DOCUMENT RESUME

ED 122 309 CS 202 725

AUTHOR Michael, Gary; Sliger, Mary
TITLE Language Arts Routing System (LARS) Instructor's Manual. Community College English Project.
INSTITUTION Illinois Univ., Urbana. Computer-Based Education Lab.
SPONS AGENCY National Science Foundation, Washington, D.C.
PUB DATE Feb 76
CONTRACT US-NSF-C-723
NOTE 42p.; Some pages may reproduce poorly due to small type
AVAILABLE FROM Plato Publications, Computer-based Education Research Laboratory, 252 Engineering Research Laboratory, University of Illinois, Urbana, Illinois 61801 ($2.50 prepaid)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage
DESCRIPTORS Basic Skills; *Computer Assisted Instruction; Higher Education; *Language Arts; *Manuals; *Remedial Instruction; *Remedial Programs
IDENTIFIERS *Language Arts Routing System; LARS; Plato IV System

ABSTRACT

Implemented on the PLATO IV computer-assisted instruction facility located at the University of Illinois at Urbana-Champaign, the Language Arts Routing System (LARS) is a package of lessons and tests designed to provide remedial training in certain basic language arts skills. LARS is a system which may be used by itself or as an adjunct to regular in-class instruction. By taking over the responsibility of diagnosing and treating basic skill deficiencies, the computer allows the instructor to devote more time to less didactic, more rewarding teaching activities which require a higher degree of human interaction. This document describes LARS; provides a rationale for the system; describes the functions of the instructor, including entering the course roster, specifying the curriculum sequence, monitoring student progress, reading and writing notes, and prescribing supplementary aid; describes the LARS curriculum, including spelling, word usage, grammar, and punctuation; discusses student performance data, including the progress report, diagnostic test scores, and lesson data; and describes student views of LARS. (TS)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED122309

LARS INSTRUCTOR'S MANUAL

Language Arts Routing System

Gary Michael
Mary Sliger

COMMUNITY COLLEGE ENGLISH GROUP
February 1976

BEST COPY AVAILABLE

COMPUTER-BASED EDUCATION RESEARCH LABORATORY
University of Illinois
Urbana, Illinois

CS 207 786

PERMISSION TO REPRODUCE THIS COPY RIGHTED MATERIAL HAS BEEN GRANTED BY

Board of Trustees of the University of Illinois

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

Copyright © February 1976
by Board of Trustees
of the University of Illinois

All rights reserved. No part of this book may be reproduced in any form or by any means without permission in writing from the authors.

This manuscript was prepared with partial support from the National Science Foundation (USNSF C-723) and the University of Illinois at Urbana-Champaign.

ACKNOWLEDGMENTS

Many people have contributed to the success of the Language Arts Routing System. It would be impossible to name all of the instructors, site personnel, students, and obliging friends who have taken the time to review lesson material and diagnostic questions, offer ideas and constructive criticism, and serve as guinea pigs during the early debugging phases of the project. Instead, the following is a list of those individuals who have been formally associated with the project at one time or another since its inception in January of 1974.

Administration:	Daniel Alpert Pauline Jordan
Teacher Liaison:	Jim Williamson
System Design:	Gary Michael
Programming:	Irena Finkelsztein Alexander Dimitrief Karen Lantz Caryn Sedloff
Test Design:	Mary Sliger Dorothy Rosen Peg Steffensen

Special thanks are due the authors of the instructional lessons which were adapted for use with LARS. Without their cooperation and advice, the goals of the project would have been unattainable within the time-frame allowed.

Doris Barr	Errol Magidson
Robert Bator	Rita Silveri
Betty Cain	Joan Sweany
Barbara Geaither	Marguerite Thompson
Elise Gorun	Sally Wallace
William Ibbs	Mitsuru Yamada
Delores Lipscomb	

Finally, an extra note of appreciation is due Pauline Jordan, our project coordinator, who alternately begged, demanded, cajoled, and congratulated us into writing this manual, two months after it was needed but three months before we wanted to.

Champaign-Urbana
February 1976

Gary Michael
Mary Sliger

PAGE

ACKNOWLEDGMENTS i

TABLE OF CONTENTS iii

FOREWORD v

DESCRIPTION 1

RATIONALE 1

Environment 1
Design Criteria 2

FUNCTIONS OF THE INSTRUCTOR 3

Entering the Course Roster 3
Specifying the Curriculum Sequence 3
Monitoring Student Progress 4
Reading and Writing Notes 4
Prescribing Supplementary Aid 5

THE LARS CURRICULUM 5

Spelling 6
Word Usage 6
Grammar 6
Punctuation 7

STUDENT PERFORMANCE DATA 8

Student Progress Report 8
Diagnostic Test Scores 9
Lesson Data 10

THE STUDENT VIEWPOINT 10

EPILOGUE 12

APPENDICES 13

A: Questions & Answers 15
B: LARS Curriculum Catalog 19
C: Instructor Signon Sequence 29
D: Student Introduction to PLATO 33
E: LARS Routing Modes 37
F: On-Line Communication 39

FOREWORD

This document is intended to serve two different purposes. For instructors who desire to know what the Language Arts Routing System is and how it can be used in conjunction with their classes, a portion of this manual is devoted to a general overview of the capabilities of LARS. For the teacher who has already decided to use the system, this manual provides detailed information necessary to setting up a course, designing a curriculum, introducing students to PLATO, monitoring their progress, and evaluating individual and class performance data.

The organization of this manual emphasizes its twofold purpose. The basic structure of LARS is presented first, so the prospective teacher or interested browser can get a quick picture of what LARS is all about. The information needed by a teacher who will be using LARS is contained in six working appendices whose function is fully realized only in connection with actual "hands-on" PLATO experience.

It should be noted that certain features of LARS are still under development. Since completion is expected within a month of publication of this manual, such features are discussed herein as if they were, in fact, already accomplished. This should cause no severe problems as the unfinished portions are not integral to operation of the system, but rather supplementary capabilities that are being implemented at the request of students and instructors.

Lastly, a warning is in order. PLATO is an experimental CAI system; new features are constantly being added and old ones modified. This manual will gradually become less useful as it falls hopelessly behind in its race against a dynamic, evolving medium.

THE LANGUAGE ARTS ROUTING SYSTEM

DESCRIPTION

Implemented on the PLATO IV computer-assisted instruction facility located at the University of Illinois at Urbana-Champaign, the Language Arts Routing System is a package of lessons and tests designed to provide remedial training in certain basic language arts skills. LARS is a stand-alone system which may be used by itself or as an adjunct to regular in-class instruction. By taking over the responsibility of diagnosing and treating basic skill deficiencies, the computer frees the instructor to devote more time to less didactic, more rewarding teaching activities which require a higher degree of human interaction.

The LARS curriculum is composed of instructional modules which deal only with elementary verbal skills that can be distilled down to a rule or set of rules. Routing the student to instruction on the basis of diagnostic tests constructed around such rules, LARS provides an efficient means of delivering individualized, self-paced instruction on those topics most needed by the student.

While allowing the student some freedom of choice, movement through the complex of lessons is governed by a curriculum structure specified by the individual instructor. A student completing the assigned sections of LARS may demonstrate an acceptable level of competence. When a student exhausts the capabilities of the system without having met certain minimal criteria, the teacher is notified so that special attention may be given. LARS thus performs a diagnostic function in isolating those individuals who require additional help.

RATIONALE

In order to adequately understand the structure of LARS, it is necessary to recognize the environment in which it operates and the rationale behind its design.

Environment

LARS was developed in connection with the Community College English Project to provide a remedial package which could be used by four city colleges

in Chicago[1] and one community college in Champaign.[2] The four Chicago PLATO installations are located in learning resource centers. The Parkland College site occupies a large, centrally-located room housing only PLATO terminals.

It is difficult for an instructor to provide educational supervision to students who will be working on many different tasks and who may drop in for a session during a free period in addition to scheduled terminal time. For a testing/instruction package to work under such conditions, it must handle all of the complex courseware management tasks for the teacher, requiring little or no outside supervision.

Design Criteria

All too often the teacher is confronted by a classroom of students whose abilities vary so widely that it is impossible to present material at a level and rate which will not be beyond the capabilities of some individuals while simultaneously forcing well-prepared students to go at a slower pace. This is particularly a problem in the beginning college English course, where the wide range of deficiencies prevents coordinated class activities.

LARS allows the teacher to assign the task of identifying students needing remedial help to the computer, which administers tests and prescribes appropriate instructional material designed to teach specific skills. Students who proficiency diagnostic test sections bypass the associated lesson material.

Three guidelines must be met if LARS is to accomplish its goals.

Enable teachers to specify curriculum requirements.

Student and curriculum options permit an instructor to specify both instructional content and additional activities available to the class. Default specifications operate if teacher-prescription options are not exercised.

Allow students to progress at their own pace.

The demands placed upon a student's time are many and varied; requiring

---

[1] Chicago Urban Skills Institute, Kennedy-King College, Malcolm X College and Wright College

[2] Parkland College

unnecessary busywork would defeat the primary goal of LARS, that of minimizing the time and energy demanded of both student and teacher.

Give students some control over the learning process.

Various factors dictate that the student be given the power to terminate study of a particular topic and go on to the next. The instruction available may not be suited to the student's learning style or the task may simple be beyond his present ability. It is also desirable to give the student a decision-making role to foster involvement in his studies.

Several LARS features tend to generate feelings of active participation: students are encouraged to write comments about the lessons they see; prescribed review may be bypassed at the individual's discretion, remaining available for study in the future if desired; sessions may be begun or ended at the student's convenience, subject to terminal availability; supplementary instruction and educational gaming activities are available to students who finish the basic skills curriculum and wish to continue PLATO sessions.

FUNCTIONS OF THE INSTRUCTOR

The teacher who elects to use LARS as a part of class-time or in connection with regular instruction must spend a minimum amount of time at the terminal prior to actual student usage. There are five basic functions which can be handled only semi-automatically by the computer. Of these, specification of the manner in which students will be recognized by PLATO is the only one which absolutely cannot be omitted or neglected by the instructor.

Entering the Course Roster

The PLATO system parallels the classroom environment. Thus, for a student to receive instruction he must first be registered in a course roster kept by the computer. An instructor must enter the name of each student who will use the computer; any person whose name does not appear on the PLATO course roster will not be able to take lessons.

Specifying the Curriculum Sequence

The LARS curriculum is composed of 54 topics. The instructor selects both the topics and the order of presentation. If no sequence is chosen by

the teacher, a default curriculum composed of all topics, arranged in an order used by several community college instructors, is automatically presented. (The default sequence is listed in Appendix B of this manual.) Ultimately, class needs and teacher preference determine which diagnostic instructional categories should be included in the course curriculum sequence.

Monitoring Student Progress

The diagnostic tests, instructional lessons, and decision functions which control student routing in LARS have been designed to minimize necessary supervision. Yet a teacher must be kept aware of student progress. LARS provides both individual and group analyses of student data.

Reading and Writing Notes

Communication among instructors, students, and LARS maintenance personnel takes various forms. Geographic location, schedule conflicts, and personal convenience make the computer an ideal tool for relaying messages to individuals or for holding extended discussions. There are four distinct note facilities available to instructors.

Student Notes: Students are encouraged to write comments about the various lessons. Such user reactions provide a good source of information for evaluating instructional materials, improving content presentation, and eliminating any remaining programming errors. The ability to continually revise lessons as a result of student data is one of the unique features of computer-based instruction. Instructors should answer notes written by their students. Minor lesson problems may also be reported here, such as misspellings, punctuation errors, unclear directions, and questionable answer judging.

Bulletin Board: This file is used to communicate plans and changes about the LARS system to instructors and local site personnel. It also serves as a forum for pedagogical discussions and suggestions for future improvements.

Personal Notes: A mailbox facility enables instructors to communicate with non-students such as LARS staff members, PLATO consultants, or local site people. Such notes are keyed to an individual's name and course; it can only be read by the addressee.

Class Messages: Class announcements or messages to individual students may be sent through the PLATO course roster. Such notices are seen the next time the student signs on.

Prescribing Supplementary Aid

The testing feature of LARS is designed to measure students' entrance and exit performance levels for each language arts skill. They are routed through the cycle of pretest, instruction, and posttest; either mastery is achieved or remedial sequences are taken at least once. It is, however, possible for a student to exhaust the capabilities of the system without having learned a particular skill. Although the student is encouraged to review previously studied material under these circumstances, LARS allows the student to go on to the next topic, advising him to see the teacher for extra help.

THE LARS CURRICULUM

Curricular materials are organized into 54 discrete language arts skills. LARS treats each skill as a distinct *category*. Each category is operationally defined and considered to be independent of all others. Obviously, the assumption of independence is not totally valid. For instance, there is a direct relationship between a student's ability to use quotation marks in direct quotations and his chances of using them correctly in indirect quotations. However, since the pattern of language arts deficiencies in students cannot be anticipated, individual skills must be diagnosed and treated separately.

The LARS question bank is composed of items classified into the 54 categories. Each diagnostic question is designed to detect deficiency in only one category. Both the selection of questions and the order of presentation are randomized so that no two tests are identical; the number given in each category varies. A better idea of the content of the topics can be obtained by reviewing the diagnostic test items. The results of diagnostic testing are used by the master routing program to prescribe appropriate instructional modules.

In most pretests, complete mastery is required to proficiency the associated instruction. Category posttests are composed of questions generated from the same item pool as the pretests. By comparing pretest and posttest scores, the instructor can monitor student progress, offering individualized attention to those who experience difficulty in learning certain skills.

Modules teach one isolated skill, although they may contain more than one lesson. Lesson boundaries serve primarily as convenient stopping points, providing a logical place for the student to continue at the next session.

An on-line lesson catalog facilitates the evaluation of the lessons. The catalog contains a descriptive summary of each lesson as well as information on necessary prerequisites and estimated completion time. For ease in lesson review, instructors may access lessons directly from the catalog.

The LARS categories are classified into four groups: spelling, word usage, grammar, and punctuation. The teacher's choice of categories is not restricted by this classification. The categories included in each of the four groups are listed below.

Spelling

"S" Plurals
"Y" Plurals
"O" Plurals
"F" Plurals
Irregular Plurals
Vowel Changing Plurals
"ES" Plurals

Word Usage

Using it's & its
Using whose & who's
Using their, there & they're
Using your & you're
Using to, two & too
Confusing Word Pairs
All right/All ready/All together

Grammar

Sentence Fragments
Run-on Sentences
Subject-Verb Agreement: Basic
Subject-Verb Agreement: Intermediate
Pronoun Case
Pronoun Number
Relative Pronouns
Present Tense

Past Tense
Future Tense
Present Perfect Tense
Confusing Verbs: lie/lay
Confusing Verbs: raise/rise
Confusing Verbs: sit/set
Irregular Verbs
Dangling Participles
Infinitives
Gerunds & Gerund Phrases
Double Negatives
Singular Possessives
Plural Possessives
Subject-Verb Agreement: Advanced

Punctuation

Sentence -- Capital & Period
Semicolons & Sentences
Semicolons in a Series
Contractions
Indirect Quotations
Direct Quotations
Split Quotations
Comma & Conjunctions
Commas Used in Series
Restrictive/Nonrestrictive Clauses
Comma & Introductory Phrase
Comma & Introductory Clause
Commas & Appositives
Comma & Direct Address
Commas with Parenthetical Expressions
Comma with too
Comma with Tag Questions
Capitalizing "I", Names, and Titles

The order in which categories appear in the above groups parallels what an instructor setting up a curriculum sequence sees. It should not be used as a pattern since it merely reflects the inner structure of the computer program rather than any pedagogical considerations.

STUDENT PERFORMANCE DATA

Information on student abilities and progress in the curriculum is constantly being collected and analyzed by LARS. Such data provides a basis for the dynamic judgments the system must make while routing the student through the maze of tests and lessons. The information, however, is stored in a form which is not particularly meaningful to an instructor. For this reason, LARS provides several interpretive displays which aid the teacher in keeping track of class performance. Data on student test results, progress in the curriculum, individual lesson times, and PLATO attendance records are available.

Student Progress Report

The student progress report summarizes the individual's status for the instructor. It provides a concise statement of total instructional time and the date of last contact, the current skill category and title of the lesson being studied, and an estimate of the student's rate of progress in terms of the number of categories finished.

Diagnostic Test Scores

Diagnostic test results of individual students are available to the instructor as part of the student performance data package. The table below illustrates how category scores are reported.

Pretest		Posttest		Category
38%	↑	62%		Sentence Fragments
86%	=	86%		Run-on Sentences
100%		----		Subject-Verb Agreement: Basic
50%	↑	100%		Subject-Verb Agreement: Intermediate
67%	↓	50%		Direct Objects
71%			↔	Indirect Objects
				Present Tense
				Past Tense
				Future Tense

Diagnostic category scores measure entry and exit performance levels of instructional topics. The column between pretest and posttest scores tells at a glance whether performance has improved (↑), remained the same (=), or declined (↓). Since a passing score on the pretest causes lesson material to be bypassed, no posttest is given. The dashes indicate this. The list of categories is arranged in the order they are studied. The pointer (↔) marks the current topic.

Students are given their category score immediately after finishing the test; they also have the option of viewing their cumulative test scores.

Lesson Data

Time data collected by LARS as the individual works through each lesson is another source of information about student learning behavior. One function of such data is to identify the student who spends a much greater than average length of time in a particular lesson. This may indicate that the student is having difficulty in getting through the lesson and may benefit from some individual attention, particularly if such a pattern is repeated. A sample display of lesson activity times appears below.

T_{1st}	T_{total}	Lesson Description
11	11	Double Negatives
9	35	Subject-Verb Agreement II
5	5	Possessive Pronouns
12	15	Word Confusions
17	26	Subject-Verb Agreement I

Lesson data is a record of the time spent by a given student in various instructional lessons. It is broken down into two components, T_{1st} and T_{total}. Both figures are reported to the nearest minute. T_{1st} is the amount of time the student studied the lesson without interruption the first time it was encountered. T_{total} is the total time spent in a given lesson, which equals T_{1st} plus review time.

The descriptive title of the lesson appears to the right of the time data. It should be noted that the order in which the lessons are listed is NOT the order in which they were taken; the listed order is an artifact of the way the data is stored and should be disregarded.

THE STUDENT VIEWPOINT

Thus far, little has been said about how LARS appears to the student using it. Since it is the student, after all, who takes the tests and studies the lessons, some consideration must be given to ensuring that the learning experience offered by LARS is both interesting and beneficial.

The following is a facsimile of the STUDY OPTIONS page presented to students between each individual lesson.

Press LETTER of choice:

a) Continue with your next assignment.
b) Review lessons you have already taken.
c) See your test scores and current status.
d) Write a comment.
e) Relax with an educational English game.

The student is always free to select from the first four options, the fifth being available only toward the end of the daily session.

The educational games have been carefully selected to motivate the student to use the language arts skills taught by LARS. There are currently five such activities for the student to choose from.

Wordwar: An interterminal spelling competition that enables students to challenge each other to a "War of the Words."

Forum: A computer-conferencing facility which allows individuals to comment on issues confronting contemporary society and how they should affect public policy.

Hangman: A variant of the well-known children's game. Players must guess the target word one letter at a time, using a knowledge of word structure and letter frequency to solve the puzzle.

News: The Red Sweater News Service, a computerized newspaper compiled solely from articles and columns contributed by its readers.

Talkomatic: A communication channel which lets students type messages to one another, thus affording practice in the translation of verbal skills to written language.

EPILOGUE

LARS is a new tool available to the English teacher. Simplifying and standardizing the process of providing remedial instruction in the language arts skills, it offers a unique opportunity to both student and teacher. Its full implementation could only be realized as a result of computer-based instruction, a new, untried medium whose attributes are only now being understood, whose potentialities are still largely untapped and unexplored.

The PLATO experience could revolutionize patterns of education, releasing the instructor from the didactic aspects of teaching to devote more time to facilitating the individual learning process.

APPENDICES

Except for Appendix A, the following appendices are intended to aid the instructor to sign on to the terminal and prepare a PLATO course for classroom use. They are probably of little value except as materials which may be referred to while seated at a terminal in order to obtain hands-on experience.

APPENDIX A: Questions & Answers

What is LARS?

LARS is the acronym of the Language Arts Routing System, a computer-based package of diagnostic tests and instructional materials designed for remedial English skills.

What is a routing system? What is its purpose?

A routing system is a mechanism which uses information about an individual's needs and abilities, curriculum goals, and what lesson material is available to select appropriate instruction for the student. It serves to individualize the learning process by tailoring curriculum content to the educational requirements of the student rather than lockstep everyone into studying oftentimes unneeded material.

What does LARS consist of?

LARS consists of instructional lessons, diagnostic tests, comment and note files, instructor control options for student and curriculum supervision, data collection routines, and student performance displays.

How were the lessons produced?

The original lessons on which LARS is based were produced mainly by Community College instructors on release-time or at their own initiative, being designed primarily for use with their own classes. LARS staff adapted this body of material with the help of the authors so that it would be of use to a wider audience with a variety of needs and curricular requirements. New lessons were written by the Community College English Project to fill some gaps in the LARS curriculum.

How were the questions produced?

The diagnostic question bank which serves as the item pool for all pre- and posttests in LARS was constructed by Community College English staff at the University of Illinois Computer-based Education Research Laboratory. As questions covering specific skills were created, community college instructors reviewed them and recommended changes. On-site observation of students taking the diagnostic tests helped to identify ambiguous or badly worded questions.

How many questions are in pre- and posttests? How long do they take? How are they generated?

Although both pre- and posttests of a given skill contain the same number of questions, different skill deficiencies may require administration of a varying number of diagnostic questions. Each test is short, containing from 3-9 items usually requiring mastery. It is typical to finish a test in under five minutes. Tests are composed of the required number of items selected at random from the pool associated with the given topic.

How many lessons are there? How long are they? What areas do they cover?

There are over 65 separate instructional lessons which range from 5-45 minutes in length, averaging about 10 each. The lessons cover the four language arts skill areas of spelling, word usage, grammar, and punctuation.

How are the lessons structured within each category?

Since skill categories are independent of actual lesson material, LARS is able to specify variable interconnections between lessons. Thus certain lesson segments which cross category boundaries may be referred to by more than one diagnostic skill. This capability allows the master routing program to prescribe a lesson that formally belongs in another category, but which the student has not mastered sufficiently to be able to complete the current one. Students are thus sometimes routed through a lesson more than once when warranted by poor performance.

What information will a teacher receive from LARS?

Student performance data available to the teacher includes time the student has spent on the terminal as well as times on each instructional lesson, pre- and posttest scores on individual skill categories, and current status of the student in the curriculum. The data is displayable in several ways for both individuals or the entire class.

How is LARS different from the system router?

The primary difference between LARS and the standard PLATO router is in the testing/prescription function. In the system router there is no way that test scores can be used to determine what lessons a student needs. It is composed of indexes or sequences of lessons specified by the instructor.

LARS inserts one level of computerized management between the teacher and lesson material, making it possible for the instructor to specify only the behaviorial objectives desired and allowing the computer to prescribe material on an individual basis which will meet those ends.

How can I look at what LARS has to offer?

By signing on at a terminal under the name "instructor" of course "larsdemo", you will be able to inspect LARS teacher options and lesson material. To view LARS as a student, use the signon "student" of course "larsdemo".

How can my class use LARS?

You should make arrangements with your local site personnel regarding terminal availability and scheduling policies. They will also be able to provide you with a PLATO course roster for your class and teach you how to sign on to the terminal. Then you must enter your students' names in the roster and request to review PLATO lesson "lars". LARS will then present you with the option of specifying the curriculum structure which will be used for your class. If no curriculum is constructed, LARS will use the standard default sequence.

APPENDIX B: LARS Curriculum Catalog*

CATEGORY	LARS LESSON	PAGE
GRAMMAR		
Sentence Fragments	114	22
	79	22
	77	22
	76	22
	85	22
Run-on Sentences	40	22
	105	22
Sentence--Capital and Period	20	22
	101	22
Semicolons and Sentences	40	22
Subject and Verb Agreement, Basic	128	23
	127	23
	19	23
Subject and Verb Agreement, Intermediate	122	23
Subject and Verb Agreement, Advanced	62	23
Pronoun Case	66	23
	68	23
	73	23
	74	23
Pronoun Number	71	24
	143	24
Relative Pronouns	65	24
Present Tense	14	24
Past Tense	16	24
	14	24
Future Tense	16	24
	14	24
Present Perfect Tense	15	24
Confusing Verbs "Lie/Lay"	49	24
	126	24
Confusing Verbs "Raise/Rise"	49	24
	126	24
Confusing Verbs "Sit/Set"	49	24
	126	24
Irregular Verbs	50	24
	53	24
	52	24

* The order of the LARS Curriculum Catalog is also that of the *default sequence.*

CATEGORY	LARS LESSON	PAGE
GRAMMAR (cont.)		
Dangling Participles	87	25
Infinitives	132	25
Gerunds and Gerund Phrases	99	25
Double Negatives	86	25
	100	25
PUNCTUATION		
Singular Possessives	61	25
	141	25
Plural Possessives	13	25
	142	25
	64	25
Comma and Introductory Phrase	97	26
	9	26
	87	26
Comma and Introductory Clause	97	26
	9	26
Comma and Conjunctions	96	26
Restrictive/Nonrestrictive Clauses	97	26
	163	26
Commas and Appositives	36	26
Comma and Direct Address	97	26
Commas with Parenthetical Expressions	97	26
Comma with Too	37	26
Comma with Tag Question	97	26
	38	26
Commas Used in Series	98	26
	35	26
Indirect Quotations	106	26
Direct Quotations	106	26
Split Quotations	144	27
Semicolons in a Series	41	27
Capitalizing "I," Names and Titles	101	22
Contractions	70	27
	128	23

CATEGORY	LARS LESSON	PAGE
USAGE		
Using "it's" and "its"	70	27
	25	27
	31	27
Using "whose" and "who's"	70	27
	25	27
Using "their," "there" and "they're"	70	27
	25	27
	30	27
Using "your" and "you're"	70	27
	25	27
Using "to," "two" and "too"	33	27
Confusing Word Pairs	24	27
	34	27
All right/All ready/All together	133	28
SPELLING		
"S" Plurals	18	28
"ES" Plurals	12	28
"Y" Plurals	56	28
"O" Plurals	124	28
"F" Plurals	135	28
Irregular Plurals	58	28
	59	28
Vowel Changing Plurals	55	28

LARS 114: Sentence Recognition

a. Sentences
b. Clauses
c. Sentence quiz
d. Harder sentence quiz

LARS 79: Identifying Subjects and Predicates

a. Explanation of subject and predicate
b. Short quiz on material

LARS 77: Sentences and Sentence Fragments

This lesson clarifies the distinction between using sentence fragments and using complete sentences.

LARS 76: Sentences and Dependent Clauses

This lesson consists of a small test which concentrates on recognizing whether a group of words is a complete sentence or a dependent clause.

LARS 85: Identifying Sentences

This lesson is a short test on recognizing complete sentences and sentence fragments.

LARS 40: Semicolons and Comma Splices

a. Introduction
b. Semicolon and the comma splice
c. Semicolon quiz
d. Test on semicolons

LARS 105: Run-on Sentences

a. Explanation of run-on sentences
b. Correcting the run-on sentence
c. Quiz on recognizing run-on sentences

LARS 20: Using the Period

This teaches the use of periods at the end of sentences.

LARS 101: Capitalization of Names

This lesson explains the capitalization rules for titles and names of persons.

LARS 128: Introduction to Subject and Verb Agreement

a. Third person singular verb ending
b. Irregular and "es"-ending verbs
c. Contractions

LARS 127: Subject and Verb Agreement, Basic

a. Subjects joined by "and"
b. "There" and "here" beginnings
c. Quiz

LARS 19: Verbs: Person and Number

a. Introduction
b. Person and Number
c. Quiz

LARS 122: Subject and Verb Agreement, Intermediate

a. Extra words between subject and verb
b. Words that are always singular
c. "Either" and "neither"
d. "Either/or" and "neither/nor"
e. Quiz on subject and verb agreement

LARS 62: Subject and Verb Agreement, Advanced

a. Singular and plural nouns
b. Indefinite words
c. Measurement terms
d. Relative pronouns
e. "Don't Palm Springs Have a Recession?" (paragraph editing)

LARS 66: Subject Personal Pronouns

a. Introduction
b. Simple subject personal pronouns
c. Compound subject personal pronouns

LARS 68: Object Personal Pronouns

a. Object personal pronouns
b. Test on personal pronouns
c. Compound object personal pronouns
d. Test on compound personal pronouns
e. "Than" and "as"

LARS 73: Using Reflexive Pronouns

a. Explanation of reflexive pronouns
b. Quiz on reflexive pronouns

LARS 74: Proper Use of Pronoun Case

This is a short lesson which tests the usage of pronouns.

LARS 71: Indefinite Pronouns

a. Indefinite pronouns
b. Quiz on indefinite pronouns

LARS 143: Pronoun Agreement

This lesson introduces the student to the agreement between pronouns and their antecedents.

LARS 65: Who/Whom Distinction

a. Who and whom
b. Quiz on who and whom

LARS 14: Assisted Quiz on Simple Verb Tenses

This exercise tests the student's knowledge of verbs in the present, past, future, and present perfect tenses.

LARS 16: The Past and Future Tenses

a. Tense
b. Past tense
c. Conjugation
d. Future tense

LARS 15: The Present Perfect Tense

a. Introduction
b. The present perfect tense
c. Quiz

LARS 49: Transitive and Intransitive Verbs

a. Intransitive/transitive
b. Confusing verbs
c. Sit/set
d. Lie/lay
e. Rise/raise

LARS 126: Transitive and Intransitive Verbs, II

This is a test on some commonly confused verbs.

LARS 50: The Verbs "To Be" and "To Have"

a. Introduction
b. To be
c. To have

LARS 53: Exercises with Irregular Verbs

This is an exercise on the formation of irregular verbs.

LARS 52: Assisted Quiz on Irregular Verbs

This is a quiz on irregular verbs. A special help sequence allows a review of a list of verbs from which the student may select the correct form needed.

LARS 87: Dangling Participles

a. Explanation of dangling participles
b. Quiz

LARS 132: Infinitives

a. Introduction
b. Present infinitive
c. Perfect infinitive
d. To diet or not to diet
e. Split infinitive

LARS 99: Gerunds

a. Introduction to gerunds
b. Rules for adding "ing"
c. Personality quiz
d. Gerunds as subjects and objects
e. Gerunds and possessives

LARS 86: Double Negatives

a. Explanation of double negatives
b. Quiz on double negatives

LARS 100: More Double Negatives

a. Some odd negatives
b. Drill

LARS 61: Forming the Singular Possessive

a. Brief introduction to singular possessives
b. Short quiz on singular possessives

LARS 141: Singular, Plural and Possessive

This is a test on all of the many forms of plural and possessive nouns.

LARS 13: Plural Possessives

This short lesson deals with the concept of plural possessives.

LARS 142: Singular, Plural and Possessive

This is a test on all of the many forms of plural and possessive nouns; it is the second part of LARS 141.

LARS 64: Test on Plurals and Possessives

This lesson tests the choice and spelling of singular and plural possessives and the simple plural.

LARS 97: Setting Off Nonrestrictive Elements

a. Two basic comma rules
b. How to recognize nonrestrictives
c. How to make your comma decisions
d. Appositives and tacked-on comments
e. Nonrestrictives and direct address

LARS 9: Comma Usage with Phrases and Clauses

a. Misread words
b. Dependent clauses

LARS 96: Commas and Coordinate Conjunctions

This is a short lesson on using the comma to separate coordinating conjunctions.

LARS 163: Restrictive Elements of Sentences

a. Restrictive parts of sentences
b. A comma game

LARS 36: Comma Rules

a. Commas and appositives
b. Quiz on commas and appositives
c. A game with appositives

LARS 37: Comma Usage With Too

a. Comma use when "too" means also
b. Quiz

LARS 38: Tag Question Punctuation

a. Comma and question mark with tags
b. Quiz on commas and question marks with tags
c. Writing tag questions

LARS 98: Commas with Items in a Series

a. Items in a series
b. Test on the use of commas

LARS 35: Equal Adjectives

a. Equal adjectives
b. Quiz on commas and adjectives

LARS 106: Indirect Vs. Direct Quotations

a. Introduction to direct and indirect quotations
b. Quiz
c. Recognizing direct vs. indirect quotations
d. Tense in indirect quotations
e. Post-test
f. Deciding whether to use direct or indirect quotations

LARS 144: Using Quotation Marks

a. Introduction and "love story"
b. Speaker named before quotation
c. Exercises
d. Speaker named after quotation
e. Exercises

LARS 41: Semicolons with a Series

a. Semicolons and items in a series
b. Quiz on items in a series

LARS 70: Possessive Personal Pronouns

a. Possessive personal pronouns
b. Exercise on possessive personal pronouns

LARS 25: Possessive Pronoun Confusion

a. Introduction
b. There, their, they're
c. His, he's
d. Its, it's
e. Your, you're
f. Whose, who's
g. Drill on possessives

LARS 31: Using "Its" and "It's"

a. Differences between the homonyms
b. Multiple-choice quiz
c. Fill-in quiz
d. Another fill-in quiz

LARS 30: Homonyms: Their, They're and There

a. The different meanings of the homonyms
b. Multiple-choice quiz
c. A short fill-in quiz

LARS 33: Homonyms: To, Too and Two

a. The different uses of the homonyms
b. Multiple-choice quiz
c. Fill-in quiz

LARS 24: Common Word Confusions

a. Introduction
b. Then, than
c. Accept, except
d. Here, hear, here're
e. Principal, principle
f. Were, where, we're
g. "Can a Dropout Get a Degree?"

LARS 34: A Drill on Word Pairs

This is a graded exercise which tests the use of confusing word pairs.

LARS 133: Word Confusions II

a. Introduction
b. All ready, already
c. All right, alright
d. All together, altogether
e. Test

LARS 18: Prelude to Singular and Plural Nouns

This mini-lesson is concerned with the concept of singular and plural nouns.

LARS 12: Forming Plurals with "ES"

a. "ES" plurals
b. Test

LARS 56: Plurals of Nouns Ending in "Y"

a. Vowels before "y" endings
b. Consonants before "y" endings
c. Quiz

LARS 124: Plurals of Nouns Ending in "O"

a. "O" + s
b. "O" + es
c. Assisted quiz

LARS 135: Plurals of Nouns Ending in "F"

a. Changing "f" to "v"
b. Adding "s" to "f" endings
c. Quiz

LARS 58: Foreign and Hyphenated Plurals

a. Foreign plurals
b. Quiz on foreign plurals
c. Hyphenated plurals
d. Assisted quiz on hyphenated plurals

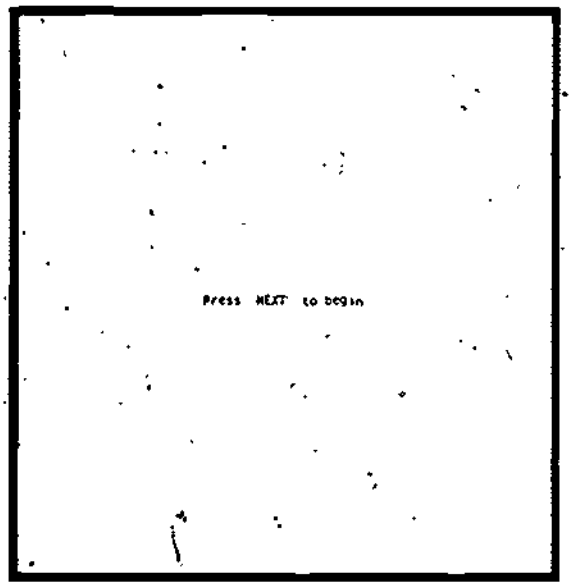
LARS 59: Quiz on the Use of Plurals

This lesson quizzes the student's knowledge of forming the plural of irregular nouns.

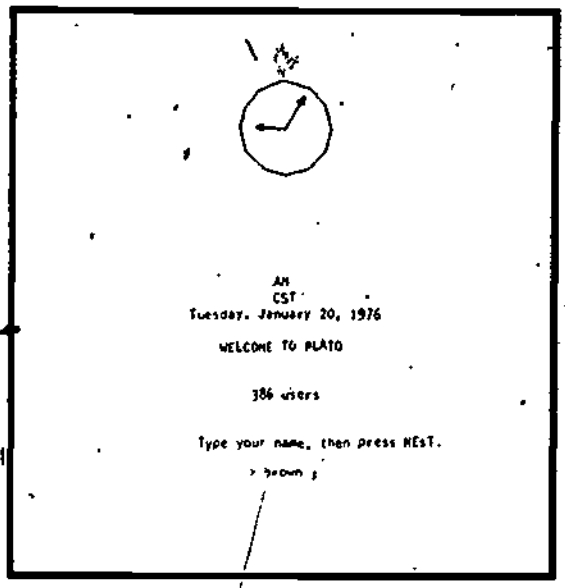
LARS 55: Irregular Plurals--Vowel Changes

a. Introduction to irregular plurals
b. Quiz on irregular plurals

APPENDIX C: INSTRUCTOR SIGNON SEQUENCE



THIS IS THE FIRST MESSAGE YOU WILL SEE ON THE PLATO SCREEN EACH TIME YOU SIGNON. IF FOR SOME REASON YOUR SCREEN DOES NOT HAVE THIS MESSAGE, PRESS SHIFT-STOP SEVERAL TIMES UNTIL IT APPEARS.

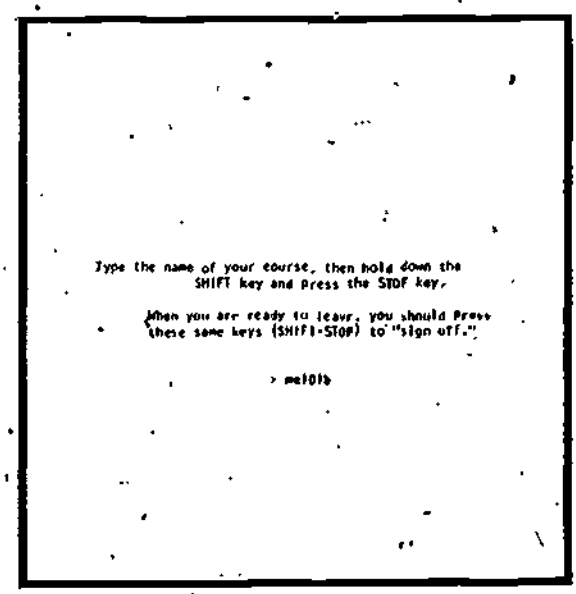


AFTER PRESSING NEXT TO BEGIN, YOU WILL RECEIVE THIS DISPLAY. YOU MUST ENTER YOUR NAME AT THE ARROW, THAT IS, YOUR NAME AS RECOGNIZED BY PLATO. IN THIS EXAMPLE, THE INSTRUCTOR'S LAST NAME AND THE FIRST INITIAL OF HIS FIRST NAME, SEPARATED BY ONE SPACE, ARE TYPED IN LOWER-CASE LETTERS.

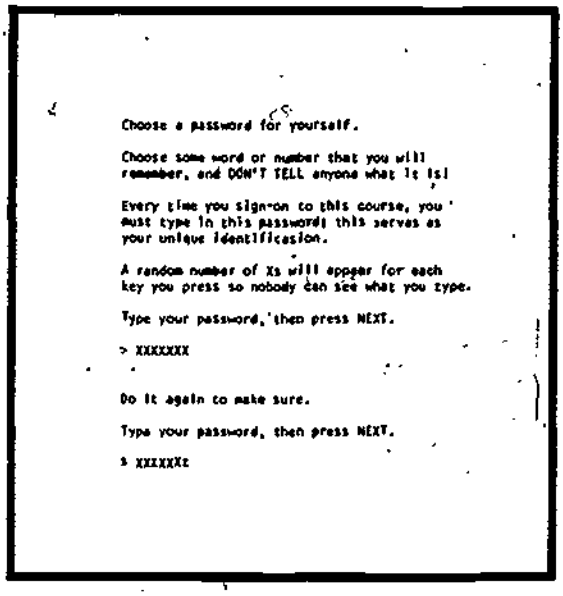
PRESSING NEXT FROM THE WELCOME TO PLATO PAGE BRINGS YOU TO THE PAGE ASKING FOR YOUR COURSE NAME. THIS NAME WILL GENERALLY VARY FROM THE COURSE NAMED BY THE COLLEGE CATALOG. IN THIS EXAMPLE, THE PLATO COURSE NAME IS me101b, WHICH REPRESENTS THE FOLLOWING INFORMATION:

1. COLLEGE NAME
   m=MALCOLM X COLLEGE
2. SUBJECT AREA
   e=ENGLISH
3. COLLEGE COURSE NUMBER AS STATED IN CATALOG
   101=ENGLISH 101
4. FIRST INITIAL OF THE INSTRUCTOR'S LAST NAME
   b=BROWN

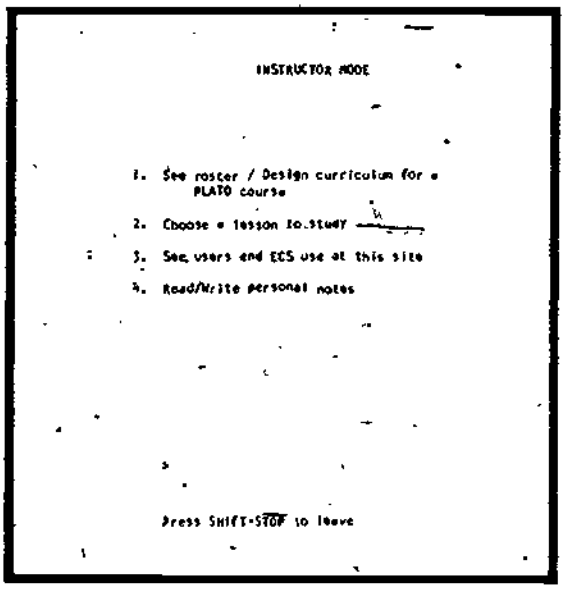
COURSE NAMES ARE ALWAYS TYPED IN LOWER-CASE LETTERS.



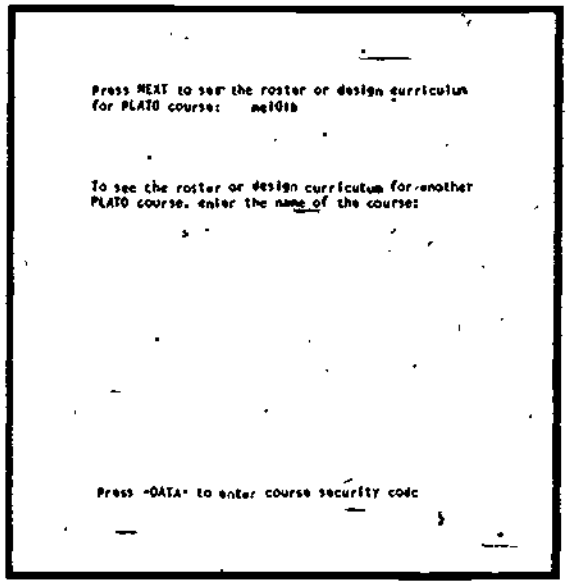
FOR PURPOSES OF IDENTIFICATION, PLATO REQUIRES EACH PERSON TO HAVE A SECRET PASSWORD ALLOWING HIM TO SIGN ONTO THE SYSTEM. DURING YOUR INITIAL PLATO SIGNON, YOU WILL BE ASKED TO TYPE THIS PASSWORD TWICE, JUST TO MAKE SURE YOU HAVE TYPED IT CORRECTLY. SELECT SOMETHING THAT IS NOT MORE THAN TEN LETTERS LONG WHICH YOU CAN EASILY REMEMBER.



DURING EACH FOLLOWING PLATO SIGNON, YOU MUST ENTER YOUR PASSWORD BEFORE BEING ALLOWED TO CONTINUE. X'S APPEAR SO THAT NO ONE ELSE CAN SEE YOUR PASSWORD BEING TYPED.

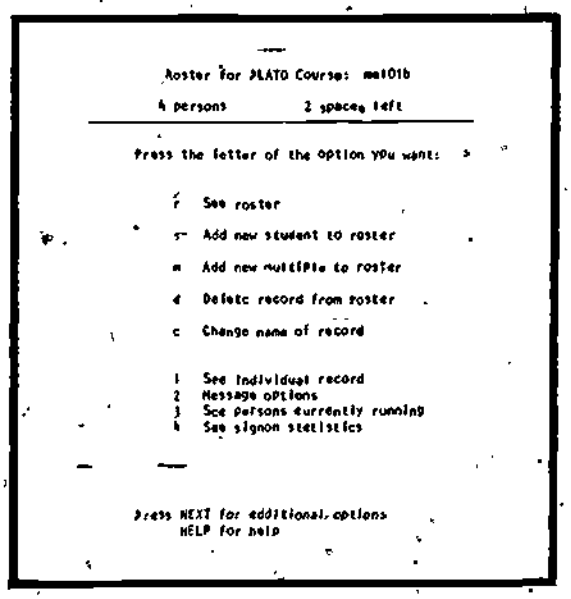


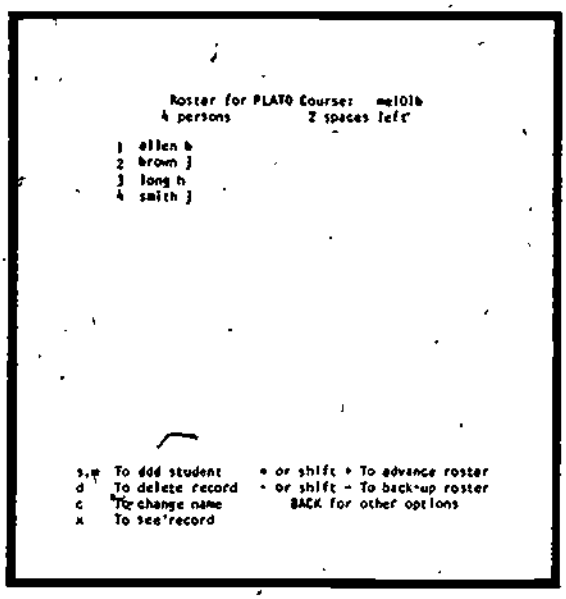
THE INSTRUCTOR MODE PAGE IS THE TEACHER'S HOME BASE. FROM HERE, THE COURSE ROSTER AND THE CONTENT OF THE CURRICULUM CAN BE MANAGED.
IN ORDER TO LEAVE THE TERMINAL, AN INSTRUCTOR SHOULD ALWAYS PRESS SHIFT-STOP FROM THIS DISPLAY.



BY PRESSING 1 ON THE INSTRUCTOR MODE PAGE, YOU WILL RECEIVE THIS DISPLAY WHICH ALLOWS AN INSTRUCTOR TO MANAGE MULTIPLE COURSES.

PRESSING NEXT, THE INSTRUCTOR OF PLATO COURSE me101b IS PRESENTED WITH THE COURSE MANAGEMENT OPTIONS. THESE OPTIONS ALLOW THE INSTRUCTOR TO ADD OR DELETE STUDENTS FROM THE ROSTER AND/OR CHANGE NAMES DUE TO MISSPELLING OR TYPOGRAPHICAL ERRORS. FURTHER OPTIONS ALLOW THE INSTRUCTOR TO SEND MESSAGES TO STUDENTS. SEE STUDENTS CURRENTLY USING THE COMPUTER AND REVIEW STUDENT SIGNON AND ATTENDANCE DATA.

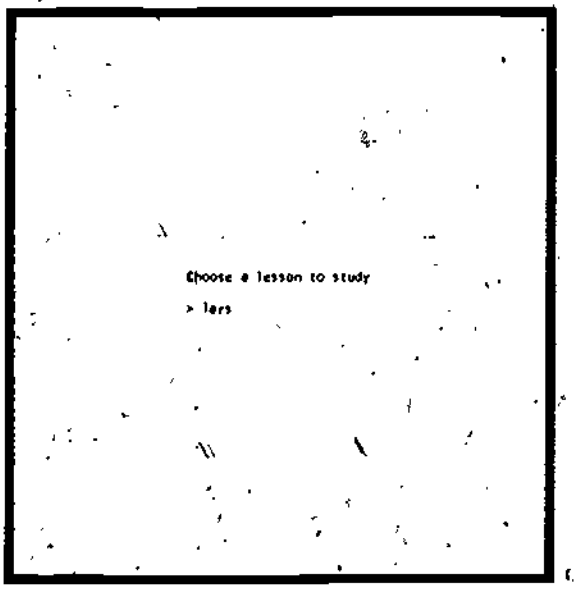




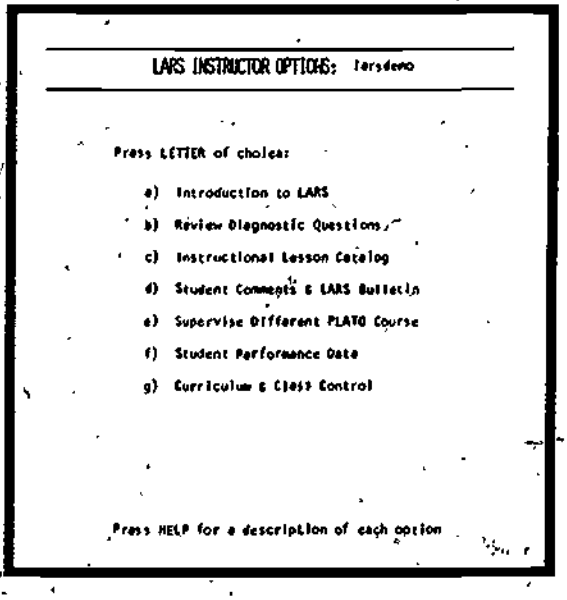
FROM THIS PAGE THE INSTRUCTOR CAN MANAGE HIS PLATO COURSE ROSTER BY FOLLOWING THE DIRECTIONS GIVEN AT THE BOTTOM OF THE PAGE. ADDITIONS, DELETIONS, AND CHANGES CAN BE ACTIVATED FROM THIS PAGE, AS WELL AS OBSERVATION OF STUDENT RECORDS.

AT THIS POINT THE INSTRUCTOR MAY WISH TO LEAVE THE STANDARD PLATO COURSE ROSTER MANAGEMENT FUNCTIONS. IN ORDER TO ACCESS THE LARS INSTRUCTOR OPTIONS, IT IS NECESSARY TO SPECIFY LARS AS THE LESSON YOU WANT TO STUDY.

FROM HERE YOU MAY LOOK AT ANY LESSON ON PLATO BY TYPING IN ITS FILE NAME.



ALL LARS INSTRUCTOR CONTROL OPTIONS CAN BE REACHED FROM THIS PAGE.



APPENDIX D: Student Introduction to PLATO

WELCOME TO PLATO

How to Use the PLATO Keyset

The PLATO keyset is like a typewriter. (See the diagram on the next page.) The keys are sensitive, so only a light touch is necessary. In addition to the regular keys, there are special keys, such as NEXT, BACK, HELP, DATA, LAB, TERM, and ERASE. A good rule of thumb is: if in doubt, press NEXT.

It is important to note the difference between the number "Ø" and the letter "O", the number "1" and the letter "l".

You will interact with PLATO much as you would with your teacher. PLATO will give you information and ask you questions about it; you will have to answer these questions before you can continue with the lesson. Don't worry -- PLATO often will help if you need assistance. When you are supposed to answer a question, a small arrow like this > will appear on the screen. Type your answer next to the arrow according to instructions in the lesson. If you make a mistake, press the ERASE key; your answer will be erased one letter at a time from the right. By holding down the SHIFT key while pressing the ERASE key, an entire word can be erased.

When you respond to a question, you must usually press the NEXT key to tell PLATO you are ready to have the answer checked. PLATO then judges your answer. If your answer is incorrect, it may be marked to help you find the mistake. If a word is misspelled (but still close to the correct spelling), it may be underlined like this:

```
> speled  no
```

If your answer has extra words in it, the extra words are marked underneath with x's, like this:

```
> This word is extra word  no
                   xxxx
```

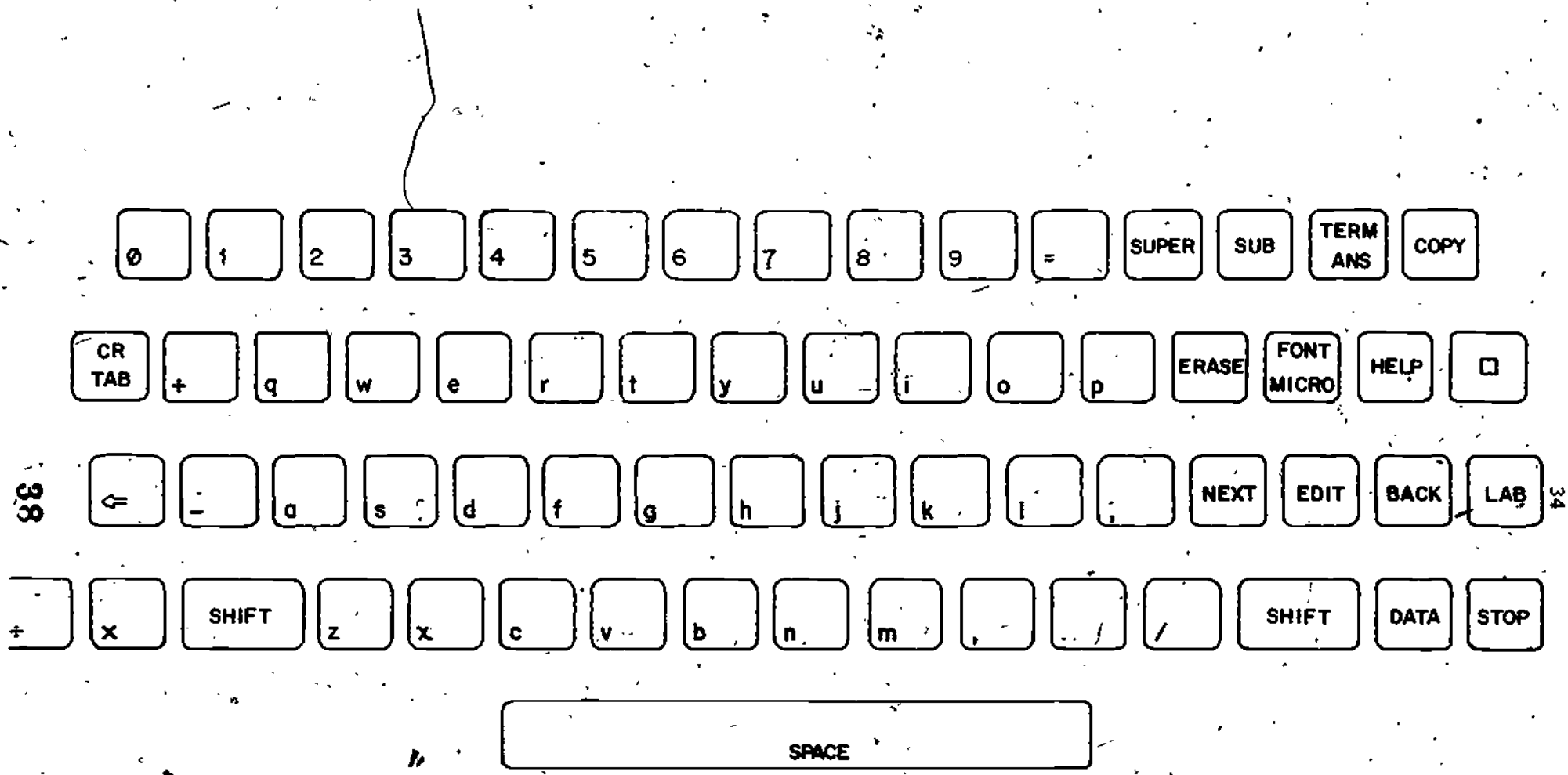
If words in your answer are in the wrong order, the words which should be moved are marked underneath with a small arrow, like this:

```
> order wrong  no
```

These markups may not always appear. Sometimes additional messages come on the screen to give hints or suggestions.

Often after you have answered the question correctly, you will have to press NEXT again to proceed to the next page. If you press NEXT by mistake and miss necessary information, you can press the BACK key.

Sometimes the lesson gives additional problems, hints, or other information which you may see if you press another special key, such as HELP or LAB. When other special keys are available, the lesson will tell you how to use them.


0 1 2 3 4 5 6 7 8 9 = SUPER SUB TERM ANS COPY
CR TAB + q w e r t y u i o p ERASE FONT MICRO HELP
a s d f g h j k l NEXT EDIT BACK LAB
x SHIFT z x c v b n m SHIFT DATA STOP
SPACE
38
34

Sign-on Procedures

When you get settled in front of a PLATO terminal, the screen will probably say "Press NEXT to begin"; if it does not, press SHIFT-STOP and BACK until it appears. After pressing NEXT to begin, you will see the WELCOME TO PLATO clock page.

To sign in, you must enter your PLATO name and PLATO course, that is, the name and course which are recognized by PLATO as entered by your instructor.

NAME: When you are asked for your name, you will usually type your last name without capitals, space once, and type the first initial of your first name.

> Type your name, then press NEXT:
>
> > smith j

COURSE: When you are asked for the name of your course, you must always use lower-case letters. You may have to ask your teacher for the PLATO name of your course.

> Type the name of your course, then hold down the SHIFT key and press the STOP key.
>
> When you are ready to leave, you should press these same keys (SHIFT-STOP) to "sign off."
>
> > me101bt

Once you type in your name and your course, you have one more step to complete before you actually receive instructional material; you must type in your PLATO password. You must select a password so your PLATO identification cannot be used by someone else. Select something you will remember, as you will be the only person to know your password. Keep it less than 10 characters (letters or numerals). You will need to enter your password every time you use PLATO. After typing in your password, you may begin studying.

To leave PLATO when you are finished with a session, press the SHIFT-STOP key twice. You can be sure you are signed off when you reach the "press NEXT to begin" page.

† We wish to thank Elaine Avner for allowing us to use portions of her directions for new PLATO students.

APPENDIX E: LARS Routing Modes

LARS reports the student's position within the curriculum and the nature of the current activity. Below are the routing modes used by the system.

Introductory Sequence: The lessons which introduce the student to PLATO, the use of the keyset, and other pre-curriculum activities are indicated by this label.

Supplementary Material: Optional instruction may be taken by the student after finishing the prescribed curriculum. Such extra material may consist either of modules which the student proficiencied out of but chooses to study anyway, or lessons dealing with topics beyond the scope of the LARS remedial curriculum, such as paragraph editing, footnoting, and bilbiographic form.

Diagnostic Testing: Diagnostic skills testing is a major component of LARS and occupies 10-50 percent of a student's time on PLATO, depending on the amount of instruction which is bypassed due to superior test performance.

Prescribed Instruction: The typical mode of student activity is study prescribed by the master router program on the basis of diagnostic test scores and lesson performance measures.

Controlled Review: Students are allowed to review lessons taken previously, if desired, at any point in the curriculum. LARS will somteimes recommend that a prior lesson be reviewed; the student may choose to ignore such advice.

Individual Curriculum: A special curriculum may be constructed by the instructor for a single student if desired. Such individualized curriculum design is usually appropriate only in one-on-one tutoring situations.[3]

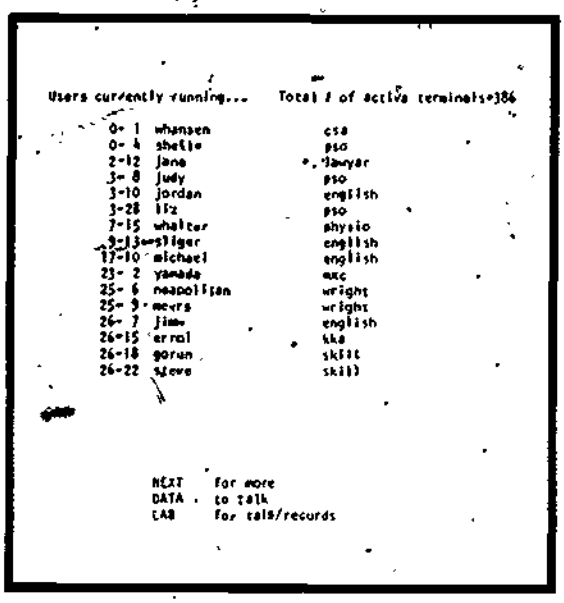
Educational Gaming: At times the student is allowed to participate in some extra-curricular activities designed to stimulate motivation and interest in the practical application of the language arts skills being acquired. A spelling competition, the PLATO newspaper, and an interactive public policy forum are among some of the activities available.

---

[3]The individual curriculum design feature of LARS is not yet operational. Currently, a curriculum must be specified that will apply to the entire class, not just one student.

Open Curriculum: Once all prescribed testing and instructional lessons have been finished, LARS allows the student to freely choose from advanced material, lesson review, and educational gaming activities. LARS thus becomes a resource and reference tool for the student who exhibits the initiative to use it. This feature may be inhibited at the instructor's discretion; under such circumstances, the student is told to report to the teacher after completion of the curriculum.

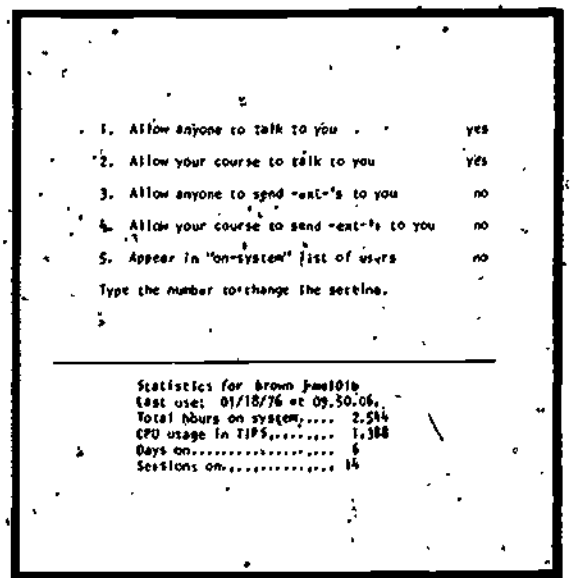
APPENDIX F: ON-LINE COMMUNICATION



BY REQUESTING LESSON user FROM THE CHOOSE-A-LESSON-TO-STUDY PAGE, A LIST OF AUTHORS CURRENTLY ON PLATO WILL APPEAR. PRESS DATA IN ORDER TO TALK TO ANOTHER USER. PLATO WILL THEN ASK WHO YOU WISH TO TALK TO AND WHAT COURSE HE IS REGISTERED IN. TYPE THE NAME AND COURSE EXACTLY AS THEY APPEAR ON THE LIST.

IN ORDER TO BE ABLE TO TALK, HOWEVER, THERE IS ONE INITIAL TASK YOU MUST COMPLETE. THIS INVOLVES PRESSING LAB FROM THE USER LIST. YOU WILL THEN BE PRESENTED WITH 5 OPTIONS WHICH WILL INITIALLY BE SET TO "NO." CHANGE OPTIONS 1 AND 2 TO "YES" AND RETURN TO THE PAGE LISTING ALL CURRENT USERS. YOU WILL NOW BE ABLE TO INITIATE AND RECEIVE TALK REQUESTS.

IF YOU RECEIVE A TALK REQUEST, A MESSAGE WILL FLASH AT THE BOTTOM OF YOUR SCREEN:

TALK: MICHAEL/ENGLISH

YOU SHOULD RESPOND BY HOLDING DOWN THE SHIFT KEY AND PRESSING THE TERM/ANS KEY. TYPE EITHER TALK OR REJECT.