

**NOVA SOUTHEASTERN UNIVERSITY  
FISCHLER SCHOOL OF EDUCATION AND HUMAN SERVICES**

**LDR 9310**

**TECHNOLOGICAL LITERACY FOR ORGANIZATIONAL LEADERS**

**Study Guide**

**Revised Fall 2004**

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## PREFACE

This study guide is designed for Nova Southeastern University (NSU) students as they explore the leader's role in developing technology literacy within an organization. Technology literacy can be defined as the ability to use, manage, and understand technology. It is considered to be critical to the success of individuals, society, and the world as a global entirety. This course will prepare students to become outstanding leaders who are able to perform effectively by developing, providing, and managing technology literacy in their work environment.

This study and resource guide serves as an overview of the topics to be studied in this instructional technology specialization course (**LDR 9310**). Student learning outcomes anticipated as a result of active engagement in the study area are presented. Reading and writing assignments as well as teaching and learning resources are included. As an active learner your first task is to read this guide carefully and thoroughly. Your instructor will provide you with more guidance and specific instructions during your online sessions.

The instructional sequence of **LDR 9310** is divided into six major themes that will be covered over a 15-week period. The guide is divided into these **six** parts:

1. **Technology Literacy Self-Assessment**
2. **Working Components of Computers**
3. **Online Discourse and Communication**
4. **Leading and Managing the Technical Training Department**
5. **Ethical Use and Policy Making**
6. **Visioning, Planning, and Leadership in Technology**

The first part is **Technology Literacy Self-Assessment**. An organization's, agency's, or department's need for new or revised technology intervention is dependent on its leader. It is essential for leaders to have a sufficient depth of understanding of technology so they are comfortable in making strategic technology decisions in their organizations. Hence, this part deals with a self-analysis of your technology literacy; it will help you to determine which areas you need additional training in and which areas you could serve as a resource to other staff members in. **Working Components of Computers** is the second area covered. It deals with identifying the hardware and software, along with the inner workings of the computer, and explaining how each works. **Online Discourse and Communication** is the third topic. It involves applying a critical literacy framework to online discourse and identifying the decoding strategies used to communicate the ideological ideas of the Internet in order to heighten public awareness in shaping oppositional responses and public policy. The fourth part is **Leading and Managing the Technical Training Department**. Before a training plan is developed, a skills assessment must be administered to the staff in order to judge their technology literacy level. This requires a series of evaluation questions such as: "What are the performance goals of the organization?" "What performance gaps exist right now?" "What functions and levels in the organization show significant opportunities for improvement?" and

“What new skills and knowledge can close the gaps through improved performance?” The role of the leader in relation to technology training will be discussed. **Ethical Use and Policy Making** is the fifth element of the course. It involves copyright and fair use issues as they apply to information technology resources. **Visioning, Planning, and Leadership in Technology**, the sixth part, will comprise technology planning; making decisions about hardware acquisition; staff development in technology; and the assessment, evaluation, and updating of technology goals in accordance with a long-range plan through an active leadership role.

## **COURSE DESCRIPTION**

### **LDR 9310: Technological Literacy for Organizational Leaders**

This course, **LDR 9310**, is the first of the technology core courses in instructional technology. The later courses, LDR 9320 and LDR 9330, will build upon the concepts presented in this course. In this course participants will explore a broad range of issues related to technological literacy. These include technology learning styles, basic computer operations, Internet use, office productivity software, maintaining hardware, technology planning, online discourse and communication, staff training and development, and ethical use and policy making. Hence, the knowledge and role of an organizational leader in promoting technological literacy is vital for organizations to take their place in the global online community.

## **LEARNING OUTCOMES**

As a result of actively engaging in LDR 9310, the participants will be able to:

1. define technological literacy as it applies to an organizational leader,
2. conduct a technology literacy self-assessment,
3. identify strengths and weaknesses in technological literacy,
4. identify the working components of computers,
5. explain the inner workings of computers,
6. understand and solve basic hardware and software issues,
7. define online discourse,
8. identify the decoding strategies used in online communication,
9. define technical training and its characteristics,
10. identify the technical training needs of staff,
11. conduct an assessment on the level of management support for technical training,
12. define an “acceptable use” policy and describe its rationale,
13. describe the components and rationale for an acceptable use policy (AUP),

14. describe the components and rationale for copyright/fair use, and
15. define and identify the technology vision and goals of an organization.

### **COURSE CONDUCT**

LDR 9310 is conducted using a Web-based course management system, WebCT (<http://www.nova.edu/webct/>). More specific information about WebCT can be obtained from the program Web site, <http://www.schoolofed.nova.edu/orgleader>. You will communicate with the instructor and your cohorts through e-mail on WebCT. Your assignments will be posted to the instructor's mailbox. Feedback on assignments will be e-mailed to you on WebCT. The NSU help desk is open daily for your needs at 1-800-986-3223, ext. HELP.

As previously stated, this course is divided into six major topics: Technology Literacy Self-Assessment; Working Components of Computers; Online Discourse and Communication; Leading and Managing the Technical Training Department; Ethical Use and Policy Making; and Visioning, Planning, and Leadership in Technology. The course and topics are organized into 15 sessions/weeks. You should plan to spend a minimum of 5 hours per week reading and working online, exploring and examining Internet sites and related materials as well as preparing written assignments and responding to modules and discussions. Offline activities include reading the required texts and doing the necessary background work to prepare assignments using your word processor. Preparation of assignments using the word processor will enable you to take advantage of the spell-checking and grammar-checking capabilities of the software. Written assignment information appears in the Assignments section of this study guide.

As you progress through this course, you are encouraged to apply the concepts and principles that you are learning to everyday practice. Use this learning as an opportunity to informally and immediately apply your new knowledge and insights within your work setting. More formal opportunities will arise as you progress through the program. The grade you will receive from this course directly reflects your active engagement in reading and writing assignments and class participation via online chat sessions. Make the most of this experience.

### **REQUIRED TEXTS**

Educational Impact. (2000). *Educational Impact electronic textbook*. [Online]. Go to <http://www.educationalimpact.com/nsu> and purchase your FSEHS Electronic Resource for doctoral studies.

Turban, E., Mclean, E., & Wetherbe, J. (2004). *Information technology for management*. New Jersey: John Wiley & Sons, Inc. (ISBN: 0471229679)

Rothwell, H. (2002). *Creating and offering successful technical training*. New York: John Wiley and Sons. (ISBN: 0787955957)

Warnick, B. (2001). *Critical literacy in a digital era: Technology, rhetoric, and the public interest*. Lawrence Erlbaum Associates. (ISBN:0805841156)

White, R., Downs, T., & Downs, T. E. (2001). *How computers work*. Pearson Education. (ISBN:0789725495)

You can purchase the books from the bookstore of your choice. They are also available and can be ordered from the university bookstore at <http://www.nsubooks.bkstore.com/>

## **COURSE OUTLINE & ASSIGNMENT TIMELINE**

### **TOPICS/READINGS**

#### **WEEK ONE**

##### **Technology Literacy Self-Assessment/Working Components of Computers**

- Define technological literacy
- Conduct a technology literacy self-assessment (Assignment 1)
  - Assess your skills in technology learning styles
  - Assess your skills in basic computer operations
- Read related parts in White and Downs text (parts 1, 2, 3, 4, 5, and 8) and chapter 1 in Turban text
- Apply concepts in White and Downs text to your assignment

#### **WEEK TWO**

##### **Technology Literacy Self-Assessment/Working Components of Computers**

- Conduct a technology literacy self-assessment (Assignment 1, cont.)
  - Assess your skills in basic computer operations (cont.)
- Read related parts in White and Downs text (parts 1, 2, 3, 4, 5, and 8, cont.) and chapter 2 in Turban text
- Apply concepts in White and Downs text to your assignment

#### **WEEK THREE**

##### **Technology Literacy Self-Assessment/Working Components of Computers**

- Conduct a technology literacy self-assessment (Assignment 1, cont.)
  - Assess your skills in basic computer operations (cont.)
- Read related parts in White and Downs text (parts 1, 2, 3, 4, 5, and 8, cont.)
- Apply concepts in White and Downs text to your assignment

**WEEK FOUR****Technology Literacy Self-Assessment/Working Components of Computers**

- Conduct a technology literacy self-assessment (Assignment 1, cont.)
  - Assess your skills in Internet use
- Read related parts in White and Downs text (part 7)
- Apply concepts in White and Downs text to your assignment

**WEEK FIVE****Technology Literacy Self-Assessment/Working Components of Computers**

- Conduct a technology literacy self-assessment (Assignment 1, cont.)
  - Assess your skills in office productivity software
- Read related parts in White and Downs text (part 6)
- Apply concepts in White and Downs text to your assignment
- **Assignment 1 due**

**WEEK SIX****Online Discourse and Communication**

- Write a book review (Assignment 2)
- Define and understand rhetoric and critical literacy
- Understand the notion of “new frontier” in cyberspace
- Understand the concept of new libertarianism
- Understand the concepts of writing, style, race, and gender-related issues in cyberspace
- Read chapter 1 in Warnick text

**WEEK SEVEN****Online Discourse and Communication**

- Write a book review (Assignment 2, cont.)
- Understand the notion of women and discourse in cyberspace
- Identify and understand the concepts of hierarchical appeals in invitational discourse and print media
- Define and understand the concept of e-zines
- Read chapter 2 in Warnick text

**WEEK EIGHT****Online Discourse and Communication**

- Write a book review (Assignment 2, cont.)
- Comprehend issues related to politics, political participation, and the World Wide Web
- Identify sites related to politics and the World Wide Web

- Define the concept of textuality
- Examine case studies of political issues and the World Wide Web
- Read chapter 3 in Warnick text
- **Assignment 2 due**

## **WEEK NINE**

### **Leading and Managing the Technical Training Department**

- Technical training assignment (Assignment 3)
- Define technical training
- Understand the importance of technical training
- Describe key factors that influence the role of technical training in organizations
- Examine case studies of effective technical training
- Identify the characteristics of effective technical training
- Read chapters 1 and 2 in the Rothwell and Benkowski text

## **WEEK TEN**

### **Leading and Managing the Technical Training Department**

- Technical training assignment (Assignment 3, cont.)
- Understand, via case study, the concept of developing a strategic plan for technical training
- Understand the role of the leader in formulating and implementing a strategic plan for technical training
- Define and examine the process of environmental scanning
- Read chapter 3 in the Rothwell and Benkowski text

## **WEEK ELEVEN**

### **Leading and Managing the Technical Training Department**

- Technical training assignment (Assignment 3, cont.)
- Define the role of leader and manager of technical training
- Understand the responsibilities of the technical manager or leader
- Read chapter 4 in the Rothwell and Benkowski text
- **Assignment 3 due**

## **WEEK TWELVE**

### **Ethical Use and Policy Making**

- AUP/copyright position paper (Assignment 4)
- Define policy development/statements of philosophy
- Understand the role of the leader in policy development
- Understand and examine acceptable use policy issues (AUP)
- Read chapter 4 in the Turban text

**WEEK THIRTEEN****Ethical Use and Policy Making**

- AUP/copyright position paper (Assignment 4, cont.)
- Understand and examine copyright issues
- Examine the link between copyright and AUP issues
- Examine the role of the leader in dealing with AUP and copyright violations
- **Assignment 4 due**

**WEEK FOURTEEN****Visioning, Planning, and Leadership in Technology**

- Technology vision statement and goals for your organization (Assignment 5)
- Define and create a technology vision statement

**WEEK FIFTEEN****Visioning, Planning, and Leadership in Technology**

- Technology vision statement and goals for your organization (Assignment 5, cont.)
- Identify immediate, 2- to 5-year, and long-term goals in relation to vision statement
- **Assignment 5 due**

**RECOMMENDED READINGS**

The modules will make direct reference to readings/lectures online and offline and are designed to supplement the text and enable the learner to effectively explore the topics for the course. In addition, students should also refer to the extensive bibliography in the required books. Students may check Web sites through the NSU electronic library as well.

**COURSE REQUIREMENTS**

Learning activities for **LDR 9310** consist of readings, writing assignments, and interactive learning experiences (discussion responses and chats).

**Readings:** The readings are organized according to the six major themes of this course. The reading assignments are essential for your understanding and participation in online chat sessions and in the preparation of written assignments. It is important that you complete all of the required reading as assigned. You are expected to integrate the content of reading assignments into written assignments and module/discussion responses. Reading assignments are listed in the Course Outline of this study guide.

**Chats:** There are chat rooms available in the course area on WebCT. The cohorts may choose to schedule chats to interact, which is optional. However, chats may be scheduled by the instructor as the course proceeds, which you are required to attend.

**Lecture/Discussion Modules:** Lectures/discussions that are incorporated from Educational Impact (<http://www.educationalimpact.com/nsu>) and other Web resources are an integral component of the course. A lecture and discussion questions comprise ONE MODULE and will be posted in the MODULE areas of WebCT. There are a total of SIX MODULES, one for each theme. For each module, you are expected to read and explore the links provided to you.

The MODULES will also guide you in terms of the topic for you to post to the discussion area. You must post your response for that module in the form of thoughts, comments, reactions, sharing personal experiences, pros, cons, applications, etc. You are required to read postings from other students in the class and respond to them as well. If we were in a traditional classroom, discussion would be a key component. In an online course, the discussion area is used as an open forum to participate with your classmates and instructor. These activities comprise 10% of your grade for the course. Each response that you post should be approximately 1 to 2 paragraphs in length and be written concisely. Please label these postings as “Module 1,” “Module 2,” etc. It is expected that you respond to each part of the module and that you READ and RESPOND to several of your classmates’ responses as well. This will require you to post discussion items several times (3 to 4) for each module.

**Internet Resources:** In addition to responding to lecture and discussion prompts, each student is required to post 5 to 10 Internet resources on the DISCUSSION/BULLETIN BOARD for the themes stated in each MODULE. The sites that you explore should be related to the topic of study/readings for that week/module. Please post a brief description of the site and/or how it would benefit educators or promote knowledge in the topic addressed for that week/module. Comments about each Web site do not need to be more than 1 to 2 sentences. At the end of this course it would be very beneficial for each student to record these sites in a log, which can be used for future reference. Please try to locate sites that are specific to each weekly topic. Please label these postings as “Internet Sites.”

**Written Assignments:** There are five written assignments in this course:

1. Technology Literacy Self-Assessment
2. Book Review
3. Assessment of Technical Training Needs and Support
4. AUP/Copyright Position Paper
5. Technology Vision Statement and Goals for Your Organization

Unless otherwise indicated, written assignments are due by MIDNIGHT on Sunday of the determined week. Assignments submitted after midnight Sunday will receive a reduced grade of one letter per week. Assignments should be posted as an attachment to

an e-mail message to the instructor's mailbox. Students are advised to keep a copy of all written assignments throughout the doctoral program.

Moreover, since you are directed to complete your assignments using a word processor rather than typing an e-mail message online, you should have a well-crafted document (reflecting use of the spell-checking and grammar-checking capabilities of your word processor) saved to your local hard drive in the event of data loss in an online course environment. Be sure to include your name **within** the document, not just in the e-mail to which it is attached or in the name of your attachment. When the document is opened and printed, it must be identifiable as yours. A cover page is required.

Your grades will be posted in the grades area, and you will also be sent a private e-mail with your grade and comments regarding the assignment. Assignments should adhere to APA guidelines, and it is strongly recommended that you have at least two other colleagues proofread your work before submitting it. Please make use of subheadings for the respective components for each assignment.

### **GRADING CRITERIA**

The major assignments for LDR 9310 and their corresponding points are as follows:

1. Technology Literacy Self-Assessment	20 pts (20% of grade)
2. Book Review	20 pts (20% of grade)
3. Assessment of Technical Training Needs and Support	20 pts (20% of grade)
4. AUP/Copyright Position Paper	20 pts (20% of grade)
5. Technology Vision Statement and Goals for Your Org.	10 pts (10% of grade)
6. Discussion/Class Participation	10 pts (10% of grade)
• Responding to assignments posted in the modules	
• Posting Internet sites	

Grades issued in this course are A, B+, B, and F. Instructors may issue C, D, and plus and minus grades on assignments as indicators of quality.

The student must negotiate an incomplete (I) grade with the instructor. An I is given at the discretion of the professor and is only considered in a case in which the student has completed most of the course assignments. The instructor will determine the time extension given to each student. The time extension may not exceed one term, or 15 weeks.

A student who does not complete any assignments is not entitled to an I grade and will receive an F. Students who receive Fs will be placed on probation and will be expected to take the course over again.

Rewrites: Only ONE rewrite will be allowed for the class, and if a student chooses this option, the highest score possible will be a grade of B. The rewrite must be submitted within 3 to 5 days.

## Assignment Scoring Rubric

### Development/Content and Ideas

SCORE: High 5 4 3 2 1 Low

Focus (purpose or controlling concept):

- is clear, articulate, and insightful
- is fully realized (carefully and deliberately treated from start to finish), thorough, and complete
- develops from simple to complex and from general to specific

Textual paragraphs are supported by:

- a variety of relevant facts
- rich supporting details, examples, and illustrations
- references to related readings and sources

Written product:

- maintains consistent tense and voice
- maintains purpose
- presents sentences in a variety of styles or sophisticated patterns

### Organization

Product:

- maintains clear, logical, and inventive organization or concepts and ideas, where same are easily seen to connect and relate one to the other

Introduction and conclusion:

- are powerful but not redundant

Paragraphs:

- are focused and include supporting evidence
- lead to smooth flow/movement as the content builds throughout the product
- reflect a sense of order in the content presentation, which results in a coherent, seamless flow of ideas as individual elements are knit together

### Mechanics

Form and style:

- are fully accurate according to APA standards

Structural integrity is maintained by:

- accurate grammar, punctuation, and sentence structure
- accurate spelling, mechanical conventions (capitalization, etc.), and spacing
- accurate and precise diction, phrasing, and subject/verb agreement

### Overall Comments:

## WRITTEN ASSIGNMENT REQUIREMENTS

### Written Assignment 1 Technology Literacy Self-Assessment Due: Week 5 20 points

This assignment has two parts.

Part 1: Students will download a copy of the Technology Literacy Self-Assessment from the Web site <http://www.projectalchemy.org/csti/assessments/> (then select [Staff Skill Self-Assessment](#)) and will judge their level of achievement for each skill area. Then, based on the responses, students will identify the areas in which they need additional training and practice.

Part 2: From each part, choose at least three skills that you think you are competent in and three skills you feel you need practice in. Then, explain how you could serve as a mentor to other staff members in the areas you are competent in and also how you would improve your skills and knowledge in the areas you need more training in. After completing each area of the assessment, students will write a reflective paper with titles for each part of the assessment; the titles are Basic Computer Operations, Internet Use, and Office Productivity Software. Also include discussion of whether the book by White and Downs, *How Computers Work*, has assisted you in learning about issues you were unfamiliar with and, if it has, how it has contributed to your learning experience.

Suggested length: 8–10 pages

### Written Assignment 2 Book Review Due: Week 8 20 points

Students will write a review of the book *Critical literacy in a digital era: Technology, rhetoric, and the public interest* (2001), by Barbara Warnick. This essay, like any good book review, should explain the book to your readers (though it should not simply summarize the book) and make some sort of “point” about the book based on your reading. It is in your interest to try to quote from the book to make your points. Be sure to explain the main point of the book, highlight key parts, and present other relevant information that might help the reader understand the book.

Suggested length: 10–12 pages

**Written Assignment 3**  
**Assessment of Technical Training Needs and Support**  
**Due: Week 11**  
**20 points**

As an organizational leader, one of your duties is to build, support, lead, and manage the technical training department within your organization. This assignment addresses several issues in relation to your role as a leader/trainer in assessment, technical training needs, and support for your staff. The assignment has five parts. You will need the Rothwell and Benkowski book, *Building Effective Technical Training*, in order to do this assignment. Each part should be done in relation to the organization you work at. If you do not work in an organizational setting, you should select an organization to relate to. After responding to each part, you must report your findings in the form of a comprehensive, well-organized paper. There must be a link between each part. Make smooth transitions and use titles/subtitles as necessary.

- Part 1: Complete the self-assessment in Appendix I (pp. 289–291) – *Assessing and building competence as a technical trainer*
- Part 2: Complete the worksheet on p. 15 – *Assessing the level of management support for technical training*
- Part 3: Complete the worksheet on p. 92 – *An interview guide to examine strategic issues in technical training.*
- Part 4: Complete the worksheet on p. 109 – *Formulating a vision for the technical training function*
- Part 5: Complete the worksheet on p 110 – *Clarifying the role of the manager of technical training*

Suggested length: 8–10 pages

**Written Assignment 4**  
**AUP/Copyright Position Paper**  
**Due: Week 13**  
**20 points**

This assignment is related to policy development. An ongoing organizational challenge is developing policy. An organization's policies are the statements of the philosophy. Technology has blurred the divisions between professional and personal, so it is important that an organization's policies reflect the organizational culture. As a mechanism of exploring this theme, each of you will develop an acceptable use policy (AUP).

Please read the following information very carefully, as you are responsible for developing your AUP/COPYRIGHT POSITION/PHILOSOPHY (AUP/CP/P).

Essentially, your AUP/CP/P must include the components you believe are generic and critical to be an effective leader in your work environment: the personal and professional beliefs, theories, assumptions, attitudes, etc., that you adopt from the framework for your role as a leader in the area of technological literacy.

Your paper should have three sections: AUP, Copyright, and Ethical Issues. The AUP section should summarize your organization's AUP (if your organization does not have one, use the AUP that guides your use of the NSU online account). Address the following: How does your AUP compare to other policies of which you have knowledge? Please be specific in your discussion. If your organization does not have an AUP, why not? Whose role is it to put this in place? What are the potential problems ahead if Internet access is implemented into the classroom/organization without an AUP? Assume a district has an AUP in place, very standard in nature, defining unacceptable use and consequences. What are the pros and cons of publicizing the AUP in the city newspaper, school newspaper, parent letters, and student handbook, and then allowing all students to have access unless a parent requests that his or her child not be allowed to use the Internet and/or e-mail? Are there different AUP requirements for students and faculty/staff? Why or why not? Please remember that your leadership position is a powerful determinant in the creation of learning communities, and your discussion should be presented within the context of your role as an organizational leader.

The second section of your paper should focus on the concepts of copyright and acceptable use within the context of your organization and your leadership. Summarize the concept based upon your exploration and the class discussion. Mention at least two sites (including the URLs) that you found of particular value.

- Define “acceptable use” and the application of “copyright” to your work setting.
- Summarize the impact that copyright has on you as an organizational leader using the Internet.
- Discuss how copyright links with the topic of AUPs.

The final section of the paper is reflective. Place the implementation of an AUP and copyright policy in the context of your leadership. What is your level of tolerance for violations? What procedures would you implement to avoid copyright violations and improper use of Internet access? Discuss your proactivity versus reactivity in situations that violate expected professional behavior. Should filtering and/or other monitoring be required? What is your position on the use of such software? What are the alternatives? Summarize your expectations for technological literacy in terms of acceptable use and copyright for the persons within your organization. As an organizational leader, how will you effectively deal with the issues of acceptable use and copyright? What are the consequences for violation and what procedures and policies would you implement?

References are required for this assignment.

Suggested length: 6–10 pages

**Written Assignment 5**  
**Technology Vision Statements and Goals**  
**Due: Week 15**  
**10 points**

As organizational leaders you are expected to predict the future. This can be done by assessing your needs and the needs of your organization in relation to technological literacy. This assignment is based upon the first three assignments that you have already completed in this course. Based on the self-assessment, book review, and assessment of your staff and organization, you will write a comprehensive vision for your use of technology in your organization. Include a timeline that states immediate goals, goals that should be achieved in 2 to 5 years, and long-term goals.

**Your Goals**

*Under each category, list at least one goal that is immediate, one that should be achieved in 2 to 5 years, and one that is long term.*

**Goal One – Student learning and technology**

Immediate

2–5 years

Long term

**Goal Two – Staff use of technology**

Immediate

2–5 years

Long term

**Goal Three – Access to resources using technology**

Immediate

2–5 years

Long term

**Goal Four – Technology for administration, record keeping, and communication**

Immediate

2–5 years

Long term

Suggested length: 8–10 pages