

CHILD LANGUAGE DEVELOPMENT AND DISORDERS (CLDD)

LABORATORY

Louisiana State University

Janna B. Oetting, Ph.D.

The goal of this laboratory is to generate research and foster student training in research in the areas of child language development and disorders. The lab is open to students at all levels of training (B.A., M.A., and Ph.D.) and Ph.D. student alumni. This document presents the data access guidelines and authorship guidelines for the research projects that are established and conducted in the lab. It is consistent with the expectations for responsible conduct of research at Louisiana State University (LSU). Much of the content for this document came from the Child Language and Literacy Lab of C. Melanie Schuele, Ph.D. at the Vanderbilt University, and within Dr. Schuele's lab manual, she credits portions of her document to one formulated by Julie Washington, Ph.D. who at the time was at the University of Wisconsin, Madison. These guidelines are also intended to offer a foundation for further dialogue between Dr. Oetting and students about issues related to lab access, data access, and authorship.

STUDENT ACCESS TO THE LAB

Student access to the lab is highly encouraged, but it is also based on prior approval from Dr. Oetting. When keys are available, they are typically given to Ph.D. students first and then to M.A. and B.A. students. For students who do not have keys, the lab can be opened upon request by Raven Johnson or Rhonda Aucoin. When working in the lab, students will also receive the password for the computers and learn the location of the key to the data cabinets. If the lab begins to feel cramped, Dr. Oetting may ask students to work elsewhere within the department on a temporary basis. Students who do not work for Dr. Oetting should never be in the lab and should never use the equipment in the lab.

It is expected that all students who work in the lab will first complete NIH's computerized training program, as specified by LSU's Institutional Review Board (IRB). Students are required to give Dr. Oetting a copy of their certificates prior to working in the lab. Students are also encouraged to keep a copy of their certificate for their own records.

It is expected that students in the lab will be working on lab-related research. The lab equipment should not be used for personal projects, and this includes homework and papers for classes. It is expected that students will keep the lab clean and initiate clean up and computer updates on a weekly basis. Please do not place food and drink by the computers and take all perishable items out of the lab when you leave.

The lab contains basic office supplies that can be used for research. When inexpensive supplies (paper, staples, etc) run low, we get them from Raven. If the department is out of an item, the item may need to be ordered. Printer cartridges tend to be expensive so it is best to let Dr. Oetting know when these need to be replaced. Software and other equipment purchases also go through Raven, but they need prior approval from Dr. Oetting.

All data and documents should be backed up on a daily basis. Flash drives are in the lab for this purpose. Please keep projects organized by folders and include the date of your last revision of

an electronic file in the title when appropriate (e.g., pasttense.reliability.summary.06.01.07). Avoid naming files by generic titles (e.g., project, thesis, dissertation).

When representing the lab off-campus, professional attire should be worn (i.e., no jeans) and when in the public schools, students wear an LSU hang tag and sign in to the school using the public schools guidelines.

All field equipment, including laptops and audio-recorders need to be checked out and returned in an efficient and systematic manner. Also, it is critical that all data management, scoring, and storage systems created within the lab be followed within the time constraints set by the lab.

Please let Dr. Oetting know when you are unable to follow these procedures. The intent is for these guidelines to facilitate faculty and student research in ways that are respectful and protective of each other's efforts.

All file cabinets with locks need to be kept locked at all time; doors to the lab also must be kept locked. The lab is located in a place where security is often breached.

DATA ACCESS AND OWNERSHIP

The conduct of science is a collective effort, especially when one works as part of an active research lab. Although many persons may contribute to a particular project, not all contributors have the same role, power, authority, or seniority. It is essential that the roles of all participants in the lab are clarified and understood, and that individuals understand their contribution and access to lab data. Below, a few different types of data situations are described. Following this, procedures for documenting access and ownership are outlined.

LAB DATA

1. Archival data are the property of Dr. Oetting, as the director of the lab (i.e., the data are actually owned by LSU). These data may be accessed by lab members (current and alumni) for a variety of projects with the agreement of Dr. Oetting. While the goal of the lab is to facilitate a wide range of topics that relate to the study of child language development and disorders, it is possible that particular projects will not be possible if, for example, the proposed project conflicts with the central aims of current and/or future research that is being carried out in the lab. Archival data must remain in the lab at all times (unless a different work space has been specified and secured), and individuals working on these data must adhere to guidelines outlined in the IRB proposal that covers these data. Currently, these data include:
 - a. Language samples (written, electronic, audio, video) that have been collected as part of past projects in the lab (93 SAAE and SWE rural samples, aged 4 to 6 years, 21 AAE samples, aged 3 years, 17 AAE samples from mother-child dyads, 60 SAAE urban samples, aged 5 to 6 years).
 - b. Testing data that have been collected as part of past projects in the lab. This includes test data from the PPVT-R, PPVTIII, TOLD, LEITER, CSSB, CMMS, MCDI, HOME, and A&S.
 - c. Experimental probe data from studies as cited in Oetting and Rice (1993), Oetting and Horohov (1997), Oetting (1999), Oetting (2000), Oetting and Cleveland (2006), and Oetting, Habans and Cope (in press). These data do not include experimental probes collected as the central component of a dissertation by past Ph.D. students.
 - d. Data collected from current NIH grant, 2009-2014.
2. Data from faculty-initiated projects: These projects are those that are generated by Dr. Oetting; they may or may not be tied to external funding. Dr. Oetting remains the Principal Investigator (PI) on these projects for IRB purposes. Projects that fall into this category may include BA and MA student thesis work as well as some research projects that are conducted by Ph.D. students; this often is the case when students are asked to collect data as part of a larger study being conducted within the lab.
3. Data from student-initiated projects: These projects are separate from the central research projects of Dr. Oetting. It is important to recognize that although the data for these projects are collected with students, Dr. Oetting plays a critical role and serves as the PI on these projects for IRB purposes at LSU. Ownership of these data will be determined on a case by case basis. For Ph.D. dissertations, experimental probe data that are central

to the study are typically owned by the student, but an archival copy of the data may be retained in the lab depending on the student's interests and needs. Test data and language sample data from dissertations and other student-initiated projects, however, may be treated differently, especially if the data are collected, transcribed, scored, and/or coded by multiple lab members. The intent here is to facilitate a PhD student's independent work while also maintaining a high level of rigor for data collection, transcribing, and coding that a large lab (as opposed to an individual) can accomplish. When this occurs, the audio, video, electronic, and written forms of these data may stay with student and/or may become part of the larger archive of test and language sample data in the lab.

PROCEDURES FOR DOCUMENTING LAB DATA ACCESS/OWNERSHIP

Historically and across multiple labs around the country, ownership and access to data can be difficult to determine, and initial agreements about access and ownership may also need to be changed as a project progresses (or does not progress). Therefore, at the onset of each project, a working document of data access/ownership will be established and signed. Adjustments will be documented in writing by agreement of the student and Dr. Oetting. The student will maintain a copy; Dr. Oetting will retain the original document.

TRANSFER OF DATA OR COPY OF DATA TO ANOTHER UNIVERSITY

When research materials (i.e. data) or copies of materials need to be moved from the lab (as in the case of a PhD student graduating), a formal request to document the transfer will be sent to the IRB office. As the PI, Dr. Oetting will generate or sign this request.

AUTHORSHIP

For each manuscript submission and conference presentation, the team members, under the direction of Dr. Oetting, will develop a working plan that delineates each student's expected contribution and anticipated authorship credit. In the perfect world, all members will verify this document by signature. As changes can take place in the execution of projects, this plan may be subject to revision; if necessary, any changes will be acknowledged by signature of all relevant lab members. All participants on projects will be provided a copy of the working plan. Dr. Oetting will retain the original document. For theses and dissertations, every effort will be made to allow the student to serve as the first author of any publication or presentation that comes from the work, with Dr. Oetting serving as a co-author.

*"Authorship cannot be conferred; it may be undertaken by one who will shoulder the responsibility that goes with it. To a responsible writer, an article with his(her) name on it, is the highest product of his(her) mind and art, his(her) property...founded in his(her) character and evidence of it...The reader of a report issued by two or more authors has a right to assume that each author has some authoritative knowledge of the subject, that each contributed to the investigation, and that each labored on the report to the extent of weighing every word and quantity in it."*¹

¹ Hewitt, R.M. (1957). *The Physician-Writer's Book; Tricks of the trade of medical writing*. Philadelphia: W.B. Saunders, p. 312

1. Authorship credit on any research publication produced in Dr. Oetting's laboratory at LSU assumes that each author has contributed in a substantial way to the conceptualization, design, analysis, or interpretation of the results. For the purposes of this document, *research publications* include:

- a. articles based on original research and submitted to journals,
- b. abstracts or manuscripts submitted for conference proceedings,
- c. abstracts and presentations presented at conferences, and
- d. review articles submitted to journals or book publishers.

According to the International Committee on Medical Journal Ethics (ICMJE), whose guidelines for responsible authorship represent the current state of the art in publication ethics, "*each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content*" and "*one or more authors should take responsibility for the integrity of the work as a whole, from inception to published article.*"²

Specifically, the following 3 conditions for authorship shall be met by each potential author:³

1. Substantial contributions to conceptualization and design of the study, or acquisition of the data, or analysis **and** interpretation of the data;
2. Substantial contributions to the writing of the manuscript or critical revision of the manuscript for important intellectual content; and,
3. Substantial contributions to the approval of the final version to be published.

All 3 conditions must be met in order to recommend authorship on a given manuscript.

2. Authorship credit shall not be given for strictly routine contributions to the research effort that do not involve responsibility for the content and integrity of the manuscript.

Specifically, individuals shall not be given authorship credit solely for:

1. Collection of the data
2. Statistical analysis of the data
3. Data input
4. Supervision of the research group
5. Providing funding
6. Consulting for a fee or reimbursement⁴
7. Routine technical work (e.g., transcription, coding, scoring)
8. Proofreading or editing
9. Contributing to the solution of narrowly defined problems that are not related to the larger project/manuscript objectives⁵

² International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. Updated May 2000. Available at: <http://icmje.org>. Accessed May 6, 2004.

³ *ibid*

⁴ The University of Michigan Medical School Guidelines for Responsible Conduct of Research. <http://www.responsibility.research.umich.edu/UMMSauthor.html>. Accessed 5/6/04.

⁵ *ibid*

Occasionally, a volunteer lab member (i.e., not paid) will be awarded authorship on a conference presentation only for what might be considered routine contributions to the research effort. These decisions will be made on a case-by-case basis.

3. First authorship requires significant responsibility for the manuscript, beyond that assumed by any other co-author. The first author shall assume a leadership role regarding all aspects of the manuscript, and shall assume primary responsibility for its content and completion.

Specifically, the first author is responsible for:

1. Deciding who should be included as authors;
2. Determining the order of authorship;
3. Deciding the content of acknowledgements and research credits;
4. Writing the manuscript;
5. Revising the manuscript and corresponding with the journal or publisher;
6. Designing the study (often in collaboration with other members of the research team);
7. Obtaining approval of all coauthors on the final draft; and,
8. Understanding the general principles of all work included in the manuscript.⁶

4. Authorship shall be established as early as possible in the writing process. It shall be the responsibility of the first author (or in the case of a student or intern, the senior researcher) to ensure that authorship relationships have been established and agreed upon based upon the relative contribution of each member of the team to the conceptualization of the manuscript.

Authorship agreements may be renegotiated under the following circumstances:

1. Substantial re-writing of the first author's manuscript is necessary;
2. More than 6 months has elapsed and the manuscript has not been completed and submitted to a journal or publisher in a timely manner;
3. First author does not demonstrate sufficient knowledge of the general principles of the manuscript topic, and there is another team member who has such knowledge.

My signature below indicates that I have read this policy and understand the lab access, data access, data ownership, and authorship policies set forth in this document

Signature

Role in the Lab

Date

⁶ *ibid*

Recommended Reading

- Fine, M.A. & Kurdek, L.A. (1993). Reflections on determining authorship credit and authorship order on faculty-student collaborations. *American Psychologist*, 48(11), 1141-1147.
- Garfield, E. Giving credit only where it is due: The problem of defining authorship. *The Scientist*, 9(19), 13-14.
- Kennedy, D. (2003). Multiple authors, multiple problems. *Science*, 301, 733.
- Marco, C.A. & Schmidt, T.A. (2004). Who wrote this paper? Basics of authorship and ethical issues. *Academy of Emergency medicine*, 11(1), 76 – 77.
- Murray, B. (1998). The authorship dilemma: Who gets credit for what? *The APA Monitor*, 29(12), 1 – 4.
- Publication Manual of the American Psychological Association-Sixth Edition (2009). Washington DC: American Psychological Association.
- Rennie, D., Flanagan, A., & Yank, V. (2000). The contributions of authors. *Journal of the American Medical Association*, 284(1), 89-91.
- The University of Michigan Medical School Guidelines for Responsible Conduct of Research.
<http://www.responsibility.research.umich.edu/UMMS.author.html>.

Authorship Determination Scorecard

Instructions. This checklist is designed to aid contributors in deciding if they deserve authorship on the research project and to aid authorship-worthy contributors in determining the order of authorship. This checklist should include all contributors of the research project. Contributors complete this checklist collaboratively as the project progresses and it should be completed in such a way that all authors' scores equal the total points assigned to each item. For example, for 'Conceptualizing a research idea,' the scores of all contributors should sum to a total of 90 points. Please note that earning any points on this checklist will warrant authorship. When two or more contributors receive an equal score, please use 'Authorship Tie-breaker Scorecard.' This scorecard should be used and revised periodically based on changes in the responsibilities of concerned contributors.

| Activity Category | Total Points | Contributor Score | | | | |
|--|--------------|-------------------|--|--|--|--|
| | | Initials | | | | |
| Conceptualizing a research idea | 90 | | | | | |
| Refining/ crystalizing a research idea | 60 | | | | | |
| Literature search: Summarizing literary pieces (e.g., articles, book chapters, etc.) | 20 | | | | | |
| Creating a research design (e.g., counterbalancing, randomization to conditions, survey design etc.) | 80 | | | | | |
| Selecting an Instrument/ a measure: Instrument construction | 30 | | | | | |
| Selection of statistical tests/analyses | 40 | | | | | |
| Performing statistical analyses and computations (including computer work) | 40 | | | | | |
| Interpretation of statistical analyses | 80 | | | | | |
| Manuscript | | | | | | |
| Writing an introduction section | 90 | | | | | |
| Writing a methods section | 80 | | | | | |
| Writing results section | 80 | | | | | |
| Writing discussion section | 100 | | | | | |
| Writing conclusive summary | 60 | | | | | |
| Writing limitations of the study | 60 | | | | | |
| Writing future directions of the study | 60 | | | | | |
| Managing Submission Process | | | | | | |
| Responding to reviewers' feedback | 10 | | | | | |
| Making changes based on reviewer feedback | 60 | | | | | |
| | Total Score | | | | | |

NOTE: This table is adapted from that found at <http://www.apa.org/science/leadership/students/authorship-determination.pdf> which was developed based on

Winston, Jr., R. B. (1985). A suggested procedure for determining order of authorship in research publications.

Journal of Counseling and Development, 63, 515-518.

Activity categories and weights developed in 2014 by Bharati Belwalkar, Steven Toaddy, and the other students and faculty of the Industrial and Organizational Psychology PhD Program at Louisiana Tech University.