RESEARCH ISSUES

In this issue, *TESOL Quarterly* presents revised guidelines for quantitative and qualitative research in TESOL. Contributors to the guidelines were Dwight Atkinson, J. D. Brown, Suresh Canagarajah, Kathryn Davis, Patricia A. Duff, Linda Harklau, Joan Jamieson, Numa Markee, and Steven Ross.

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Some Guidelines for Conducting Quantitative and Qualitative Research in TESOL

■ Research practices evolve as new issues and questions emerge and as new methods and tools are developed to address them. In view of the changing landscape of research in the TESOL profession, *TESOL Quarterly*'s Editorial Advisory Board regularly reexamines the guidelines for research provided for contributors to keep the guidelines up-to-date and reflective of the agreed-on conventions for undertaking and reporting research. Since 1992 *TESOL Quarterly* has included guidelines for statistical research at the back of each issue to guide the growing number of contributors conducting such research. In 1994, the increase in qualitative studies submitted to *TESOL Quarterly* prompted the Editorial Advisory Board to include a set of qualitative research guidelines for contributors as well.

In recent years, the character of the submissions has again shifted to include a wider variety of methodologies. The complexity of today's research seemed to call for a rethinking of the guidelines rather than the simple addition of a methodology. Guidelines for quantitative studies needed to address more fully the rationale underlying the research rather than concentrating on the procedural aspects of the analysis. The qualitative guidelines, rather than reflecting primarily an ethnographic approach, needed to reflect the multiple legitimate approaches to qualitative research. Both qualitative and quantitative guidelines needed to cite authoritative sources to which contributors could turn for extensive explanation and help.

The revised guidelines address these needs and outline the collective professional judgment about good practice for quantitative and qualitative research in TESOL. The quantitative guidelines include important considerations in conducting and reporting rigorous quantitative research, with attention to a study's purpose, participants, measures, procedures, analysis, and interpretation. These guidelines do not attempt to distinguish among the many types of quantitative studies, but rather focus on common principles and good practice pertaining to a variety of such studies. Readers are referred to the many other published sources in the References and Further Reading section of the quantitative guidelines.

For qualitative research methods in TESOL, about which fewer textbooks or articles have been written, we provide guidelines for case study, conversation analysis, and (critical) ethnography as three exemplars, each with its own traditions, variants and alternatives, and conventions. Among these three qualitative methods, overlapping principles are evident, but so are distinctions. Across all four pieces, whether quantitative and qualitative, an overriding theme is that researchers should be explicit about the research contexts, populations, procedures, analyses, and basis for interpretations. This requirement tends to imply long papers, but because of the limits on the length of submissions, writers and editors must make informed decisions about what information is essential to include and what is not.

We did not attempt to squeeze the guidelines for each research approach into exactly the same mold. In view of the diverse epistemologies associated with the research approaches, it seems natural for each set of guidelines to be expressed in a different way. What they share, however, is an expression of accepted practice within a particular research tradition from the view of researchers within that tradition. In assembling these guidelines, we did not intend to cover every research approach that might be applied to a problem in TESOL. For example, contributors can find discussion of narrative research with comprehensive references in the Research Issues section of Vol. 36, No. 2 (Summer 2002). In the future, this discussion might be formalized into guidelines for narrative research, as might other discussions of approaches appearing in Research Issues. These guidelines are the first in an expanding set of summaries to be introduced in Research Issues and in the *TESOL Quarterly* section of TESOL's Web site. The guidelines, like those previously published in *TESOL Quarterly,* will naturally evolve and grow over time. We welcome readers' input and suggestions about guidelines for other types of research.

Quantitative Research Guidelines

■ Quantitative research has played an important role in TESOL for a long time, but over the years the standards have shifted somewhat. In part because of the educational role *TESOL Quarterly* plays in modeling research in the field, it is of particular concern that published research articles meet current standards. To support this goal, the following guidelines and references are provided for quantitative research papers submitted to *TESOL Quarterly*.

INTRODUCTION

Explain the point of the study. What problem is being addressed? Why is it interesting or important from a theoretical perspective? Briefly review the literature, emphasizing pertinent and relevant findings, methodological issues, and gaps in understanding. Conclude the introduction with a statement of purpose, your research questions, and, where relevant, your hypotheses; clearly explain the rationale for each hypothesis.

METHOD

Explain your study in enough detail that it could be replicated.

Participants

Clearly state whether there is a population that you would ideally want to generalize to; explain the characteristics of that population. Explain your sampling procedure. If you are using a convenience sample, be sure to say so. Arguments for representativeness can be strengthened by comparing characteristics of the sample with that of the population on a range of variables. Describe the characteristics and the size of the sample. When appropriate, describe how participants were assigned to groups.

Measures

Summarize all instruments in terms of both descriptions and measurement properties (i.e., reliability and validity). Provide estimates of the reliability of the scores in your sample in addition to reliability estimates provided by test publishers, other researchers, or both; when you make judgments about performance or when language samples are coded for linguistic characteristics, include estimates of classification dependability or coder agreement.

Procedure

Describe the conditions under which you administered your instruments.

Design. Make clear what type of study you have done—was your study evaluating a priori hypotheses, or was it exploratory in order to generate hypotheses? Was it a meta-analysis? Explain your design, and state whether your comparisons were within subjects, between subjects, or both. Refer to standard works such as textbooks for study designs. Describe the methods used to deal with experimenter bias if you collected the data yourself. If you assigned participants to subgroups, explain how you did so. If you used random assignment, tell the readers how the randomization was done (e.g., coin toss, random numbers table, computerized random numbers generation). If you did not use random assignment, explain relevant covariates and the way you measured and adjusted for them, either statistically or by design. Describe the characteristics and the size of the subgroups. In place of the terms *experimental group* and *control group,* use *treatment group* and *contrast group.*

Variables. Define the variables in the study. Make explicit the link between the theoretical constructs and the way(s) they have been operationalized in your study. Define the role of each variable in your study (e.g., dependent, independent, moderating, control). Explain how you measured or otherwise observed the variables.

Power and sample size. Provide information on the sample size and the process that led to the decision to use that size. Provide information on the anticipated effect size as you have estimated it from previous research. Provide the alpha level used in the study, discussing the risk of Type I error. Provide the power of your study (calculate it using a standard reference such as Cohen, 1988, or a computer program). Discuss the risk of Type II error.

RESULTS

- Explain the data collected and their statistical treatment as well as all relevant results in relation to your research questions. Interpretation of results is not appropriate in this section.
- Report unanticipated events that occurred during your data collection. Explain how the actual analysis differs from the planned analysis. Explain your handling of missing data.
- Explain the techniques you used to “clean” your data set.

- Choose a minimally sufficient statistical procedure; provide a rationale for its use and a textbook reference for it. Specify any computer programs used.
- Describe the assumptions for each procedure and the steps you took to ensure that they were not violated.
- When using inferential statistics, provide the descriptive statistics, confidence intervals, and sample sizes for each variable as well as the value of the test statistic, its direction, the degrees of freedom, and the significance level (report the actual p value).
- Always supplement the reporting of an actual p value with a measure of effect magnitude (e.g., measures of strength of association or measures of effect size). Briefly contextualize the magnitude of the effect in theoretical and practical terms. Confidence intervals for the effect magnitudes of principal outcomes are recommended.
- If you use multiple statistical analyses (e.g., t tests, analyses of variance, correlations), make the required adjustments to the alpha level (e.g., a Bonferroni correction).
- Avoid inferring causality, particularly in nonrandomized designs or without further experimentation.
- Use tables to provide exact values; present all values with two places to the right of the decimal point.
- Use figures to convey global effects. Keep figures small in size; include graphic representations of confidence intervals whenever possible.
- Always tell the reader what to look for in tables and figures.

DISCUSSION

Interpretation

Clearly state your findings for each of your research questions and their associated hypotheses. State similarities and differences with effect sizes reported in the literature. Discuss whether features of the methodology and analysis are strong enough to support strong conclusions.

Conclusions

Note the weaknesses of your study. Identify theoretical and practical implications of your study. Discuss limitations and suggest improvements to your study. Provide recommendations for future research that are thoughtful and grounded both in terms of your results and in the literature.

REFERENCES AND FURTHER READING ON QUANTITATIVE RESEARCH

Abelson, R. (1997). On the surprising longevity of flogged horses: Why there is a case for the significance test. *Psychological Science, 8,* 12–15.

American Psychological Association. (1994). *Publication manual of the American Psychological Association* (4th ed.). Washington, DC: Author.

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

Anderson, D. (2000). *Problems with the hypothesis testing approach.* Retrieved January 29, 2003, from http://www.cnr.colostate.edu/~anderson/quotes.pdf

Bailar, J., & Mosteller, F. (1988). Guidelines for statistical reporting in articles for medical journals. *Annals of Internal Medicine, 108,* 266–273.

Baugh, F. (2002). Correcting effect sizes for score reliability: A reminder that measurement and substantive issues are linked inextricably. *Educational and Psychological Measurement, 62,* 254–263.

Bird, K. (2002). Confidence intervals for effect sizes in analysis of variance. *Educational and Psychological Measurement, 62,* 197–226.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences.* Hillsdale, NJ: Erlbaum.

Cohen, J. (1994). The earth is round ($p < .05$). *American Psychologist, 49,* 997–1003.

Cook, T., Cooper, H., Cordray, D., Hartman, H., Hedges, L., Light, R., Louis, T., & Mosteller, F. (Eds.). (1992). *Meta-analysis for explanation.* New York: Russell Sage Foundation.

Cumming, G., & Finch, S. (2001a). ESCI: Exploratory Software for Confidence Intervals [Computer software]. Victoria, Australia: La Trobe University. Available from http://www.psy.latrobe.edu.au/esci

Cumming, G., & Finch, S. (2001b). A primer on the understanding, use, and calculation of confidence intervals that are based on central and noncentral distributions. *Educational and Psychological Measurement, 61,* 532–574.

Fan, X., & Thompson, B. (2001). Confidence intervals about score reliability coefficients, please: An EPM guidelines editorial. *Educational and Psychological Measurement, 61,* 517–531.

Gall, M., Gall, J., & Borg, W. (2002). *Educational research: An introduction* (7th ed.). Boston: Allyn & Bacon.

Hatch, E., & Lazaraton, A. (1991). *The research manual: Design and statistics for applied linguistics.* New York: Newbury House.

Huberty, C. (1993). Historical origins of statistical testing practices: The treatment of Fisher versus Neyman-Pearson views in textbooks. *Journal of Experimental Education, 61,* 317–333.

Huberty, C. (2002). A history of effect size indices. *Educational and Psychological Measurement, 62,* 227–240.

Hunter, J. (1997). Needed: A ban on the significance test. *Psychological Science, 8,* 3–7.

Kirk, R. (1996). Practical significance: A concept whose time has come. *Educational and Psychological Measurement, 56,* 746–759.

Minium, E. (1978). *Statistical reasoning in psychology and education.* New York: Wiley.

Mittag, K., & Thompson, B. (2000). A national survey of AERA members' perceptions of statistical significance tests and other statistical issues. *Educational Researcher, 29*(4), 14–20.

Montgomery, D. (2000). *Design and analysis of experiments* (5th ed.). New York: Wiley.

Myers, J., & Well, A. (1995). *Research design and statistical analysis.* Hillside, NJ: Erlbaum.
Parkhurst, D. F. (1997). *Commentaries on significance testing.* Retrieved January 29, 2003, from http://www.indiana.edu/~stigtsts/
Roberts, J. K., & Henson, R. (2002). Correcting for bias in estimating effect sizes. *Educational and Psychological Measurement, 62,* 241–253.
Rosenthal, R. (1994). Parametric measures of effect size. In H. Cooper & L. V. Hedges (Eds.), *The handbook of research synthesis* (pp. 231–244). New York: Russell Sage Foundation.
Schmidt, F. (1996). Statistical significance testing and cumulative knowledge in psychology: Implications for the training of researchers. *Psychological Methods, 1,* 115–129.
Shadish, W., Robinson, L., & Lu, C. (1999). ES: A Computer Program for Effect Size Calculation [Computer software]. St. Paul, MN: Assessment Systems.
Smithson, M. (2001). Correct confidence intervals for various regression effect sizes and parameters: The importance of noncentral distributions in computing intervals. *Educational and Psychological Measurement, 61,* 605–632.
Smithson, M. (2002). *Scripts and software for noncentral confidence interval and power calculations.* Retrieved January 29, 2003, from http://www.anu.edu.au/psychology/staff/mike/CIstuff/CI.html
Thompson, B. (1999). Journal editorial policies regarding statistical significance tests: Heat is to fire as *p* is to importance. *Educational Psychology Review, 11,* 157–169.
Thompson, B. (2000). *Various editorial policies regarding statistical significance tests and effect sizes.* Retrieved January 29, 2003, from http://www.coe.tamu.edu/~bthompson/journals.htm
Thompson, B. (2002). What future quantitative social science research could look like: Confidence intervals for effect sizes. *Educational Researcher, 31*(3), 25–32.
Thompson, B., & Vacha-Haase, T. (2000). Psychometrics *is* datametrics: The test is not reliable. *Educational and Psychological Measurement, 60,* 174–195.
Thompson, W. L. (2000). *326 articles/books questioning the indiscriminate use of statistical hypothesis tests in observational studies.* Retrieved January 29, 2003, from http://www.cnr.colostate.edu/~anderson/thompson1.html
Vacha-Haase, T., Nilsson, J., Reetz, D., Lance, T., & Thompson, B. (2000). Reporting practices and APA editorial policies regarding statistical significance and effect size. *Theory and Psychology, 10,* 413–425.
Wilkinson, L., & Task Force on Statistical Inference. (1999). Statistical methods in psychology journals: Guidelines and explanations [Electronic version]. *American Psychologist, 54,* 594–604. Retrieved January 29, 2002, from http://www.apa.org/journals/amp/amp548594.html

Qualitative Research Guidelines

Case Study Research

■ The following guidelines are provided for submissions reporting case study research aimed at understanding a bounded phenomenon by examining in depth, and in a holistic manner, one or more particular instances of the phenomenon. Case study research in TESOL and second language acquisition (SLA) has its origins in psychology and linguistics (e.g., Hatch, 1978), with a focus on the development of L2 syntax, morphology, phonology, and so on, as analyzed by an ostensibly objective researcher. More recently, TESOL case studies have adopted the more subjective and interpretive stance typical of case studies in education and other fields (Gall, Borg, & Gall, 1996; Johnson, 1992; Stake, 1994, 1995), with less emphasis on the acquisition of discrete linguistic elements and more emphasis on such issues as learners' and teachers' identities, skill development and its consequences for learners, teachers' professional development experiences, and the implementation of language policies in programs and countries. Both approaches are legitimate but require sufficient detail and contextualization.

ASSUMPTIONS

1. In TESOL, a case typically refers to a person, either a learner or a teacher, or an entity, such as a school, a university, a classroom, or a program (see Faltis, 1997; Johnson, 1992; Nunan, 1992). In language policy research, the case may be a country. Case studies may be included in larger quantitative or qualitative studies to provide a concrete illustration of findings, or they may be conducted independently, either longitudinally or in a more limited temporal period. Unlike ethnographic research, case studies do not necessarily focus on cultural aspects of a group or its members. Case study research may feature single cases or multiple cases (e.g., often two to four).
2. Acknowledging multiple realities in qualitative case studies, as is now commonly done, involves discerning the various perspectives of the researcher, the case/participant, and others, which may or may not converge (Yin, 1994). As an interpretive, inductive form of research, case studies explore the details and meanings of experience and do not usually attempt to test a priori hypotheses. Instead, the researcher attempts to identify important patterns and themes in the data. The richness of case studies is related to the amount of detail and contextualization that is possible when only one or a small number of focal cases and issues are analyzed. The writer's ability to provide a compelling and engaging profile of the case, with suitable examples and linkages to broader issues, is also very important.

METHODS

Context

Provide sufficient contextual information about the case, including relevant biographical and social information (depending on the focus), such as ESL learning/teaching history, L1 background, years of residence in a new country, data collection site(s), or other relevant descriptive information pertaining to the case and situation.

Sampling

Purposeful sampling is generally used in case study research; therefore, explain sampling procedures and case selection, and the defining characteristics and typicality or atypicality of the case: Note whether the case in question is a deviant or extreme case, a critical case, a convenience case, a politically significant case, and so on (Creswell, 1998; Miles & Huberman, 1994). Because attrition may deeply affect longitudinal case studies based on just one or two participants, sampling carefully is crucial. If multiple cases are used, researchers often provide a detailed account of each and then some form of cross-case comparison, either in prose or in a tabular summary (Creswell, 1998). Multiple cases are often preferable to single cases, particularly when the cases may not be representative of the population from which they are drawn and when a range of behaviors/profiles, experiences, outcomes, or situations is desirable. However, including multiple cases limits the depth with which each case may be analyzed and also has implications for the structure and length of the final report.

Data

Draw data either from one primary source (e.g., oral interviews, journals, or essays) or from multiple sources. As in ethnography, bringing together *(triangulating)* multiple perspectives, methods, and sources of information (e.g., from interviews, observations, field notes, self-reports or think-aloud protocols, tests, transcripts, and other documents) adds texture, depth, and multiple insights to an analysis and can enhance the validity or credibility of the results. Observations and data collection settings may range from natural to artificial, with relatively unstructured to highly structured elicitation tasks and category systems, depending on the purpose of the study and the disciplinary traditions associated with it (Cohen & Manion, 1994). Data in SLA studies may be somewhat more restricted (either interviews, tests, writing samples, think-aloud protocols, or grammaticality judgments), and the analytic focus may be narrower and more technical as well, such as the development of linguistic or rhetorical structures in oral or written L2 production.

Establishing a trusting relationship with research participants, using multiple elicitation tasks (data collection procedures), obtaining adequate relevant background information about case participants and sites, and having access to or contact with the case over a period of time are, in general, all highly desirable.

ANALYSIS AND INTERPRETATION

Analysis

Case study data analysis generally involves an iterative, spiraling, or cyclical process that proceeds from more general to more specific observations (Creswell, 1998; Palys, 1997; Silverman, 2000). Data analysis may begin informally during interviews or observations and continue during transcription, when recurring themes, patterns, and categories become evident. Once written records are available, analysis involves the coding of data and the identification of salient points or structures. Having additional coders is highly desirable (but is less common in qualitative research than in quantitative research), especially in structural analyses of discourse, texts, syntactic structures, or interaction patterns involving high-inference categories leading ultimately to the quantification of types of items within categories. Data reduction may include quantification or other means of data aggregation and reduction, including the use of data matrices, tables, and figures (Miles & Huberman, 1994).

In multiple case studies, each case may represent a different thematic finding, such as a different type of learner, teacher, or program (e.g., highly successful vs. less successful, domestic vs. international), which you may also portray as a clustering of properties or even a metaphor; alternatively, you may analyze and discuss each of the cases in terms of a small number of pervasive and important themes that run across them to varying degrees.

Interpretation

Establishing the significance or importance of themes or findings is crucial; the discussion should ideally link these themes explicitly to larger theoretical and practical issues. However, generalization to populations is not appropriate or desirable in most case studies. Be cautious about drawing unwarranted inferences because of the small sample size, particularly if the case is not typical of others in the same set. L2 researchers frequently propose models or principles based on their results to be supported, tested, compared, or refuted by themselves or others in subsequent research (e.g., Schmidt, 1983; Schmidt & Frota, 1986).

Data may be analyzed and interpreted through a variety of ideological lenses (e.g., positivist, poststructuralist, feminist, or critical (Duff, 2002; Merriam, 1998; Yin, 1994), although descriptive/interpretive approaches are still the most common in TESOL. Provide sufficient evidence for your claims or interpretations to make them clear, credible, and convincing to others. Consider alternate explanations, and account for results that run contrary to the themes that emerge or for differences among triangulated sources. It may be worthwhile to consult case participants for their interpretation of (nontechnical) data or findings. Young L2 learners or others who are not highly proficient in their L2 may not have the maturity or the linguistic competence to convey their perspectives easily; in some cases, an assistant who can speak the participant's L1 to explain the research purposes and elicit the participant's views in their L1 may be helpful, depending on the focus of the study (Duff, in press).

THE CASE STUDY REPORT

Reports of case studies submitted to *TESOL Quarterly* should include the following elements:

- a statement of the study's purpose and the theoretical context
- the problem or issue being addressed
- central research questions
- a detailed description of the case(s) and explanation of decisions related to sampling and selection
- context of the study and case history, where relevant
- issues of access to the site/participants and the relationship between you and the research participant (case)
- the duration of the study
- evidence that you obtained informed consent, that the participants' identities and privacy are protected, and, ideally, that participants benefited in some way from taking part in the study
- methods of data collection and analysis, either manual or computer-based data management and analysis (see Weitzman & Miles, 1995), or other equipment and procedures used
- findings, which may take the form of major emergent themes, developmental stages, or an in-depth discussion of each case in relation to the research questions; and illustrative quotations or excerpts and sufficient amounts of other data to establish the validity and credibility of the analysis and interpretations

- a discussion of factors that might have influenced the interpretation of data in undesired, unanticipated, or conflicting ways
- a consideration of the connection between the case study and larger theoretical and practical issues in the field

REFERENCES AND FURTHER READING ON CASE STUDY RESEARCH

Cohen, L. & Manion, L. (1994). *Research methods in education* (4th ed.). London: Routledge.

Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage.

Duff, P. (2002). Research approaches in applied linguistics. In R. Kaplan (Ed.), *Handbook of applied linguistics* (pp. 13–23). Oxford: Oxford University Press.

Duff, P. (in press). *Case study research in applied linguistics.* Mahwah, NJ: Erlbaum.

Faltis, C. (1997). Case study methods in researching language and education. In N. Hornberger & D. Corson (Eds.), *Research methods in language and education* (pp. 145–152). Dordrecht, Netherlands: Kluwer.

Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research* (6th ed.). London: Longman.

Hatch, E. (Ed.). (1978). *Second language acquisition.* Rowley, MA: Newbury House.

Johnson, D. (1992). *Approaches to research in second language learning.* New York: Longman.

Merriam, S. (1998). *Qualitative research and case study applications in education.* San Francisco: Jossey-Bass.

Miles, M., & Huberman, A. (1994). *Qualitative data analysis: A sourcebook of new methods* (2nd ed.). Thousand Oaks, CA: Sage.

Nunan, D. (1992). *Research methods in language learning.* Cambridge: Cambridge University Press.

Palys, T. (1997). *Research decisions: Quantitative and qualitative perspectives* (2nd ed.). Toronto, Ontario, Canada: Harcourt Brace Jovanovich.

Schmidt, R. (1983). Interaction, acculturation and the acquisition of communicative competence. In N. Wolfson & E. Judd (Eds.), *Sociolinguistics and second language acquisition* (pp. 137–174). Rowley, MA: Newbury House.

Schmidt, R., & Frota, S. (1986). Developing basic conversational ability in a second language: A case study of an adult learner. In R. Day (Ed.), *Talking to learn* (pp. 237–322). Rowley, MA: Newbury House.

Silverman, D. (2000). *Doing qualitative research.* Thousand Oaks, CA: Sage.

Stake, R. E. (1994). Identification of the case. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 236–247). Thousand Oaks, CA: Sage.

Stake, R. E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage.

Weitzman, E., & Miles, M. (1995). *Computer programs for qualitative data analysis.* Thousand Oaks, CA: Sage.

Yin, R. (1994). *Case study research: Design and methods.* Thousand Oaks, CA: Sage.

Conversation Analysis

■ The following guidelines are provided for submissions using an ethnomethodological approach to conversation analysis (CA) as originated by Sacks, Schegloff, and Jefferson (1974) and Schegloff, Jefferson, and Sacks (1977). From this perspective, the principal goal of CA is to explicate and interpret how participants achieve everyday courses of action by orienting to the underlying structural organization of talk-in-interaction.

ASSUMPTIONS

CA studies submitted to *TESOL Quarterly* should exhibit an in-depth understanding of the ethnomethodological philosophical perspectives and methodologies of CA research (see Firth, 1996; Firth & Wagner, 1997; Markee, 1994, 1995, 2000; Schegloff, Koshik, Jacoby, & Olsher, 2002; Seedhouse, 1997, 1999; Wagner, 1996). Utilizing these perspectives and methods in the course of conducting CA research helps ensure that studies represent credible accounts of participants' orientations to the behaviors they display to each other and therefore to analysts. Reports of CA studies should meet the following criteria:

1. The kinds of data analyzed should include naturally occurring data from either ordinary conversation (i.e., ordinary chatting among friends) or institutional talk (e.g., ESL classroom talk, oral proficiency interviews, writing conferences).
2. The report should focus on the usual topics of CA research (see Drew, 1994). These topics include, but are not limited to, the organization of sequences (i.e., courses of action), turn-taking and repair practices, syntax-for-conversation, the structure of speech events, and the integration of speech and gesture. Analyses should demonstrate how native speakers/users of English, nonnative speakers/users of English, or both deploy these aspects of interactional competence to communicate in or learn this language.
3. The research should aim to uncover an emic perspective. In other words, the study focuses on participants' contextualized perspectives and interpretations of behavior, events, and situations rather than etic (outsider-imposed) categories, models, and viewpoints (van Lier, 1988).
4. The primary data in the study should be the conversational and other behaviors that participants produce for each other in real time. The notion of *context* is principally understood as the talk that immediately precedes and follows the conversational object under study (Heritage, 1988); this is sometimes referred to as the *cotext of*

talk (Brown & Yule, 1983). Other important aspects of context include the integration of embodied action and gesture with talk (Schegloff et al., 2002).

5. The conversational analysis may be supplemented by ethnographically oriented notions of context that entail the use of triangulated secondary data (such as think-aloud protocols, interviews, or diaries; see van Lier, 1988). The study may establish theoretical links to other perspectives on talk-in-interaction, such as Vygotskyan analyses of learners' zones of proximal development (Ohta, 2001).
6. Data collection strategies include the collection of videotapes, audiotapes, or both of talk-in-interaction, which are then transcribed according to the conventions of CA developed by Gail Jefferson (see Atkinson & Heritage, 1984; Boden & Zimmerman, 1991; Goodwin, 1981). Videotapes are strongly preferred because of the importance of embodied aspects of interaction.
7. In all cases, the recordings are considered to be the definitive source of information about the behaviors that were observed. Transcripts are understood as a tool for analysis to be used in conjunction with recordings.
8. External materials, such as classroom materials, interview schedules or drafts of papers, may be introduced into the database when relevant and appropriate, such as when participants themselves orient to these materials.

DATA ANALYSIS

Data analysis is guided by the ethnomethodological philosophy, methods, and goals of CA research.

1. You should provide a comprehensive treatment of the data under discussion by demonstrating how participants collaboratively co-construct their talk. This entails analyzing prototypical examples of talk-in-interaction, which may consist of either single cases or collections of particular types of conversational objects. Ensure that you can warrant your claims by pointing to a convergence of different types of textual evidence and, where relevant, by demonstrating the characteristics of a particular practice across a variety of contexts (Jacobs, 1986, 1987).

2. You may use CA findings to generate hypotheses for subsequent experimental research. However, this is not the principal aim of CA research (Schegloff, 1993). If you use quantification, ensure that it only follows careful analysis of the individual cases that are being quantified, with categories for quantification emerging from this

analysis of individual cases (Stivers, 2001, in press). However, the quantification of data is rarely an important issue in CA research.

THE CA REPORT

CA reports submitted to *TESOL Quarterly* should include the following information:

1. a clear statement of the research issues
2. a description of the research site, participants, procedures for ensuring participant anonymity, and data collection strategies
3. an empirically based description of a clear and salient organization of patterns found through data analysis—including representative examples, not anecdotal information
4. interpretations in which you trace the underlying organization of patterns across all contexts in which they are embedded
5. a discussion of how the data analyzed in the study connect with and shed light on current theoretical and practical issues in the acquisition and use of English as an L2

REFERENCES AND FURTHER READING ON CONVERSATION ANALYSIS

Atkinson, J. M., & Heritage, J. (1984). Transcript notation. In J. M. Atkinson & J. Heritage (Eds.), *Structures of social action* (pp. ix–xvi). Cambridge: Cambridge University Press.

Boden, D., & Zimmerman, D. H. (1991). Transcription appendix. In D. Boden & D. H. Zimmerman (Eds.), *Talk and social structure* (pp. 278–282). Cambridge: Polity.

Brown, G., & Yule, G. (983). *Discourse analysis.* Cambridge: Cambridge University Press.

Drew, P. (1994). Conversation analysis. In R. E. Asher (Ed.), *The encyclopedia of language and linguistics* (pp. 749–754). Oxford: Pergamon Press.

Firth, A. (1996). The discursive accomplishment of normality: On "lingua franca" English and conversation analysis. *Journal of Pragmatics, 26,* 237–259.

Firth, A., & Wagner, J. (1997). On discourse, communication, and (some) fundamental concepts in SLA research. *The Modern Language Journal, 81,* 285–300.

Goodwin, C. (1981). *Conversational organization.* New York: Academic Press.

Heritage, J. (1988). Current developments in conversation analysis. In D. Roger & P. Bull (Eds.), *Conversation* (pp. 21–47). Clevedon, England: Multilingual Matters.

Jacobs, S. (1986). How to make an argument from example. In D. G. Ellis & W. A. Donohue (Eds.), *Contemporary issues in language and discourse processes* (pp. 149–167). Hillsdale, NJ: Erlbaum.

Jacobs, S. (1987). Commentary on Zimmerman: Evidence and inference in conversation analysis. *Communication Yearbook, 11,* 433–443.

Markee, N. (1994). Toward an ethnomethodological respecification of second language acquisition studies. In E. Tarone, S. Gass, & A. Cohen (Eds.), *Research methodology in second language acquisition* (pp. 89–116). Hillsdale, NJ: Erlbaum.

Markee, N. (1995). Teachers' answers to students' questions: Problematizing the issue of making meaning. *Issues in Applied Linguistics, 6,* 63–92.
Markee, N. (2000). *Conversation analysis.* Mahwah, NJ: Erlbaum.
Ohta, A. S. (2001). *Second language acquisition processes in the classroom.* Mahwah, NJ: Erlbaum.
Sacks, H., Schegloff, E., & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking in conversation. *Language, 50,* 696–735.
Schegloff, E. A. (1993). Reflections on quantification in the study of conversation. *Research on Language and Social Interaction, 26,* 99–128.
Schegloff, E., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language, 53,* 361–382.
Schegloff, E. A., Koshik, I., Jacoby, S., & Olsher, D. (2002). Conversation analysis and applied linguistics. *American Review of Applied Linguistics, 22,* 3–31.
Seedhouse, P. (1997). The case of the missing "no": The relationship between pedagogy and interaction. *Language Learning, 47,* 547–583.
Seedhouse, P. (1999). The relationship between context and the organization of repair in the L2 classroom. *International Review of Applied Linguistics, 37,* 59–80.
Stivers, T. (2001). Negotiating who presents the problem: Next speaker selection in pediatric encounters. *Journal of Communication, 51,* 252–282.
Stivers, T. (in press). Presenting the problem in pediatric encounters: "Symptoms only" versus "candidate diagnosis" presentations. *Health Communication, 14,* 3.
van Lier, L. (1988). *The classroom and the language learner.* New York: Longman.
Wagner, J. (1996). Foreign language acquisition through interaction—A critical review of research on conversational adjustments. *Journal of Pragmatics, 26,* 215–236.

(Critical) Ethnography

■ The following guidelines are provided for submissions to *TESOL Quarterly* adopting an ethnographic approach by developing a firsthand, contextualized, naturalistic, hypotheses-generating, emic orientation to the study of TESOL through the study of culture. Ethnography represents diverse research approaches (Atkinson, Coffey, Delamont, Lofland, & Lofland, 2001), and the form and content of ethnographic reports thus vary considerably.

ASSUMPTIONS

Research approaches that use the qualifier *critical* differ from *descriptive* or *interpretive* approaches, which historically adopted a more detached, objective, value-free orientation to knowledge, although there is some convergence between critical and descriptive approaches within contemporary ethnography. Critical approaches align themselves with the post-Enlightenment philosophical tradition of situating research in its social context to consider how knowledge is shaped by the values of human agents and communities, implicated in power differences, and favorable for democratizing relationships and institutions. A critical approach questions the traditional separation of theory and method, interpretation and data, subjective and objective, and ethics and science, and particularly the treatment of the second term in each pair as constituting valid research. Critical ethnography prefers to see these binary constructs as interconnected, making mutual contributions to knowledge.

Ethnography (and critical ethnography in particular) adopts a complex theoretical orientation toward culture. Culture—in collectives of differing magnitude, whether educational institutions, student communities, classrooms, or activity groups—is treated as heterogeneous, conflictual, negotiated, and evolving, as distinct from unified, cohesive, fixed, and static. Also, in contrast with a relativistic view of cultures as different-but-equal, critical ethnography explicitly assumes that cultures are positioned unequally in power relations. Furthermore, critical ethnography sees descriptions of culture as shaped by the interests of the researcher, the sponsors of the project, the audience, and the dominant communities. Therefore, cultural representations are acknowledged as always being somewhat partial and partisan. Studies that claim to adopt an ethnographic approach should be informed by the theoretical assumptions motivating this research practice.

1. Because of the diversity of perspectives represented within ethnography, be as explicit as possible about the disciplinary traditions or models of ethnographic scholarship that have influenced your work (e.g., cultural anthropology, sociology, sociolinguistics, linguistic anthropology, ethnography of communication, cultural studies). A wide array of approaches exist, including but not limited to hermeneutics, symbolic interactionism, critical theories, feminist theories, postmodernisms, constructivism, and critical humanism.
2. State explicitly your specific approach and its underlying assumptions and beliefs about the nature of ethnographic knowledge. For example, do you believe that ethnographic findings are scientific, aimed at uncovering patterned social realities? Or do you believe that the purpose of ethnography is interpretive, aimed at developing insights into the symbolic meanings of experiences for participants? Or do you believe that the purpose of ethnography is, more critically, the pursuit of social justice?
3. State explicitly the conventions for data collection, analysis, and reporting that are typical within your chosen school(s) of thought, and cite exemplars from previously published work.

DATA

1. Show evidence of residing or spending considerable lengths of time interacting with people in the study setting, observing and recording their activities as they unfolded through means such as field notes (see, e.g., Emerson, Fretz, & Shaw, 1995), audio and video recordings, or both. A hallmark of ethnography is extended, firsthand participant observation and interactions with participants in the study setting.
2. Record participant beliefs and attitudes through such typical means as notes or transcribed recordings of informal conversation and interviews, and participant journals (see Salzman, 2001).
3. Include several different sources of data. Besides participant observation and interactions with participants, these sources might include life histories (Darnell, 2001) and narrative analysis (Cortazzi, 2001), photography, audio or video recordings (Nastasi, 1999), written documents (Brewer, 2000), data documenting historical trends, and questionnaires and surveys (Salzman, 2001).
4. If called for, as they often are in critical ethnography (as well as in many cases of descriptive/interpretive ethnography), use additional sources of data and reflection. These include
   - evidence of how the power differences between you and the informants/subjects were negotiated. Though it is idealistic to think that power differences can be totally eliminated, address how they were managed, modified, or shifted and how they influenced the data gathered.
   - your attitudes and biases toward the community and its culture. Record how the your perspectives changed during the course of the research and how these changes shaped the data gathered.
   - the impact of your activities and behavior on the community. State whether you involved yourself in the ethical, social, or political challenges faced by the community. Include in the data the way such practical engagements may have generated deeper insights or affected the research (and the ways you negotiated these tensions).
   - the conflicts and inconsistencies in the statements made by the informants (or community insiders). Rather than favoring one set of data over the other or neatly tying all the loose strands to arrive at generalizations, wrestle with the diversity of insider perspectives in order to represent culture with complexity.
   - a broadened understanding of the context of the culture. Although context is being constantly (re)created through talk

even as the informants interact with the researcher, reflect in the data the way larger forces outside the community shape culture. Study how social institutions and political agencies affect the local culture, and, similarly, seek historical data on the status of the culture before and after the research.

5. Because ethnographic analytical procedures vary by researchers' schools of thought, you may incorporate quantitative as well as qualitative procedures and instruments if appropriate (see, e.g., Bernard, 2002).

ANALYSIS AND INTERPRETATION

1. Emphasize emic—or participant—attitudes, beliefs, behaviors, and practices, as the objective of ethnography is to come to a deeper understanding of how people in particular contexts experience their social and cultural worlds.
2. Practice reflexivity, a process of self-examination and self-disclosure about aspects of your own background, identities or subjectivities, and assumptions that influence data collection and interpretation.
3. Approach data analysis and findings through an inductive and recursive process. Expect patterns, categories, or themes to evolve as data collection proceeds rather than imposing them a priori.
4. In the report, show evidence of triangulation, a systematic process of looking across multiple data sources for findings and confirming or disconfirming evidence.
5. Note that because of its firsthand, experiential nature, ethnographic knowledge is necessarily tied to particular contexts and periods of time. However, most contemporary ethnographers view it as important to acknowledge the instability and ever-evolving nature of the cultures under study, and to explore their nestedness in and interdependence with broader sociocultural contexts.
6. Note that while ethnographic reports may present abstractions and generalizations about attitudes, behaviors, and beliefs of the cultures under study, many ethnographers acknowledge and represent heterogeneity and diversity within the cultures or cultural scenes under study (see below).
7. Give evidence that you have interpreted the tensions implicit in the research with complexity and openness, particularly (but not exclusively) in critical research
   - between insider (emic) and outsider (etic) perspectives. Your relative outsider status and generalized etic perspectives can offer interpretive angles that are not available to the insiders.

- between macro- and microperspectives on the culture. Though the strength of ethnography is its localized, detailed, grounded perspective, global forces from ideological, economic, and geopolitical structures influence local culture. Sensitivity to the macrolevel shaping of the local culture will provide critical insights into the prospects for community empowerment.
- between the structural and the temporal. Although descriptive ethnography traditionally may have valued capturing the historical present—that is, culture as a self-contained and well-constructed static system—critical ethnography considers culture as open to historical influences and itself shaping history, though it is relatively autonomous from other social institutions.
- between interpreting and explaining. Critical ethnography recognizes that culture-as-ideology can lead to certain misinterpretations of social life. Similarly, a culture that is merely lived out is not always open to critical reflection for insiders. With sufficient respect and sensitivity to the community, you may attempt to explain some of the questions/contradictions left open in the informant's interpretation of things.
- between the parts and the whole of the culture. To explain away the tensions in a culture is to impose a consistency and uniformity on the community that serves to stereotype, essentialize, and generalize its culture reductively. Thus, a critical interpretation represents the culture in all its complexity, instability, and diversity.
- between the different subject positions of the researcher. Adopt a reflexive approach; interpret your own biases, backgrounds, and identities (e.g., of scholarship, ethnicity, class, gender, region) both in the field and outside; and acknowledge the ways they shape the research and cultural representation.

8. Indicate the social implications of the cultural description. Interpretation in critical ethnography values not only the validity of the study (e.g., enhanced by triangulation of data or the sophistication of methods used), but also the social usefulness of the research and the ways it addresses issues of social justice, human development, and ethical integrity.

THE CRITICAL ETHNOGRAPHY REPORT

Established genres of the research article may not always be suitable for reporting ethnographic studies that practice a critical ethnography. The dominant Introduction-Method-Results-Discussion structure is often more amenable to reporting descriptive and scientific studies informed by Enlightenment values, typically presenting a detached, controlled, authorially imposed version of the findings. Other emergent genres of research reporting adopt greater *reflexivity* (in representing the personal shaping of the findings, in light of the changing biases, subject positions, and involvement of the researcher), *narratives* (for a more indirect, context-bound, personal form of theorization), *multivocality* (for textualizing the plural perspectives and voices—of different informants, researchers, participants—on the same culture), *authorial collaboration* (in involving the participants/informants in the representation of the findings), and *open-endedness* (in dramatizing the tensions in interpretation and data from the field, and encouraging the readers to form alternate paradigms of interpretation). Develop a mode of textual representation that suits your research experience, objectives, beliefs about the nature of ethnographic knowledge, and preferences.

REFERENCES AND FURTHER READING ON ETHNOGRAPHY

Anderson, G. (1989). Critical ethnography in education: Origins, current status, and new directions. *Review of Educational Research, 59,* 249–270.

Athanases, S. Z., & Heath, S. B. (1995). Ethnography in the study of the teaching and learning of English. *Research in the Teaching of English, 29,* 263–287.

Atkinson, P., Coffey, A., Delamont, S., Lofland, J., & Lofland, L. (2001). Editorial introduction. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, & L. Lofland (Eds.), *Handbook of ethnography* (pp. 1–7). London: Sage.

Belsey, C. (1983). *Critical practice.* London: Methuen.

Berkenkotter, C. (1993). A "rhetoric for naturalistic inquiry" and the question of genre. *Research in the Teaching of English, 27,* 293–304.

Bernard, H. R. (2002). *Research methods in anthropology: Qualitative and quantitative approaches* (3rd ed.). Walnut Creek, CA: AltaMira Press.

Brewer, J. D. (2000). *Ethnography.* Buckingham, England: Open University Press.

Canagarajah, A. S. (1993). Critical ethnography of a Sri Lankan classroom: Ambiguities in opposition to reproduction through ESOL. *TESOL Quarterly, 27,* 601–626.

Canagarajah, A. S. (1996). From critical research practice to critical research reporting. *TESOL Quarterly, 29,* 320–330.

Cortazzi, M. (2001). Narrative analysis in ethnography. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, & L. Lofland (Eds.), *Handbook of ethnography* (pp. 384–394). London: Sage.

Darnell, R. (2001). *Invisible genealogies: A history of Americanist anthropology.* Lincoln: University of Nebraska Press.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnographic fieldnotes.* Chicago: University of Chicago Press.

Kubota, R. (1999). Japanese culture constructed by discourses: Implications for applied linguistics research and ELT. *TESOL Quarterly, 33,* 9–35.

Marcus, G., & Fischer, M. M. J. (1986). *Anthropology as cultural critique: An experimental moment in the human sciences.* Chicago: University of Chicago Press.

Nastasi, B. K. (1999). Audiovisual methods in ethnography. In J. J. Schensul, M. D. LeCompte, B. K. Nastasi, & S. P. Borgatti (Eds.), *Enhanced ethnographic methods:*

Audiovisual techniques, focused group interviews, and elicitation techniques (pp. 1–50). Walnut Creek, CA: AltaMira Press.

Peirce, B. N. (1995). The theory of methodology in qualitative research. *TESOL Quarterly, 29,* 569–576.

Pennycook, A. (1994). Critical pedagogical approaches to research. *TESOL Quarterly, 28,* 690–693.

Salzman, P. C. (2001). *Understanding culture: An introduction to anthropological theory.* Prospect Heights, IL: Waveland Press.

Scheurich, J. J., & Young, M. D. (1997). Coloring epistemologies: Are our research epistemologies racially biased? *Educational Researcher, 26*(4), 4–17.