INTegrating computerized legal Research into the undergraduate law curriculum

by

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Computerized data bases are available to expand traditional libraries and to interest undergraduate students in the method and substance of the law. This paper focuses on the Lexis® system by Mead Data Central but there are numerous other companies which offer similar products. The versatility of the chosen data bank, and the host of services available help a school to decide which company best meets its needs.

A computer terminal which connects to a central data base provides a valuable educational opportunity for undergraduate students. Students are able to retrieve the full-text of cases excerpted in brief in their textbooks and thus obtain a fuller understanding of a court's decision. Statutes which are mentioned in the text are readily available on-line.

Both students and faculty (especially those faculty whose law school experience predates computerized legal research benefit from working with this method of legal research. Users become familiar with a standard system of logic which permits the terminal user to formulate a search request. The search request is a series of key words which describe the topic to be researched. For example, a search request "(management or employer) w/7 dominatl w/10 union" would retrieve cases where the word management(s) or employer(s) occurs in the text within 7 words of dominate (or domination or dominating) and the word union(s) occurs within 10 words of the other key words. The computer is literal, and the researcher must at times modify the search request to improve the focus of the material produced for review. A library and file choice dictates the scope of reporters scanned during a search.
Cases are presented in an order relative to their precedential value (highest court first, most recent decision of that court first). The user views compiled research in a variety of formats, including case names and citations, two quick reference formats which focus on a screen of text surrounding the highlighted words of the search request, or in a full-text version. Services are available which Shephardize cases.

As undergraduate students learn about the legal system and begin to recognize legal issues and questions, they become acquainted with the efficiency of computerized legal research and the primary methodology of such research. In contrast to the generalized treatment of a topic in an undergraduate law textbook, computerized legal research promotes student inquiry into the more remote legal issues. For colleges which do not maintain a complete law library, the data bank provides a worthwhile supplement to legal encyclopedias and other limited resource materials. Even for an institution which has a law library, the computerized legal research tool provides several advantages for undergraduate legal instruction. It exposes students to a research method which is relatively new, although one could argue that the topical search process is similar to West's Key Number system. The computer medium motivates many students who have been nurtured on computers. The legal research experience, whether manual or computerized, exposes students to the complexity of the law. A student better understands the reason why the advice of legal counsel is often couched in terms of probabilities after a carefully designed research exercise illustrates that different courts reach different conclusions on the same legal issue, that the decisions of administrative agencies are not always enforced by the courts, and that even the Supreme Court alters its opinion on an issue over the course of time depending upon its membership and many other factors.

Method
At our school, the college community may reserve time on the Lexis terminal in 15 minute blocks. Law faculty and other appropriate staff receive personal identification numbers for logging on to Lexis, and students obtain a number from the library reference desk which permits them to access the data base. Software is available to permit some personal computers to tie into Lexis via a telephone modem.
Faculty and library staff receive a training program from Mead Data and pass on their knowledge to students in small group sessions where students try several tasks. This initial session is mandatory. Students receive handouts prior to the session including Mead Data's "Quick Reference" folder and the "Developing a Search Request" form. Students are expected to formulate a search request concerning a topic or question within the range of subject matter of the particular law course. Students who are interested in an extra-credit project can reserve time for themselves on Lexis® and experiment with their request through selected Lexis® libraries and files.

As the program evolves into the second year, a second terminal will accommodate additional student demand and the increase in mandatory computer research. Students will become familiarized with the system and search out and print a recent case on a selected topic. The advanced undergraduate seminars in law, e.g., Administrative Law, Environmental Law, and Labor Law will require, at the professor's directive, more comprehensive computer research for term papers and other assigned projects.

A Law Library in a Small Space

For institutions not directly affiliated with a law school, the availability of a Lexis® terminal obviates the need to send students to the nearest law school library for research materials. In addition to the text of cases and statutes, a significant number of law reviews are in the data base. Law review articles are a popular source of information for undergraduate term paper writers.

The Nexis® service may also be purchased with the Lexis® terminal which service contains the text of over one hundred publications including newspapers and magazines. Using the same search request formulated for Lexis®, the user may update his/her research with the most recent writing on the topic through Nexis®.

Accounting and finance students are interested in NAARS®, National Automated Accounting Research System, another service from Mead Data which contains annual reports, proxy statements and accounting literature. Our College's paralegal program which is open to enrollment by students in the four-year degree program, has integrated
Lexis® use into courses such as Effective Use of Legal Materials, Advanced Legal Writing, Litigation, and a Seminar in Computer Support for Legal Research. In addition, the graduate program in taxation has made use of the terminal for student research.

Cost Justification

Although our primary concern is with students in undergraduate law courses, the use of a data base by students in other disciplines helps to present a cost justification to those approving college budgets. Flat rates are available for educational users. The benefit of the flat rate is that the college pays semi-annually a set rate regardless of the amount of use on the terminal. Commercial users are billed on the basis of on-line time, the number of searches, and modifications made during searches. The flat rate encourages maximal use by faculty, staff and students since any educational exercise does not result in separate billing. The educational user must identify the course and project when logging on in order to maintain the flat educational rate.

Faculty may utilize personal computers to access the data base via office or home telephone, although the identification numbers will not permit an unlimited number of faculty members to log on at the same time. The disadvantage of educational user status is that the data bank is unavailable 2-5 p.m. Monday through Friday to Non-commercial accounts. Because it is a multiple-user system, this limitation speeds access for the commercial customers during those peak hours for research. Our college community still finds ample time to use the terminals because they are open to use during all library hours.

Faculty Research

The advantage of computerized legal research availability for undergraduate law teachers goes beyond integrating its use into the curriculum. For publication purposes, faculty are able to obtain the most recent cases, statutes, and other materials, in an efficient and comprehensive manner. Because the Lexis® libraries and files do not encompass all court decisions or law reviews, the serious researcher will need to resort to the hard copy of a law library to complete his/her research. And because publications require citation to the pages of official
reporters, the author must match the test to be quoted from a particular Lexis® screen (Lexis® cites the initial page of the official reporter but does not note the subsequent page numbers form the official text) to the appropriate page in the official reporter. Despite these shortcomings, in the academic arena where research and publication remain so important, this research tool is an asset to faculty engaged in research activity.

Conclusion
As an educational device, a computerized data bank exposes the undergraduate student to the legal process and substantive law in the context of a user-friendly research system. In today's fast-paced society, students learn to utilize available technology to maximize their research output. The medium evokes student interest and provides a new opportunity for efficient independent legal research for both students and faculty. Although the method is not a substitute for traditional legal research techniques, it is innovative and complements the traditional methods.

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FOOTNOTE

1. See Appendix for forms, reprinted with the permission of Mead Data Central.
Establishing Communication with LEVIS- / NEXIS:
Press the ESC button on the terminal. After about thirty
seconds, you will receive a message to type your identification
number and press the TRANSMIT key.
After transmitting your personal number, you may identify your
client or search topic and then proceed to the list of libraries
and files. After selecting the library and file you want to search,
you are then ready to enter your search request.

Search Request
A search request can consist of a single word, phrase, number, or
combination of words, phrases or numbers grouped together by
connectors.

Search Words
Noise Words—"We," "that," "and," "is," "of" etc. are not searchable
words. When a noise word is used in a search request, the word
is treated as if it is not present. However, the word will appear in
the text of displayed documents. See the LEVIS/NEXIS Refer-
ence Manual for a listing of noise words.
Reserved Words—Connectors, i.e., "OR" or "AND" are not search-
able. For example, assume you want to find documents that men-
tion the company, Black and Decker. The search, black and
Decker, will look for the word black, anywhere in the document,
and the word Decker, anywhere in the document. To look for the
specific phrase Black and Decker, simply transmit black and
decker.

Search Word Equivalents
• Plurals and Possessives—Regular plural endings (s, es and is) and
possessive endings (s's or a) are automatically retrieved.
For example, a search for the word city will also retrieve cities,
'city's and cities'. A search for child will also retrieve child's, but
not children.
• Hyphenated Words—A hyphen is treated as a space between
two words. For example, fail-safe retrieves fail safe, but fail-
safe.
• Universal Characters—An exclamation mark (!) at the end of
a word or prefix retrieves all possible endings as well as the
word or prefix itself. For example, terminal will retrieve ter-
minal, terminating, terminating, termination, etc. An asterisk (*)
or asterisks placed within a word will take the place of any
character that might appear in that place. For example,
women will retrieve woman or women. Multiple asterisks used
at the end of a word will find one or more letters, up to the
number of asterisks used. For example, depre*acy will find
depreciate, depreciation, depreciated.
• Dates—For date searches, the dates may be written in a
number of equivalent ways: December 10, 1972; Dec. 10, 1972;
10 Dec 1972, 12/10/72, 12-10-72, etc. Dates may be written
with day, month and year; with month and year, or with year only.
• Other Equivalents—Certain words or terms are treated as
direct equivalents of each other. For example, Monday will also
retrieve Mon., M.R.S. will also retrieve MRS. A more thorough
discussion of equivalent terms can be found in the equivalents

Search Logic/Connectors
• speech on press—Either the word speech or the word press
must appear somewhere in the document.
• speech who censor—Both the word speech and the forms of
the word censor! must appear in the document within 10
words of each other.
• inflation and housing—Both words must be in the same
document.
• pay plus television—Both words must be within six words
of each other, and pay must precede television.
• speech when censor—Both the word speech and forms of
the word censor! must appear in the document, and both
words must appear in the same segment.
• speech not who censor!—The document must contain at least
one occurrence of the word speech that is not within ten
words of forms of the word censor!
• speech not when censor!—The document must contain at least
one segment in which the word speech appears, but
forms of the word censor! do not appear.
• speech and not censor!—The document must contain the
word speech but forms of the word censor! cannot appear
anywhere in the document.

Combination of Connectors
Connectors join words in the following priority:
OR
AND
AND

Each connector joins the words or phrases it connects before
any connector lower on the list does so. A OR B AND C means
(A or B) and C. To change the sequence in which the connec-
tors operate, use parentheses—e.g., A (OR B) AND C.

When two or more AND, OR, or NOT are used consecutively,
the one with the smallest number joins words first—e.g.,
A and B when C means (A and B) when C. If the numbers are
equal, the connectors operate from the left to right.

Search Strategy
1. State your problem in a few concise sentences.
2. Select a library and file appropriate to the problem described
in your statement. Different files often use specific language
or terminology that will affect the words you include in your
search request.
3. Select words, phrases or numbers you think most likely to
appear in a document dealing with your research problem.
Select terms representing concepts as well as specific facts.
Use universal characters, i.e., where appropriate.
Remember: some words have equivalents: regular plural and
possessive endings are added automatically (car = cars = car's
= cars'); and a hyphenated word is read as two words.
4. Select connectors to establish a relationship between words
and expressions.
Be wary of set phrases—freedom wir speech is a more com-
prehensive search than freedom of speech.
5. If appropriate, arrange the search in levels. Using modifications
gives you more flexibility, allowing you to more efficiently con-
trol your search.
6. Take time to browse through your search results. Reviewing retrieved documents in the RNC format is a low cost way of validating your search results.

Special Searches
It is possible to limit searches to a specified segment, such as opinions written by a particular judge, or a section of a publication, or a date of publication. Special searches can be helpful in narrowing your search request to a precise topic. The types of special searches that may be done vary from file to file. You can find more detailed information about special searches by referring to the Quick Reference folder or the LEXIS/NEXIS Reference Manual.

Choosing a Display Format*

<table>
<thead>
<tr>
<th>Format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNC</td>
<td>Displays the bibliographic reference or citation, date and search terms with 15 words (15 words for NEXIS) of text on either side of your search terms.</td>
</tr>
<tr>
<td>WAR</td>
<td>Works the same fashion as RNC, but it displays 50 words (30 words for NEXIS) of text on either side of your search terms. The number of surrounding words may be increased or decreased by typing a number from 1 to 999 before pressing the KRN key.</td>
</tr>
<tr>
<td>FULL</td>
<td>Displays the full text of a document.</td>
</tr>
<tr>
<td>RFPS or CITE</td>
<td>Displays a list of bibliographic references or citations for the retrieved documents.</td>
</tr>
<tr>
<td>SEGMENTS</td>
<td>Displays the reference cite and date of the document, and the full text of any one or more segments selected from a display list.</td>
</tr>
</tbody>
</table>

The RSEARCH key may also be used to determine the cost of a search request in any file. While you are viewing a file menu on the screen, you may press the RSEARCH key and the cost of a search in any of the files shown on the screen will be displayed.

Reviewing Your Search Request

Displays a summary of your current search request.

Modifying a Search Request

Add more terms by linking new terms to the preceding level with a connector.

Edit existing terms by typing the number of the level you wish to edit, pressing the F (for modify) key, then the TRIM key. Type a new search level or, using the arrow keys, edit the existing request. Remember to move the cursor to the end of the edited level before transmitting. The example to the left shows the steps to modify level 2.

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**LEXIS** NAMES AND EXCHANGE after variables in display formats. For more information refer to your Quick Reference folder or Reference Manual.

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Beginning a New Search

| CHG | A New Library |
| LB | |
| CHG | A New File |
| FILE | (Remember files are units within a library.) |
| NEW | The Same File |
| SEARCH | |

Repeating Your Last Search Request In a New File or Library

After you select a new file in the same library (CHG FILE) or a new library (CHG LB), your last search request will be displayed on the screen. You may use this search request as it is, edit or submit an entirely new search request.

Browsing Retrieved Documents

<table>
<thead>
<tr>
<th>NEXT</th>
<th>PAGE</th>
<th>PREV</th>
<th>PAGE</th>
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<tr>
<td>PAGE</td>
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</tbody>
</table>

Moves to the next or to the previous page (screen) of the document you are viewing. If you are in the RNC or WAR RNC format, you will move to the next or previous page on which your search terms appear, even if they are in the next or previous document.

NEXT | DOWN | PAGE | PREV | UP | PAGE |
<table>
<thead>
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<td>PAGE</td>
</tr>
</tbody>
</table>

Moves ahead or back the number of pages you want to move. Type in the number you want to move and press the NEXT PAGE or PREV PAGE key. In the example given on the left, you will move ahead or back three pages.

TRANSMIT

Shows you the length of the document you are viewing by indicating the number of screens it will take to display the document in the format you have chosen. (Not available in RFPS or errs format.)

ROLL | ROLL |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UP</td>
<td>DOWN</td>
</tr>
</tbody>
</table>

Scrolls the text up or down. Tap the key to move one line, hold the key down to move more than one line. You cannot scroll into the preceding or succeeding documents.

FIRST | PAGE |
|------|------|

Scrolls the first page of the document you are viewing. If you are in the RNC or WAR RNC format, the first page on which your search terms appear will be displayed.

NEXT | DOC | PREV | DOC |
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>DOC</td>
<td>DOC</td>
<td>DOC</td>
<td></td>
</tr>
</tbody>
</table>

Moves to the next or previous document. If you are in the RNC or WAR RNC format when you press the key, the first page on which your search terms appear will be displayed.

NEXT | DOC | PREV | DOC |
<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>DOC</td>
<td>DOC</td>
<td>DOC</td>
<td></td>
</tr>
</tbody>
</table>

Moves ahead or back more than one document. Type in the number of documents you want to move and press the NEXT DOC or PREV DOC key. In the example given on the left, you will move ahead or back three documents.

FIRST | DOC |
|------|-----|

Displays the first page of the first retrieved document that satisfies your search request. If you are in the RNC or WAR RNC format, the first page on which your search terms appear will be displayed first.

Continued on the next page
<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP</td>
<td>Displays documents retrieved at a different level of the multi-level search request. Type in the number of the level you want to view and press the DP or Lev key. The example at the left will display documents retrieved on the second level of the search.</td>
</tr>
<tr>
<td>PRNT</td>
<td>Prints a copy of the text that is displayed at the time the key is pressed. You may continue your research without waiting for the printer to stop.</td>
</tr>
<tr>
<td>PRNT DOC</td>
<td>Prints a particular document you have retrieved: Press the menu DOC key to print the document in full. The screen will display the number of printed pages the document contains and ask you to confirm, cancel or change the display format.</td>
</tr>
<tr>
<td>TRANSMIT</td>
<td>To confirm, press the y (for yes) key and then the TRANSMIT key. To cancel, press the n (for no) key and then the TRANSMIT key.</td>
</tr>
<tr>
<td>ENRC</td>
<td>To print the document in a different format, press the appropriate display format key, for example, the enrc format. You will again confirm, cancel or change the request.</td>
</tr>
<tr>
<td>MAIL</td>
<td>To print the text of all the documents you have retrieved at the current search level, press the mail it key, followed by a display format key (enrc, full, etc.). A display format key must be pressed immediately after pressing mail it. This example shows how to order a mail it in the full format. You will confirm or cancel the request. To confirm, press the y (for yes) key. To cancel, press the n (for no) key.</td>
</tr>
</tbody>
</table>

### Selecting Other Services
- **SELECT** allows you to select additional services that are available, such as Auto-Cite™ Shepard’s® and ECLIPSE.
- **ECLIPSE** (Electronic CLIPping ECLipse) allows you to follow the development of a topic automatically. Any search can be saved and updated on a daily, weekly or monthly basis. A hard copy print will be produced in the format of your choice.
- To use ECLIPSE you must first perform a search and then press the SELECT serv key. Instructions for saving, recalling, changing or deleting your request will appear on the screen.
- **EXIT** allows you to return to your research.
- **TRANSMIT** gives you access to a set of specific tutorials about every aspect of doing research—strategy, connectors, words, modifying, browsing, etc.

### To Store or End Your Research
- **SIGN OFF** ends your research and displays a summary of your last search request. Follow the screen instructions to store your research and continue it later in the day. (Press again if you change your mind and do not want to sign off.)

### Terminal Malfunction
- **RESET** clears any apparent malfunction by pressing the RESET button and then the STOP key. Follow screen instructions to regain research.

### LEXIS/NEXIS Hours
- **Monday through Friday**: Available all hours except 2:00 a.m. to 2:15 a.m. (Eastern Time)
- **Saturday, Sunday, New Year’s Day and Christmas Day**: 7:30 a.m. to 10:00 p.m. (Eastern Time)

#### Peak Hours
- **Daily**: 7:30 a.m. to 7:30 p.m. (Local Time)

#### Off-Peak Hours
- **All hours during which LEXIS/NEXIS are available that are not peak hours.**

### Auto-Cite™ Hours
- **Monday through Friday**: 8:00 a.m. to midnight (Eastern Time)
- **Saturday and Sunday**: 10:00 a.m. to 10:00 p.m. (Eastern Time)

### Customer Service (Toll Free)
- **Please be prepared to give the Customer Service Representative the property tag number on your Mead Data Central equipment, if your call concerns equipment.**
  - On Deluxe terminals this number can be found on the silver swing arm for your terminal screen.
  - On UBSO terminals this number is located in the upper left hand corner of the keyboard.
  - On desk-top printers it is located on the front of the printer.
  - On offline printers it is located inside the red door.

**800-643-8862 or 913-888-1628 (collect) if toll-free line is busy.**