Research Proposal Assignment

Effective End-User Software Documentation for a European Audience

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ETR 520 Introduction to Educational Research - Fall 2004

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1. Introduction

1.1. Context

Novarra Inc. develops an Internet browser that is used on cellular phones. This browser allows for the reformatting and display of Web pages that are designed for much larger desktop computers and monitors.

To date, documentation has only been developed for customers in the United States. Novarra Inc. will be introducing this browser to the European market in 2005. The browser will be used on a variety of phone models/manufacturers and with several different cellular phone service providers. These phones and service providers are different than those in the United States.

1.2. Need for Knowledge

To date, Novarra Inc. has not developed a product for use outside the United States. Therefore, documentation has only been developed with this audience in mind. The researcher will be developing the documentation for the European audience. The researcher has not previously created, nor has the knowledge for creating, the appropriate documentation for the European audience.

1.3. Statement of Problem

The problem to be addressed by this proposed study is how should effective user documentation, for the Novarra Inc. browser, be developed for a European audience.

1.4. Significance of Problem

If a product were totally intuitive, user documentation would not be necessary. Given the various platforms and equipment the Novarra Inc. browser will be deployed on, it is not totally intuitive. This makes documentation an important part of the total product.

Many companies make the assumption that the way things are done in the United States are widely accepted around the world. This is not always true. If Novarra Inc. is going to compete head-to-head with European competitors, the documentation needs to be acceptable to an audience previously unaddressed. Failure to gain acceptance by intended audience will result in less than expected sales.

2. Purpose

2.1. Purpose of the Study

The purpose of this proposed study is to define the style and format for developing Novarra Inc. browser user documentation for a European audience.

2.2. Significance of Proposed Study

Documentation needs to be developed in time for the first launch of the Novarra Inc. browser to Europe. This study should reveal what is necessary to develop effective documentation for a European audience. As the browser is certified on additional phones and service providers, additional documentation will need to be developed. The initial documentation will serve as the basis for future documentation.

2.3. Feasibility of Proposed Study

The end-user documentation must be ready, in an electronic format, in time for the 2005 product launch in Europe. Given the limited writing resources and other ongoing projects, it is important that the research is conducted as early as possible to allow sufficient time for the writing, formatting and editing of the documentation.

2.4. Research Questions

URQ: How must end-user documentation, for a US developed cell phone Internet browser, be written for a European audience?

PRQ 1. What are the document formatting, layout and structure used in European end-user documentation for software?

SRQ 1.1. Is documentation structured similar to that developed in the United States?

SRQ 1.2. Is the format used in US documentation acceptable in Europe?

PRQ 2. How are graphics used?

SRQ 2.1. Are documentation graphics used extensively throughout the various European nations?

SRQ 2.2. Is there a level of graphic usage acceptable between the various audiences?

PRQ 3. How are the table of contents, index and glossary used?

PRQ 4. Is a creative (personal) writing style preferred over a technical (formal) writing style?

PRQ 5. How are technical expressions used?

SRQ 5.1. How does technical jargon translate across the various cultures?

SRQ 5.2. Are acronyms used?

PRQ 6. What are the medium and delivery methods of end-user documentation?

SRQ 6.1. Does the audience expect hard (paper) copy or soft (electronic) copy?

SRQ 6.2. Will the audience accept on-line (Internet) documentation?

PRQ 7. What are the differences in documentation presentation?

SRQ 7.1. Other than English, in what languages do the documents need to be translated?

SRQ 7.2. How do intercultural differences affect the development of end-user documentation?

TRQ 7.2.1. Is humor acceptable?

TRQ 7.2.2. Is a straightforward, professional style expected?

2.4.1 Research Hypotheses of Proposed Study

RH 1.1. Documentation structured similar to that developed in the United States is acceptable in Europe.

RH 1.2. The English language format used in US documentation is acceptable in Europe.

RH 2.1. Graphics are extensively used in technical documentation throughout the various European nations.

RH 2.2. Graphic usage is acceptable between the various audiences.

RH 3. The table of contents, index and glossary are used similar to that of US documentation.

RH 4. A creative (personal) writing style is preferred over an overly technical (formal) writing style.

RH 5.1. Technical jargon does not translate across the various cultures.

RH 5.2. Acronyms need to be initially spelled out and referenced in the glossary.

RH 6.1. The audience is open to soft (electronic) copy.

RH 6.2. The audience will accept on-line (Internet) documentation.

RH 7.1. When offered in a language other than English, the documents need to be translated to French, German, Italian and Spanish.

RH 7.2.1. Due to cross cultural differences, humor should be avoided.

RH 7.2.2. A straightforward, professional style is expected by the end-user.

2.4.2 Statistical Hypotheses (as necessary, and if appropriate)

Statistical hypotheses are not necessary in this research proposal.

3 Background

3.1 Theoretical Basis of Proposed Study

The researcher's intent is to establish the appropriate style and format for the development of product documentation for a European audience. Drawing upon existing information from various sources, the researcher expects to identify the differences between American and European software documentation. With this knowledge, the researcher will modify and update existing software documentation and use this as the basis for development.

3.1.1 Theories

Technical documentation, as developed for an American audience, does not transcend through all languages and cultures. As Hoft (1995) noted:

International technical communication requires a significant extension of technical communication as we know it today. It dictates a completely different approach to developing information, new tools, and new methods for its design and testing. In short, we need to reengineer technical communication for international use.

3.1.2 Problem Issues

Refer to the Knowledge Tree in Appendix 7.1.

3.2 Observable Phenomena of Problem

The average consumer today is using a myriad of different software, and documentation must be understandable by the masses rather than the technically advantaged designers and engineers. This has become a global problem rather than a local one. More software is being developed around the world and distributed globally. Besides trying to translate the highly technical

language and concepts to the local user, many times it needs to be translated for an international audience.

This situation has grown with consumer products (cell phones, PDAs, etc.) that essentially are small hand-held computers that perform multiple functions. Unless these products are extremely intuitive, documentation will play a critical role in their success or failure.

In Taylor's (2000) article he states:

An encouraging trend on both sides of the Atlantic, and elsewhere, is a renewed focus on design methods, to which I think the software industry has contributed a lot. It's increasingly common for communicators to acknowledge the importance of user-centered design and usability evaluation. Perhaps in part this is because, whether we are writers or illustrators or designers, we are all computer users now.

3.3 Historical Approaches to Investigation

From the literature the researcher has uncovered so far, this problem has been addressed primarily by the European nations and not so much so by the United States. Various international organizations, such as The Institute of Scientific and Technical Communicators (ISTC) (http://www.istc.org.uk/) exist for professional communicators. Another example is Tceurope "…that was founded as a European umbrella organisation for technical communicators integrating most of the national organisations in Europe" (http://www.tceurope.org/abouttceurope/missionstatement.htm).

The European colloquium has been conducted annually since 2000 in the area of user-friendly product information. In the report from the 3rd European Colloquium (Brynn, 2003), it was noted, "There is today little statistics on technical writing in Europe."

At this colloquium, presentations were made by the various organizations represented. An example is Mr. Mirko Bernhard of the Verein fuer Konsumenteninformation (VKI) in Austria**.** VKI is an Austrian organization for consumer information and consumer protection. They conducted a survey (questionnaire) about instructions for the use of technical consumer goods. Additionally, Mrs. Petra Wimmer form the Donau-Universität Krems (Austria) presented results of the survey on consumers' needs conducted by the university. The report does not discuss how these surveys were conducted. It does however give the major points discovered.

The International Council for Technical Communication (INTECOM) "stands for international co-operation between technical communication organizations, and aims to improve technical documentation and communication. INTECOM represents approximately 30.000 technical

communicators in fifteen member organizations" (http://www.intecom.org/dynindex.html). The International Language Project Group of INTECOM published the *Guidelines for Writing Technical Documentation for an International Audience* (2003). These guidelines were the result of a study group that was to "examine differences in spelling, usage and punctuation; it also was to consider cultural differences that influence how one should write." The group was initially set up in June of 2000 and their results were published for release in July of 2003.

3.4 Reported Findings

In the report from the 3rd European Colloquium (Brynn, 2003), the following was presented:

Verein fuer Konsumenteninformation (VKI) –

- Good products often come with good manuals
- Consumers don't take enough time to read through the instruction manuals
- Consumers are not always aware of their needs
- More and more features of the products are not used at all
- Devices get more complicated by an overload of features

Donau-Universität Krems –

- More female than male consumers read the complete manuals before using products
- People from Central Europe read the complete manual
- People for the Nordic countries only consult the manuals when there is a problem
- Elderly people also consult the whole manual before using products

3.5 Unsatisfied Needs for Knowledge

The information discovered so far is primarily from the view of Europeans writing documentation for other Europeans. It takes into account that English, though not the primary language, is shared by many of the nations.

Two literary giants have commented indirectly about this problem. George Bernard Shaw has been quoted saying "England and America are two countries separated by a common language." In The Canterville Ghost, Oscar Wilde wrote: "We have really everything in common with America nowadays except, of course, language."

If Novarra wants to "win the hearts and minds" of Europeans, they really need to develop documentation directed at them. For Novarra's product to be truly successful in Europe, they must not expect that documentation developed for users in the United State will be automatically understood or embraced by the Europeans.

Novarra's product is moving into the competitor's neighborhood. The "rules of engagement" have changed. The success Novarra is looking for will be the acceptance of their product which results in revenue.

3.6 Definition of Terms

Browser – A client software program used for searching and viewing various kinds of Internet resources such as information on a Web site.

Client – A software program that is used to contact and obtain data from a Server software program on another computer, often across a great distance.

End-user – The person who actually uses a product, whether or not they are the one who purchased the product.

4 Methodology

4.1 Research Design

4.1.1 Method

This proposed study will involve predominately qualitative research. The researcher will not have the time and necessary resources to do quantitative research in the timeframe available. Quantitative data, compiled by other researchers, may be considered in the evaluation of available data and conclusions drawn.

4.1.2 Approach

The approach for the data will be predominately inactive, historical research. With the limited time and resources available, the researcher intends on developing a strategy that incorporates findings from other companies, associations and subject matter experts.

4.1.3 Mechanics

The mechanism for data collection will be documentation retrieved from a variety of sources to include on-line documentation, books, trade journals and articles published in association journals. Sample documentation from competitors will also be reviewed.

4.2 Data Source

4.2.1 Characteristics of Population

The data being reviewed comes from a variety of sources. This includes American software manufacturers with products sold in Europe as well as Novarra's direct European competition and their documentation. Additionally, American technical communication associations, international technical communication associations, and various subject matter experts articles, reports, studies and books were researched.

4.2.1.1 Attributes
Does not apply. Inactive data will be used.

4.2.1.2 Size
Does not apply. Inactive data will be used.

4.2.2 Characteristics of Desired Sample
Does not apply. Inactive data will be used.

4.2.2.1 Attributes
Does not apply. Inactive data will be used.

4.2.2.2 Size
Does not apply. Inactive data will be used.

4.3 Sampling
Does not apply. Inactive data will be used.

4.3.1 Technique
Does not apply. Inactive data will be used.

4.3.2 Audit
Does not apply. Inactive data will be used.

4.4 Human Subjects Compliance

4.4.1 IRB Application
Copies of the IRB application can be found in section 7.3.

4.4.2 APA Principles

Principle A
Does not apply. Inactive data will be used and no human subjects will be involved.

Principle B
Does not apply. Inactive data will be used and no human subjects will be involved.

Principle C
Does not apply. Inactive data will be used and no human subjects will be involved.

Principle D
Does not apply. Inactive data will be used and no human subjects will be involved.

Principle E
Does not apply. Inactive data will be used and no human subjects will be involved.

Principle F
Does not apply. Inactive data will be used and no human subjects will be involved.

Principle G
Does not apply. Inactive data will be used and no human subjects will be involved.

Principle H
Does not apply. Inactive data will be used and no human subjects will be involved.

Principle I
Does not apply. Inactive data will be used and no human subjects will be involved.

Principle J
Does not apply. Inactive data will be used and no human subjects will be involved.

4.4.3 NIH Training Certificate
Copies of the researcher's NIH training certificates can be found in section 7.6.

4.5 Variables

4.5.1 Qualitative
Inactive data will be used and no new qualitative studies will be conducted by, or for, the researcher.

4.5.2 Quantitative
The inactive data discovered so far does not give specifics on the quantitative variables within those sources. No new quantitative studies will be conducted by, or for, the researcher.

4.6 Data Collection

4.6.1 Variable Measurement
The inactive data discovered so far does not give specifics on the mechanism of measurement (data collection) used by the various sources. No new quantitative studies will be conducted the researcher.

4.6.2 Variable Coding

Does not apply. Inactive data will be used and no new quantitative studies will be conducted by, or for, the researcher.

4.6.3 Validity

Does not apply. Inactive data will be used and no new quantitative studies will be conducted by, or for, the researcher.

4.6.4 Reliability

Does not apply. Inactive data will be used and no new quantitative studies will be conducted by, or for, the researcher.

4.7 Data Analysis

4.7.1 Analytical Techniques

4.7.1.1 Qualitative

Qualitative data will be analyzed by appropriate techniques after consultation with Dr. Brent Wholeben.

4.7.1.2 Quantitative

Inactive data is used. No quantitative (numeric) data will be used in this research.

4.8 Limitations and Delimitations

4.8.1 Limitations

Several limitations will affect the findings of this proposed study:

- No funding for conducting and collecting primary data by the researcher – Novarra has not budgeted any monies for documentation research. This is one reason for the use of inactive data.
- Time constraints – Enough time does not exist to conduct primary research (e.g. questionnaires, focus groups, etc.) collect and evaluate the data, and produce documentation in time for the product launch.
- Constraints imposed by other projects – The researcher's primary responsibility is creating user documentation for all of Novarra's products. Since the researcher is the sole producer of user documentation for Novarra, a limited amount of time can be spent on research.

4.8.2 Delimitations

Due to some of the previously listed limitations, the researcher will focus on obtaining information from impersonal sources (Web sites, books, articles, journals, etc.). The researcher will forego contacting trade organizations and associations directly for information. This could potentially limit the amount of

recently produced information for the researcher that the organizations and associations may have access to.

5 Implications

5.1 Implications of Possible Findings

5.1.1 Theory Enhancement

The resulting information from this study will enable the researcher, who is also Novarra's sole technical writer, to develop end-user documentation for a European audience. This documentation combined with Novarra's superior Web browsing product is expected to make a big impact in the European market.

The knowledge initially gained, and additional feedback after product launch, will provide a basis for documentation improvements. The findings will also provide useful information for future products and their accompanying documentation.

5.1.2 Field Applications

Novarra's technical writer, who has no experience in developing documentation for use outside the United States, will be the primary beneficiary of this research. Effective use of this information will make the technical writer a more valuable, and versatile, asset.

The end result is that the combination of the browser and end-user documentation proves to be a total superior product than the European's currently have. This will result in greater realized revenues by Novarra.

6 References

6.1 Research Bibliography

Brynn, R (2003, March). *User-friendly Operating Manuals for Technical Consumer Goods*, Report from 3rd European Colloquium for user-friendly product information, Palais des Congres, Brussels.

Hoft, N. L (1995*). International Technical Communication: How to Export Information about High Technology*. New York: John Wiley.

Taylor, C. (2000). Information Design: A European Perspective. *Technical Communication, Vol. 47 Issue2,* 167-168. Retrieved October 5, 2004 from ERIC database.

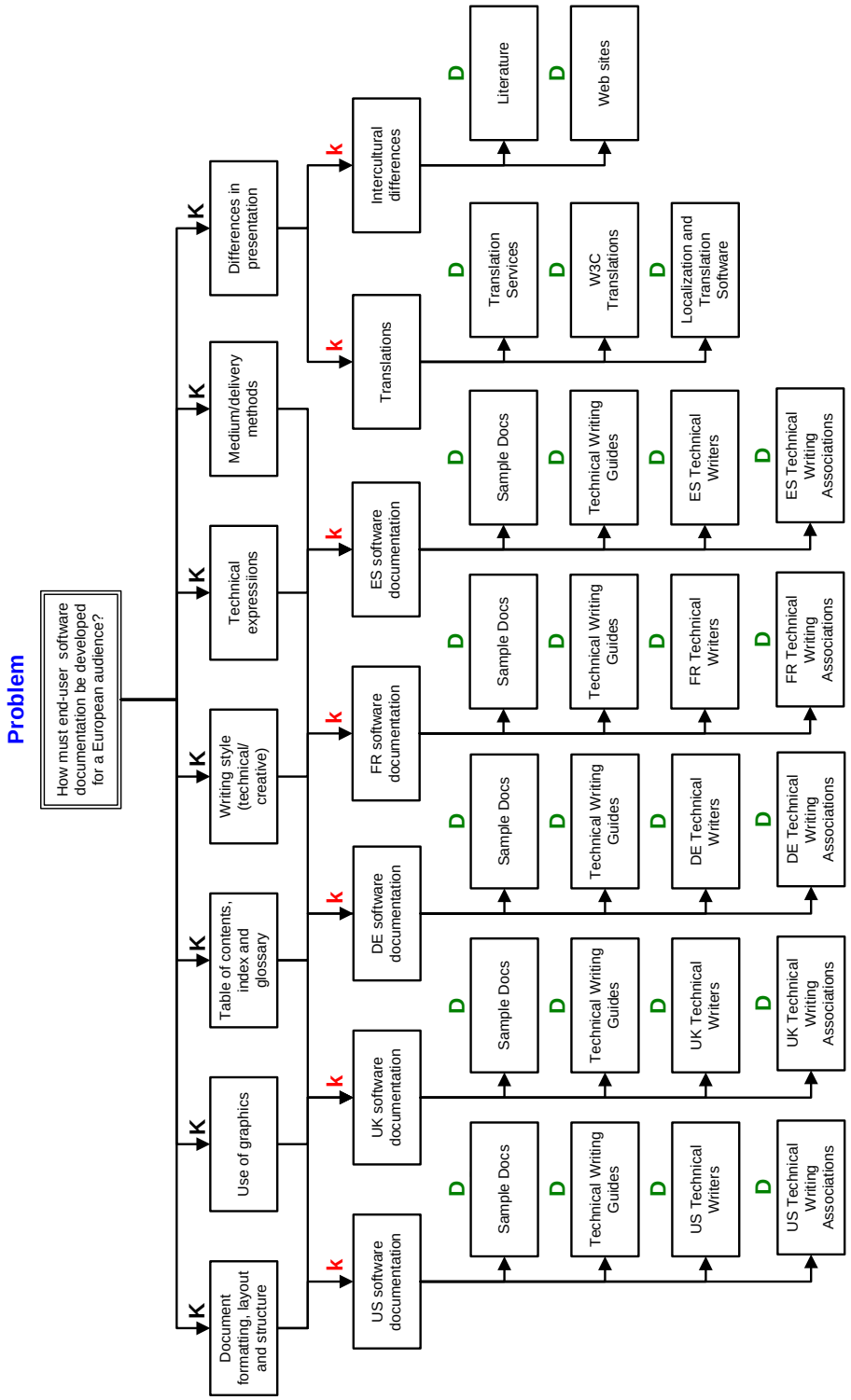
The International Council for Technical Communication (2003). *Guidelines for Writing English-Language Technical Documentation for an International Audience*. Retrieved October 5, 2004 from http://www.intecom.org/guidelines.html

6.2 Supplementary Bibliography

Yli-Jokipii, H. M (1998*).* Europe: Business Writing. *Business Communication Quarterly Sep 98, Vol. 61 Issue 3,* 94-101. Retrieved October 5, 2004 from ERIC database.

7 Appendices

7.1 Concept Map (Knowledge Tree)



7.2 Literature Cross-Referent Matrix

Not applicable.

7.3 IRB Application

The IRB application is attached and starts on next page.

INSTITUTIONAL REVIEW OF RESEARCH INVOLVING HUMAN SUBJECTS
SUPPLEMENTAL SCREENING FORM

In instances where it is unclear whether activities constitute research with human subjects requiring IRB approval, please complete this Screening Form. If the project is clearly research with human subjects, the investigator need not complete it but should complete and submit the remaining pages of the application form. If, upon completion of this Screening Form, the project does NOT qualify as human-subjects research requiring IRB approval, keep a copy of the Screening Form (and any other materials submitted) for departmental records and send only the signed original Screening Form page to the Office of Research Compliance in the Graduate School.

Part 1: Project Information

Name(s):

Robert J. Leahy, Jr.

Department:

ETR 520 DE1

Project Title:

Effective End-User Software Documentation for a European Audience

Data Collection Start Date:

10/05/2004

Part 2: Is IRB review required for this project?

IRB review is definitely needed because human subjects are involved and the study is intended to contribute to generalizable knowledge via a:

- ☐ Thesis
- ☐ Dissertation
- ☐ Scholarly presentation
- ☐ Scholarly publication
- ☒ Other:

  Course Project

IRB review is not needed because:

- ☐ no living human subjects are involved.
- ☐ results will be shared only with the client or stakeholder(s) for their private use for evaluation of an established program or for other non-research purposes.
- ☐ the project utilizes only publicly available, anonymous data base(s).
- ☐ the project is an internal evaluation intended for quality control of ongoing program only.

Part 3: Guidelines for Submission of Student Projects

IRB review is definitely needed because:

- ☐ it is a thesis/dissertation project (as indicated above).
- ☐ the results of the project are intended for scholarly dissemination outside the classroom.

At the discretion of the course instructor, courtesy IRB review of this educational exercise is requested because:

- ☐ the project involves a risky or sensitive topic.
- ☒ data will be gathered outside the classroom.

This educational exercise does not need IRB review because:

- ☐ the sole purpose is to teach students how to gather and evaluate data and the information will not be disseminated outside the class or instructional clinical setting.

_____ _____

Signature of Authorized Departmental Reviewer *Date*

APPLICATION FOR INSTITUTIONAL REVIEW OF RESEARCH INVOLVING HUMAN SUBJECTS

Note: Please complete this form and provide brief responses to the issues raised, keeping in mind that the primary concern is the potential risk, (economic, ethical, legal, physical, political, psychological/emotional, social, breach of confidentiality, or other), to the subjects. Provide copies of all stories, questionnaires, interview questions, recruiting materials, or other documents to be used in the investigation. The Institutional Review Board (IRB) must have enough information about the transactions with the subjects to evaluate the risks of participation. Assurance from the investigator that subjects are at no risk, no matter how strong, will not substitute for a description of the transactions.

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Name(s):

Robert J. Leahy, Jr.

Department:

Mailing Address:

Phone:

E-mail:

bob_838@hotmail.com

Project Title:

Effective End-User Software Documentation for a European Audience

Data Collection Start Date:

☒ Upon IRB approval ☐ Other (specify):

Note: Unless the authorized departmental reviewer (e.g., chair or designee) has deemed on the cover page that IRB review is not needed, all projects must receive formal written clearance from the IRB Chair (or an IRB member designated by the Chair) **prior** to the start of data collection.

Type of Project (Check one)

☐ Externally Sponsored Research

A complete copy of the grant proposal or contract must accompany this application form for IRB review to take place.

- Source of Funding:
- Office of Sponsored Projects file number:

☐ Departmental Research

☐ Graduate School Fund

☐ Thesis/Dissertation (IRB application should be submitted AFTER proposal defense)

Advisor/Committee Chair (& e-mail):

☒ Other

Specify: Course Project

****

FOR ALL PROJECTS

1. Briefly provide, in nontechnical, lay-terms, the following information:

   Describe the purpose of your study and the reason(s) this study is needed. Include a description of your hypothesis or research question.

   The purpose of this proposed study is to define the style and format for developing Novarra Inc. browser user documentation for a European audience. URQ: How must end-user documentation, for a US developed cell phone Internet browser, be written for a European audience?

   a) Explain precisely what your subjects will be asked to do, provide, answer, etc.

   Does not apply. Inactive data is used and no human subjects will be involved.

   a) Attach copies of all questionnaires, surveys, interview questions, listing of all information/data to be collected, etc. If the research involves an oral interview or focus group discussion that could evolve as it progresses, include a list of discussion topics and any "starter" questions for each topic that can reasonably be expected to be covered. If a *draft* of a written questionnaire or survey is attached, it should be clearly labeled as such and a final version must be submitted *before* data collection begins.

   Does not apply. Inactive data is used and no human subjects will be involved.

2. Risk/Benefit assessment: Explain the following:

   a) The knowledge/benefit(s) to be gained from the study;

   The resulting information from this study will enable the researcher, who is also Novarra's sole technical writer, to develop end-user documentation for a European audience. This documentation combined with Novarra's superior Web browsing product is expected to make a big impact in the European market.

   The knowledge initially gained, and additional feedback after product launch, will provide a basis for documentation improvements. The findings will also provide useful information for future products and their accompanying documentation.

   b) The benefit(s) to the subject(s) (if any) from the proposed research;

   Does not apply. Inactive data is used and no human subjects will be involved.

   c) Any potential risks (economic, ethical, legal, physical, political, psychological/emotional, social, breach of confidentiality, or other) to the subjects posed by the proposed research. (Note: Some studies may have "no reasonably foreseeable risks." In other cases, although risk may be minimal, it is seldom totally absent.) It is the content of the questions asked and answered, not the risk of completing a questionnaire, etc., that must be considered in describing risk. Investigators are required to report all unexpected and/or adverse events to the IRB. Incidents that have not been listed as anticipated risks are considered protocol deviations and NIU may be required to report them at the federal level.

   Does not apply. Inactive data is used and no human subjects will be involved.

   d) What procedures will be used to minimize each risk and/or deal with the challenge(s) stated in "c" above.

   Does not apply. Inactive data is used and no human subjects will be involved.

   e) How the potential benefits of the study *justify* the potential risks to the subjects.

   Does not apply. Inactive data is used and no human subjects will be involved.

3. Provide the following information about the study participants (Note: WOMEN, CHILDREN, AND MINORITIES MUST BE INCLUDED IN THE SUBJECT POOL, OR THEIR EXCLUSION MUST BE JUSTIFIED TO THE SATISFACTION OF THE IRB. VISIT THE IRB WEB PAGE AT www.grad.niu.edu/orc FOR ASSISTANCE):

   a) Participant demographics:

   - Gender: M ☐ F ☐ Both ☐
   - Are any subjects under age 18? Yes ☐ No ☐
   - Age(s):

     Does not apply. Inactive data is used and no human subjects will be involved.

- Vulnerable populations
  ☐ Pregnant women & fetuses
  ☐ Prisoners
  ☐ Decisionally impaired/mentally disabled
  ☐ Specific ethnic group(s) (list in box):

  Does not apply. Inactive data is used and no human subjects will be involved.

  If any "vulnerable populations" have been indicated above, please explain the necessity for using this particular group.

  Does not apply. Inactive data is used and no human subjects will be involved.

- Number of participants in study (including controls):

  Does not apply. Inactive data is used and no human subjects will be involved.

b) Explain in detail how and where subjects will be recruited or introduced to the study.

Does not apply. Inactive data is used and no human subjects will be involved.

c) All subject recruitment/introductory materials (advertisements, mailings, fliers, Internet postings, etc.) to be used must be attached.

4. Describe the procedures for obtaining informed consent as provided for in the Code of Federal Regulations, sections 46.116 and 117.

   Does not apply. Inactive data is used and no human subjects will be involved.

   a) If minors are involved, describe the procedures for obtaining:

   i. individual assent to participate from the minors capable of giving assent AND

   Does not apply. Inactive data is used and no human subjects will be involved.

   ii. the procedures to obtain parental or legally authorized representative permission.

   Does not apply. Inactive data is used and no human subjects will be involved.

   b) Append any form(s) to be used. Appropriate informed consent documents should be prepared for each group of subjects participating in the study. Consent forms should be prepared for adult participants (age 18 or over). Assent forms should be prepared for minor subjects appropriate to their ages, and permission form(s) for parents or legally authorized representatives should also be prepared. For children too young to comprehend a simple explanation of participation, parental permission is sufficient only if the research will provide direct benefit to the subject, a member of the subject's family, or other children with the same condition as the subject.

   c) Does this study involve deception? Yes ☐ No ☐

   Describe the deception and why it is necessary and attach a copy of the debriefing statement.

   Does not apply. Inactive data is used and no human subjects will be involved.

   d) For projects requiring Subcommittee or Full-board Review, if requesting a waiver of the requirement for obtaining the written informed consent of research participants, justification for the requested waiver is required. Complete and attach the "Request for Variation of Consent " form.

5. Explain what, if any, support services will be provided in the event of harm to a subject.

   Does not apply. Inactive data is used and no human subjects will be involved.

6. Confidentiality:

   a) Describe precautions to insure the privacy of the subjects, and the confidentiality of the data, both in your possession and in reports and publications.

   Does not apply. Inactive data is used and no human subjects will be involved.

b) Will audio, video, or film recording be used? Yes ☐ No ☐
If yes:
i. Specify the recording format to be used.

Does not apply. Inactive data is used and no human subjects will be involved.

ii. Specific consent must be sought in the informed consent document(s) by including a separate signature/date line giving consent for recording. This is in addition to the signature/date line giving consent to participate in the research project.

c) What will be the disposition of the records (data and recordings) when the research is completed?

Does not apply. Inactive data is used and no human subjects will be involved.

7. State the research qualifications of the individuals who will have direct contact with the subjects.
a) In addition to listing the investigators' names, indicate their qualifications to conduct procedures to be used in this study.

Robert J. Leahy, Jr.: AS, Business Administration, College of Lake County, Grayslake, IL BA, Liberal Arts, Northeastern Illinois University, Chicago, IL Combined Arms Services and Staff School, US Army Command & General Staff College, Ft Leavenworth, KS MS Ed, Adult & Higher Education, Northern Illinois University, Dekalb, IL (Exp completion Spring 05) NIH Office of Human Subject Research - Ethics Training Module @ http://www.nihtraining.com/ohsrsite/IRBCBT/intro.html OHRP Human Subjects Assurance Training @ http://137.187.172.152/cbttng_ohrp/cbts/assurance/login.asp Internal Validity Tutorial @ http://psych.athabascau.ca/html/Validity/

b) List the Human Subjects Protection training program(s) completed by the individuals listed in 7a and the date(s) of completion. Indicate any workshops, courses, tutorials, or other educational experiences attended, at NIU or elsewhere, which have covered issues relevant to human subjects research. (If none, indicate "none" rather than "not applicable".)

NIH Office of Human Subject Research - Ethics Training Module @http://www.nihtraining.com/ohsrsite/IRBCBT/intro.html - Completed: 09/28/2004 OHRP Human Subjects Assurance Training @ http://137.187.172.152/cbttng_ohrp/cbts/assurance/login.asp - Completed: 09/28/2004

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REQUIRED SIGNATURES: ALL PROJECTS

CERTIFICATION

I certify that I have read and understand the policies and procedures for research projects that involve human subjects and that I intend to comply with Northern Illinois University Policy. Any changes in the approved protocol will be submitted to the IRB for written approval prior to those changes being put into practice unless it involves an immediate safety issue for the subject during a procedure. (In such instances, the researcher is required to promptly notify the IRB after the fact.) I also understand that all non-exempt projects require review at least annually.

/s/ Robert J. Leahy, Jr _____

Investigator(s) Signature(s) Date

_____

Signature of Faculty Advisor Date
(Student Project Only)

To be completed by investigator and confirmed by advisor (if student project) and departmental reviewer. Initials indicate all required parties ratify that application is complete:

Checklist of items required to accompany completed application form:

1. _____ Complete grant proposal/contract (for externally funded projects)
2. _____ All surveys, questionnaires, interview questions, or other instruments to be used
3. _____ Subject recruitment/introductory materials
4. _____ Informed consent documents (must select at least one):
   - _____ Consent form for adults (if participants are age 18 or over)
   - _____ Assent form for minors (if participants are under age 18)
   - _____ Parental permission form (if participants are under age 18)
   - _____ Waiver of written consent requested (for Subcommittee and Full-board Review projects, must complete and attach *Request for Variation of Consent Attachment* form in order to provide justification that requested waiver meets criteria listed in 45 CFR 46.116(c) or 45 CFR 46.117(c))

Initial indicating all listed materials are attached and application is complete; INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED. The investigator will be notified of deficiencies in the application via e-mail from the Office of Research Compliance (ORC); if no response is received by the ORC within five (5) working days the application will be considered void.

Investigator _____ Advisor (if student project) _____ Department Chair/Designee _____

Departmental Determination according to 45 Code of Federal Regulations 46: (to be completed by Department Chair or Designee)

☐ Project qualifies for Administrative Review.
Cite the appropriate exempt category:

☐ Project qualifies for Subcommittee Review.
Cite the appropriate expedited category:

☐ Project is referred for review by the convened IRB.

_____
Signature of Authorized Departmental Reviewer Date

Return this form, together with necessary documentation, to the Office of Research Compliance, Adams Hall, B4 or the Graduate School, Adams Hall. For information or additional assistance with the approval process, please call the office at (815) 753-8588 or access the ORC web page at www.grad.niu.edu/orc.

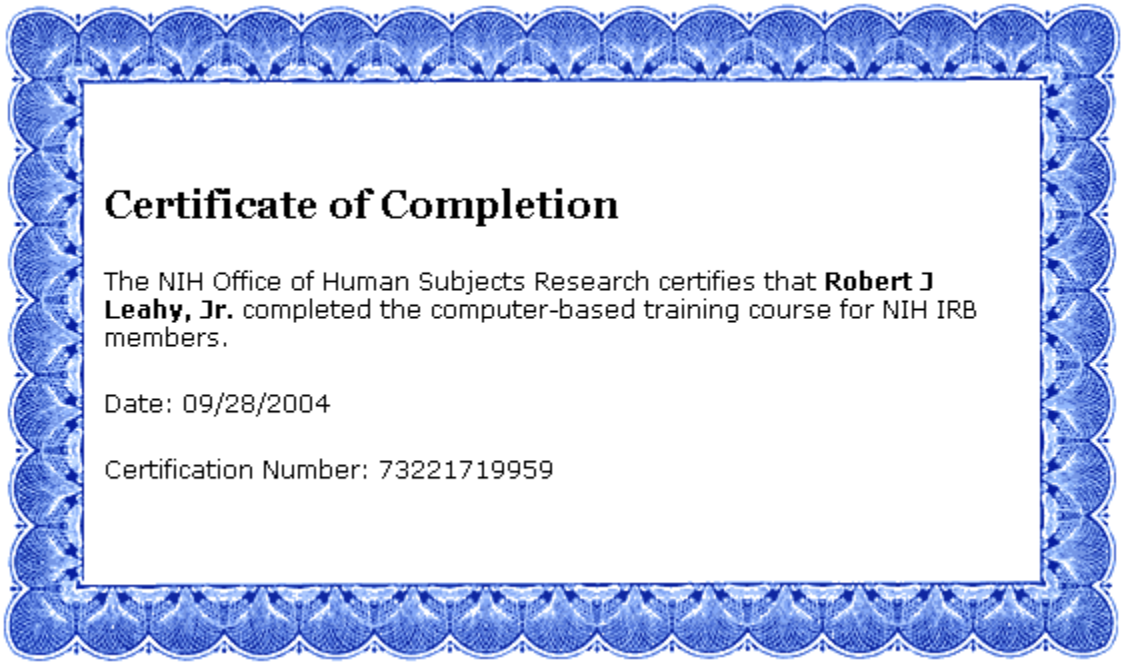
7.4 Correspondence

Not applicable.

7.5 Instrumentation

Not applicable.

7.6 NIH Training Certificates

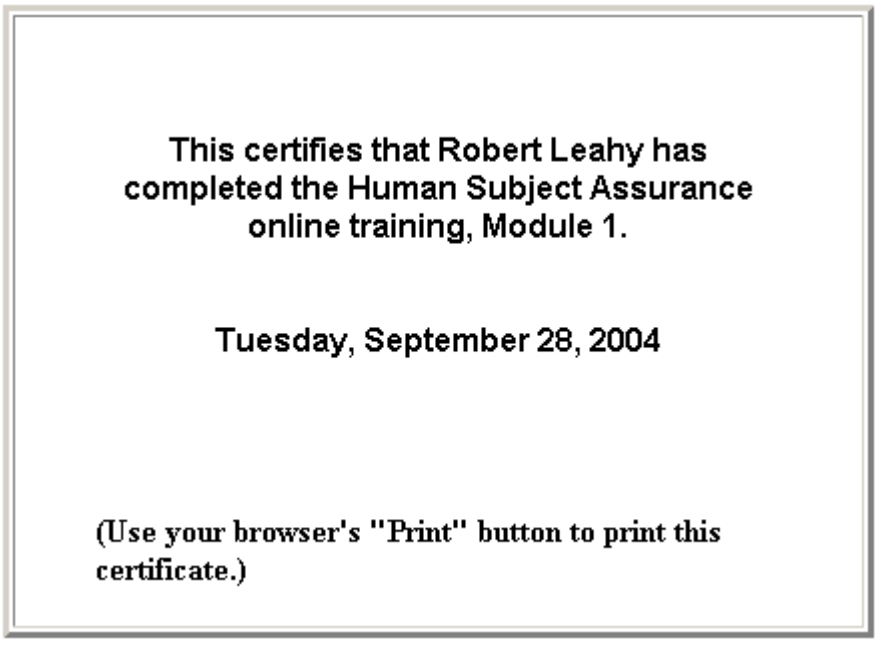


Certificate of Completion

The NIH Office of Human Subjects Research certifies that **Robert J Leahy, Jr.** completed the computer-based training course for NIH IRB members.

Date: 09/28/2004

Certification Number: 73221719959



This certifies that Robert Leahy has completed the Human Subject Assurance online training, Module 1.

Tuesday, September 28, 2004

(Use your browser's "Print" button to print this certificate.)

This certifies that Robert Leahy has completed the Human Subject Assurance online training, Module 2.

Tuesday, September 28, 2004

(Use your browser's "Print" button to print this certificate.)

This certifies that Robert Leahy has completed the Human Subject Assurance online training, Module 3.

Tuesday, September 28, 2004

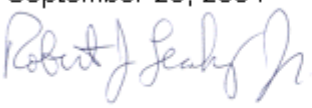
(Use your browser's "Print" button to print this certificate.)

7.7 Affidavits

7.7.1 Belmont Report

I, Robert J. Leahy, Jr., have read *The Belmont Report, Ethical Principles and Guidelines for the Protection of Human Subjects of Research* dated April 18, 1979. I downloaded this document from http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.htm.

September 28, 2004

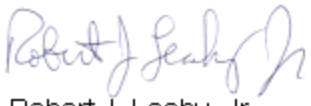


Robert J. Leahy, Jr.

7.7.2 45 CFR 46

I, Robert J. Leahy, Jr., have read *The Code of Federal Regulations Title 45, Public Welfare, Part 46, Protection of Human Subjects* effective December 13, 2001. I downloaded this document from http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm.

September 28, 2004



Robert J. Leahy, Jr.

7.8 Internal Validity Threats Scoring Sheet

ETR 520 Fall 2004 — Internal Validity (scoring) — Brent E. Wholeben, Ph.D.

Student Name: Robert Leahy **Date:** (Part 1) 11/2/04 (Part 2) 11/2/04 Time: 2:45 - 4:00

Instructions: Study *Part 1* (Definitions), then proceed to *Part 2* (Evaluation). Evaluate the situation presented, and record your response (answer) by 'circling' the corresponding item designator. Next, submit your response to the tutorial. If correct, proceed to the next item. If incorrect, place an 'X' through your (incorrectly) circled item, and 'circle' the correct item designator as per the tutorial's automated response. Lastly, tally the frequency of your "initially correct" responses, and place that sum in the space provided at the bottom of this sheet.

http://psych.athabascau.ca/html/Validity/index.shtml

	01	02	03	04	05	06	07	08	09	10	11	12
This experiment **is** internally valid.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
This experiment **is not** internally valid, and the source of threat is:												
1. Selection	S	X	S	S	S	S	S	S	S	S	S	S
2. History	H	H	H	H	H	H	H	H	H	H	H	H
3. Maturation	M	M	M	M	M	M	M	M	M	M	M	M
4. Repeated Testing	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
5. Instrumentation	I	I	I	X	X	I	X	I	I	I	I	I
6. Regression to the Mean	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM
7. Experimental Mortality	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM
8. Selection-Maturation Interaction	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI
9. Experimenter Bias	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB

	13	14	15	16	17	18	19	20	21	22	23	24
This experiment **is** internally valid.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
This experiment **is not** internally valid, and the source of threat is:												
1. Selection	S	S	S	S	S	S	S	S	S	S	S	S
2. History	H	H	H	H	H	H	H	H	H	H	H	H
3. Maturation	M	M	M	M	M	M	M	M	M	M	M	M
4. Repeated Testing	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
5. Instrumentation	I	I	I	I	I	I	I	I	I	I	I	I
6. Regression to the Mean	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM
7. Experimental Mortality	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM
8. Selection-Maturation Interaction	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI	SMI
9. Experimenter Bias	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB

	25	26	27	28	29	30	31	32	33	34	35	36
This experiment **is** internally valid.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
This experiment **is not** internally valid, and the source of threat is:												
1. Selection	S	S	S	S	S	S	S	X	S	S	S	S
2. History	H	H	H	H	H	H	H	H	H	H	H	H
3. Maturation	X	M	M	M	M	M	X	M	M	M	M	M
4. Repeated Testing	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT	RT
5. Instrumentation	I	I	I	I	I	I	I	I	I	I	I	I
6. Regression to the Mean	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM
7. Experimental Mortality	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM	EM
8. Selection-Maturation Interaction	SMI	SMI	SMI	SMI	X	SMI	SMI	SMI	SMI	SMI	SMI	SMI
9. Experimenter Bias	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB	EB

Your final score: 26 (correct of 36 total)

InternalValidity(scoring)041019::Sheet1