're probably wondering: "What about cursive and signatures? Will we still have legally valid signatures if we stop signing our names in cursive?" Brace yourself: in state and federal law, cursive signatures have no special legal validity over any other kind. (Hard to believe? Ask any attorney!)

Questioned document examiners (these are specialists in the identification of signatures, the verification of documents, etc.) inform me that the least forgeable signatures are the plainest. Most cursive signatures are loose scrawls: the rest, if they follow the rules of cursive at all, are fairly complicated: these make a forger's life easy.

All handwriting, not just cursive, is individual — just as all handwriting involves fine motor skills. That is why any first-grade teacher can immediately identify (from the print-writing on unsigned work) which of 25 or 30 students produced it.

Mandating cursive to preserve handwriting resembles mandating stovepipe hats and crinolines to preserve the art of tailoring.

Yours for better letters,

Kate Gladstone
CEO, Handwriting Repair/Handwriting That Works
Author, READ CURSIVE FAST
Director, World Handwriting Contest

## **SOURCES:**

The cursive comprehension resource READ CURSIVE FAST is available from <a href="https://ReadCursiveFast.com">https://ReadCursiveFast.com</a>, <a href="https://ReadCursiveFast.com/read-cursive-fast/">https://ReadCursiveFast.com</a>, <a href="https://ReadCursive-fast/">https://ReadCursiveFast.com</a>, <a href="https://ReadCursive-fast/">https://ReadCursive-fast/</a>, <a href="https://ReadCursive-fast-Historical-Documents/dp/">https://ReadCursive-fast/</a>, <a href="https://ReadCursive-fast-Historical-Documents/dp/">https://ReadCursive-fast/</a>, <a href="https://ReadCursive-fast-Historical-Documents/dp/">https://ReadCursive-fast-Historical-Documents/dp/</a></a>
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Handwriting research on speed and legibility:

/1/ Arthur Dale Jackson. "A Comparison of Speed and Legibility of Manuscript and Cursive Handwriting of Intermediate Grade Pupils." Ed. D. Dissertation, University of Arizona, 1970: on-line at http://www.eric.ed.gov/?id=ED056015

/2/ Steve Graham, Virginia Berninger, and Naomi Weintraub. "The Relation between Handwriting Style and Speed and Legibility." JOURNAL OF EDUCATIONAL RESEARCH, Vol. 91, No. 5 (May - June, 1998), pp. 290-296: on-line at http://www.jstor.org/stable/pdfplus/27542168.pdf

/3/ Steve Graham, Virginia Berninger, Naomi Weintraub, and William Schafer. "Development of Handwriting Speed and Legibility in Grades 1-9."

JOURNAL OF EDUCATIONAL RESEARCH, Vol. 92, No. 1 (September - October, 1998), pp. 42-52: on-line at http://www.jstor.org/stable/pdfplus/27542188.pdf

Zaner-Bloser handwriting survey: Results on-line at http://www.hw21summit.com/media/zb/hw21/files/ H2937N\_post\_event\_stats.pdf

Ongoing handwriting poll: http://poll.fm/4zac4

The research most often misrepresented by devotees of cursive ("Neural Correlates of Handwriting" by Dr. Karin Harman-James at Indiana University):

https://www.hw21summit.com/research-harman-james

Background on our handwriting, past and present: 3 videos, by a colleague, show why cursive is NOT a sacrament:

A BRIEF HISTORY OF CURSIVE — http://youtu.be/3kmJc3BCu5g

TIPS TO FIX HANDWRITING — http://youtu.be/s\_F7FqCe6To

HANDWRITING AND MOTOR MEMORY

(shows how to develop fine motor skills WITHOUT cursive) —

http://youtu.be/Od7PGzEHbu0

Yours for better letters,

Kate Gladstone

DIRECTOR, the World Handwriting Contest

CEO, Handwriting Repair/Handwriting That Works

http://www.HandwritingThatWorks.com

handwritingrepair@gmail.com