# TABLE OF CONTENTS

- Executive Summary ......................................................... 2  
- Introduction ........................................................................ 2  
- Qualitative Research in Developmental Education and Learning Assistance ........................................... 2  
- Types of Qualitative Questions Asked and Answered ................................................................. 2  
- Overview of Qualitative Approaches, Data Collection Methods, and Research Ethics .................. 3  
- Methods of Qualitative Research ........................................... 3  
- Qualitative Data Collection and Analysis Procedures ..................................................................... 10  
- Recognizing Personal Bias and Strengthening Analysis ................................................................. 10  
- Ethics of the Qualitative Inquiry .................................................................................................... 11  
- Becoming a Conscientious Consumer of Qualitative Research ..................................................... 12  
- Closing Thoughts ................................................................. 13  
- References ............................................................................ 14  
- Appendix A Methodological Exemplars .................................................. 16  
- Appendix B Field Specific Exemplars .................................................................................. 21  
- Appendix C Data Collection Exemplars .................................................................................. 24
EXECUTIVE SUMMARY

This white paper, prepared for the College Reading and Learning Association (CRLA), presents an argument for deeper engagement with research. We present an overview of qualitative research so that members of the profession might gain a fundamental knowledge of the methods of inquiry, the approaches to data collection, and the ethics associated with using and/or conducting qualitative research. Expanded inquiry, including qualitative inquiry, within postsecondary education is particularly important since our fields – developmental education and learning assistance – contain multiple, unique populations that demand contextual details to be at the forefront of questions being asked and research being conducted.

To support the acquisition of contextual details, as well as providing additional research insights, we present a variety of qualitative methodological approaches. We demonstrate that the goals of qualitative research are not fundamentally different from quantitative work, but simply that the benchmarks, questions, and methods tend to differ. Thus, expanding a field of study such as postsecondary developmental education and learning assistance to include qualitative research approaches has several benefits for the individual and the field.

Introduction

Postsecondary educators and learning assistance professionals live in an era where both developmental education programming and learning assistance services are coming under close scrutiny. We are being examined by federally funded research centers, by political advocacy groups, and by private foundations. These are entities that readily ask questions of a market-based, reform nature; often drawing heavily from quantitative research methods. However, it is important to realize that quantitative approaches to research are not the only way to conduct educational inquiry. Therefore, it is imperative that our profession be cognizant of, and qualified with, various approaches that may inform information gathering. We must also understand fully that many of the most important questions, ones that get at the very heart of our pedagogy and our students’ successes in higher education, can best be understood through descriptive data from qualitative inquiry.

Qualitative Research in Developmental Education and Learning Assistance

The decision to use a particular research method is largely determined by the assumptions, interests, and purposes related to the research questions. Often, it is number-driven questions that gain the support of policymakers, decision-makers, and grant-funding entities, as quantitative research is known for reducing bias and for providing statistical analyses on large amounts of data necessary to make policy and funding decisions. Number-driven questions also help us establish impacts, effects, and correlative relationships. However, what is not gained from quantitative inquiry is insight into the contextual details of research contexts and participants. In other words, we cannot establish the how or why those quantitative relationship exist via the numbers themselves. To support the acquisition of contextual details, as well as providing additional research insights, we present a variety of qualitative methodological approaches. We demonstrate that the goals of qualitative research are not fundamentally different from quantitative work, but simply that the benchmarks, questions, and methods tend to differ. Thus, expanding a field of study such as postsecondary developmental education and learning assistance to include qualitative research approaches has several benefits for the individual and the field.

The methodologies employed in all research processes are important to understand as these are the ways in which postsecondary educators and learning assistance professionals approach answers to pedagogical and research-based problems facing the field. Expanded inquiry, including qualitative inquiry, within postsecondary education is particularly important since our fields contain multiple, unique populations that demand contextual details be at the forefront of questions being asked and research being conducted. More specifically, where quantitative processes often throw out the “outlier,” qualitative methodologies embrace the “outlier” to investigate what can be learned from various differences. In addition, understanding various contexts qualitatively aids in the development of stronger quantitative questions. We have much to learn when we can examine the details at the student-level and across all students’ lives.

Types of Qualitative Questions Asked and Answered

First, qualitative research is comprised of and utilizes unique methodologies that answer questions different from those considered in quantitative research and evaluation projects. Qualitative research serves as a socially-based research approach that asks questions of how and why, resulting in it being inductive, concerned with the meaning ascribed by the participants regarding their everyday symbols, rituals, and stories. Qualitative research, or inquiry, cannot answer or make claims of significance, correlations, cause/effects,
but it can provide insights into problems or help to develop ideas or hypotheses for potential quantitative research. Additionally, they can provide the rich detail into the ‘whys’ of participants’ motivations and reasonings. Furthermore, each qualitative method draws upon data collection, data systemization, and analysis schemes that open windows to the local situations that cannot be opened via other approaches. Among the most recognizable of the data collection approaches are systematic observation, field notes, interviews, focus groups, participant interactive surveys, narratives, and teacher/student engaged research relationships. As a result, qualitative researchers engage in more of a dialectic process aimed at “getting it right” regarding the participants’ views on everyday realities for a variety of social phenomena, and also by asking questions that tap practice as it is really practiced.

As with any method, there is variation in implementation; for example, surveys used in quantitative research might be enhanced with more qualitative approaches (such as cognitive interviewing). However, enhancement of quantitative research with qualitative adjuncts, while a productive practice, does not engage with the larger field of qualitative inquiry. This is because qualitative elaborations to quantitative methods are still isolated from the research processes as they exist in their lived contexts.

**Overview of Qualitative Approaches, Data Collection Methods, and Research Ethics**

The following sections of this white paper present methods of qualitative research that are appropriate for conducting research in a developmental education program and in the various components of a learning assistance program. Where various methodologists group specific approaches together, our structure here is not a pure foundation to all qualitative work in its entirety or limiting the use of qualitative approaches to these listed by any means. Similar to the way usability testing methods are grouped (Nielsen, 1994), there is a variety of ways to segment qualitative methods. Like Creswell (2013), we present one popular and helpful categorization of qualitative methods into five groups: narrative, phenomenology, grounded theory, ethnography, and case study. In addition, we add autoethnography, life/oral histories, and content analysis to our categorization as history, culture, and content often describe trends in the history of our fields and the ebb and flow of instructional practices.

Let us now provide an advanced organizer of the various approaches to qualitative inquiry. Narrative weaves together a sequence of events, usually to form a story from one to two individuals. Phenomenology describes a life or universal experience from multiple individuals. Ethnography attempts to look at the essence of a social or cultural context. Grounded theory looks to provide an explanation or theory behind a particular event or phenomenon. Finally, case study provides a very deep understanding of a particular case with definite frameworks. In addition to these five more readily identifiable methodologies, autoethnography uses self-reflection and writing to explore personal experiences while connecting them to a wider cultural, political, and social meaning. Life/Oral history is a systematic collection of living people’s testimony of their own experiences. In addition, content analysis is a systematic text analysis (with text interpreted in the broadest sense) to make replicable and valid inferences via the interpreted material.

These traditional qualitative methods are described in the first half of this white paper, after which we provide a brief overview of some of the most common data collection techniques for collecting, analyzing, and trusting qualitative data that cross these methodologies. While each qualitative method may vary, each method also generally uses similar data collection techniques (surveys, interviews, focus groups, observation, review of text/documents, use of visual data, etc.). This whitepaper then provides a discussion on the reason we strive for ethical behaviors as both consumers of qualitative research and as members of the research community. Finally, we present considerations and practices each member of our field should undertake as a conscientious consumer of qualitative research.

**Methods of Qualitative Research**

**NARRATIVE**

**Description.** At times narrative has been considered a way of thinking. Used as a way of thinking, narrative is not a method but, rather, a framing for research processes that would explore a phenomenon being studied. From our perspective, narrative is a way of reflecting during the entire inquiry process. And it is also a research method, such as analyzing stories, and a writing genre for representing the research study as a product. The main claim for the use of narrative in developmental education research is that humans are storytellers who, individually and socially, lead storied lives. This means that we understand our experiences in terms of narratives, delivered as stories. From narrative research we can develop a greater understanding of our personal and professional lives as well as those of our students. Historically, developmental educators and learning assistance specialists have championed the narrative research approach for generating data to be shared with stakeholders. Members of the field have regularly employed student success stories as a form of evaluative proof of programmatic success when interacting with stakeholders on a respective campus or with
individuals such as legislators from well beyond its confines. Indeed, stories are powerful, but in the current hard data environment they can only serve as one component of the message to be delivered to stakeholders. Narratives should not be abandoned, but other forms of research data must be part of the message being brought forward.

Those of us who teach or have taught in developmental education will recognize the immediacy and applicability of the statement “Each student is an individual story.” A narrative approach has an orienting way of thinking, such as the one provided by Cole (1989). Another support for narrative is found in Bruner’s (1986) distinction between narrative and paradigmatic knowing. Using Bruner’s approach, it may be more helpful to know the story behind students’ places in higher education, than to know their placement scores that put them in developmental education. According to Bruner, paradigmatic knowledge constructs the logical relationships between different phenomena and is instantiated in our knowledge about the physical world. In contrast, narrative knowledge is our knowledge of humans and our relationships and interactions. Studying narratives provides us with powerful lens to view our students, our colleagues, and our programs. We suggest that for developmental education, where much of our work is recuperative, it may be important, or at least productive, to know the backgrounds and stories our students bring to the classroom each semester, and differentially, each different day and to build upon it in designing curriculum and instruction.

Instructional Impact. While narrative research can inform our professional worldview, the study of narrative and the composing of narrative also have powerful pedagogical properties. When developmental readers and writers read and then respond to narrative stories particularly during the initial stages of a course, they are on the first rung of what can be a thematically focused, spiral curriculum (Bruner, 1960; Taba,1962) in which the instruction across the term can lead them to greater mastery of other discourse forms to be encountered in higher education (Bartholomae & Petrosky, 1986). Bamberg (2006) suggests that creating, or textualizing narratives involves both reflective and productive language functions. Reflective functions involve writers’ reflection, interpretation, and positioning. Productive functions anchor talk as instances of what people do and use the talk to index whom the characters are, through their talk. Both functions involve an active writer who is making choices. These self-writing experiences have proved useful in coursework.

 Writers may also gain some agency as characters within the stories. As Clough (1992) claimed, these narratives may be considered the tales the researcher fashions to find themselves as heroes in their own research. Writing from informants’ narrative accounts, or writing from interview data, can be considered a synthesis task that is also structured by the writers’ selection, organizing, and connecting (Spivey & King, 1990). This means that not only is the narrative constructed, but that its construction and resultant qualities are affected by composing processes. Consequently, variation in writers’ abilities with synthesis writing has direct bearing on the outcomes of writing narratives from source texts, such as data (Spivey & King, 1990). In any case, the influence of the writer is pervasive.

PHENOMENOLOGY

Description. Phenomenology describes a shared meaning and structure for the lived experiences of individuals regarding a specific concept or phenomenon. More specifically, phenomenology attempts to focus on the commonalities or similarities across these individuals so as to weave individual stories or experiences into more general descriptions. The goal of phenomenology is to describe a universal essence, for example, “what is sorrow?” “what is grief?” “what is happiness?” In the fields of developmental education and learning assistance, phenomenology has the potential to help describe universal experiences of our students, despite their diverse characteristics, such as describing stigma, success, failure, or achievement. Revisiting the previous orienting questions, developmental education researchers may wonder “What is angst for a first-in-college family member?” Or “What is a single mom in a nursing curriculum experiencing with little time to care for her own kids?” Unlike most other qualitative approaches, this method does not attempt to analyze or explain the phenomenon, but rather develop a description of it that best describes an essence that can relate to others. In general, as detailed by Moustakas (1994) and Creswell (2013), a researcher needs to find participants who have all experienced the same phenomenon in order to develop the “what” and “how” of the heterogenous group of individuals under study. In participating in the development of understanding the essence of something, researchers often are required to “bracket” their own personal backgrounds and to assume “ignorance” about the concept or phenomenon in order to allow them to grasp the essence as it is presented by the participants. Berger and Luckman (1967) presented phenomenology as a reality that is socially constructed, which Greene (1978) supported, with phenomenologists believing in multiple ways of interpreting experiences by interacting with each other. It is in those meaningful interpretations that we eventually come to understand and constitute a concept or phenomenon as reality.

Instructional Impact. Clearly, working in the area of empathic understanding has immediate implications for
teaching. This is particularly acute in instructional domains that serve non-traditional and perhaps underserved students. Knowing about the lives of students, from the "as if" perspective of an empathically engaged teacher-researcher can be a powerful lever for motivating and enhancing the educational experiences for these students. Phenomenology provides unique opportunities for us as educators to take a closer look into the moments in education that we might often take for granted. For example, phenomenological approaches in the classroom allow us to ask question such as: How does one enter the "space" of college? What do those feelings of "stigma" have to do with academic process and success? Why do educators need to think about "unbiasing" themselves? Such questions deepen educators' sense of knowing and understanding of the contexts and experiences that themselves and students experience.

**GROUNDED THEORY**

**Description.** Developed by Glaser and Strauss (1967), grounded theory moves beyond description to generate and to discover a theory for a process or an action. Sociologists Glaser and Strauss designed grounded theory as they felt the theories used in social research were often inappropriate and ill-suited for participants under study (Glaser & Strauss, 1967). Participants in the study would all have experienced the process, and the development of the theory might help explain their practice or provide a framework for further research. A key idea undergirding grounded theory is that theory development does not come out of nowhere, but rather is generated or grounded in data from participants who have experienced the process. Thus, grounded theory is a qualitative research design in which the inquirer generates a general explanation (a theory) of a process, an action, or an interaction, an explanation shaped by/through interrelating categories of information based on data collected from a number of individuals. Grounded theory follows a set of procedures to systematically generate a theory that explains a process, albeit at a broad level. This structured procedure can be a productive choice for novice researchers who may just becoming familiar with research designs. Inquiries in career and technical education might ask “How does a CTE student's out-of-course expertise as related to a particular welding process or machine figure in his or her relationship(s) with the course instructor?” Or “Describe an instructor’s perceptions of the students’ culinary expertise on the evaluation of the students’ meal productions.”

Whereas other research methods often deploy an a priori approach to theoretical orientations, Glaser and Strauss held that theories should be “grounded” in the data from the field, and this view resulted in a methodology geared toward the generation of a theory through the constant comparative analyses and interrelated categories of information from the participants. While Glaser and Strauss initially collaborated on the creation of grounded theory methodology, ultimately, they disagreed regarding the procedures and meaning of the actual methodology. Their initial systematic procedure involved using predetermined categories to interrelate categories, diagrams, and propositions to make the theoretical connections explicit. However, Glaser (1992) eventually developed an emergent design in the coding process that allowed for a more contextual development of categories, at which time Glaser also critiqued Strauss’s approach as being too prescribed and too structured (Glaser, 1992). More recently, Charmaz (2003) proposed a revised grounded theory approach that focused on subjective meanings by participants, explicit researcher values and beliefs, and suggestive/tentative conclusions. Ultimately, regardless of which methodological procedures are adopted and followed, grounded theory methodology is the discovery of theory from data rather than verifying pre-existing theory.

**Instructional Impact.** For both the developmental education and learning assistance fields (and other student success undertakings as well), the nature of grounded theory inquiry provides a critical interaction between researcher and large numbers of participants. Analysis in grounded theory follows new ideas, concepts, or themes that emerge from the data. This in turn can foster deeper social interaction and consensus-building in the generation of new concepts and/or theories. As an outgrowth, this interaction with data can influence our practice, particularly as the development of new theory can lead our fields to further analyze and make sense of how we serve and hopefully then better the academic and even personal lives of the multitude of stakeholders that we serve on campus and beyond. In fields such as college reading, basic writing, transitional math, and learning assistance where we cannot ignore outliers, specific agentic populations that are ever changing, as well as in the dynamic, ever changing contexts of higher education influencing our instruction and service, grounded theory can assist practitioners to make sense of current if not future contexts and then lead us to craft new frameworks and models for programs, curriculum, instruction, and assessment. As such, educators and researchers can develop processes to help them become more aware of the constructs underlying innovative ideas in teaching math courses with co-requisite supports or learning assistance through on-line tutoring (as examples). Such emergent theories can promote the adoption of new innovations, the abandonment of established approaches, the adjustment of practices, the sharing of adoptions, and/or the prioritization of them. With constant
comparative methods, an educator has the potential to assess the influence of mandated programs, curriculum, and instructional changes in one’s own settings by looking at the data ground up and comparing the outcomes to the mandated reform efforts advocated by state offices or more localized administrative units. The fundamental benefit for instruction and programmatic offerings from undertaking such inquiry is that theory can be developed, lead to practice, and serve as a basis for evaluation.

**ETHNOGRAPHY**

**Description.** Ethnographic research provides a holistic description and an interpretation of both the culture and social structures of an identified group of individuals within their natural environment and across a naturally occurring cycle. One might consider the definition provided by LeCompte and Preissle (1993) as they state, “Ethnographic research is a process involving methods of inquiry, an outcome and a resultant record of inquiry. The intention of the research is to create as vivid a reconstruction as possible of the culture or groups being studied” (p. 235). During this process, researchers carefully document their observations by writing detailed ‘thick descriptions,’ which can later be used as part of the data collection tools and analysis set. Description and interpretation are accomplished by capturing behaviors, daily actions, and the events that shape lives within a bounded context and environment. In a field where students, instructors, and administrators are usually described as objects of inquiry, ethnography conducted within developmental education contexts offers the chance to observe a more human-based view of the field from the perspectives of the insiders. For developmental education, the semester course remains a convenient and rigorous cycle for researchers. In some instances, the larger structure of developmental studies programs will broaden the notion of bounded context. As such, ethnography in our field has the potential to generate theories of culture and explanations about how individuals think, what they believe, and how they behave. Theories regarding the day-to-day business of developmental education or learning assistance, within the larger nesting context of higher education, can provide rich and interesting culture differentiations and well as similarities in mission and vision. Researchers in developmental education may be interested in students’ outside of school lives. Or wonder how “school work” is integrated into other aspects of their students’ lives.

**Instructional Impact.** As the ethnography is grounded in theories of culture, it allows researchers to observe, capture, and interrogate the pedagogy, praxis, and players as these interact in the naturalized sociocultural context. However, ethnographic research focusing on educational contexts can transcend the boundaries of the specific classroom or institution to include the broader cultural contexts that influence the aforementioned factors. An example within higher education, researchers, educators, and members of society at large debate the distinctions between training and education, whereas the ethnographic process allows us to view these constructs from a broader context of enculturation. As Wolcott (1973) notes, this is how each of us acquires the basic cultural orientation that will influence a lifetime of thoughts and actions. Ethnography focuses on how things are and how things got that way. Ethnography does not point out the lessons to be gained or the actions that should be taken from perspectives of policy or pedagogy. Indeed, the final ethnographic report may suggest that the research context is far more complex than imagined or that a particular problem is far more problematic that initially envisioned.

In building upon Wolcott (1973) we can posit three recommendations for practical uses of ethnographic research for developmental educators and learning assistance personnel. First, expand professional reading to include descriptive works since such texts will assist an individual to better understand the pedagogical or programmatic endeavors in which one is professionally and personally engaged. Furthermore, in discussion groups (Teachers as Readers) the observations within the text can be unpacked, delineating between “what we do” and “what we say we do.” Secondly, become familiar with a variety of field techniques and come to recognize that a multi-source approach to assessment or evaluation is preferable to the dependence upon a single source such as the Accuplacer or a final term composition. Finally, the study of and discussion about ethnographies should lead to a more sophisticated appreciation for the role of context with all its complexities in developmental education and learning assistance.

**CASE STUDY**

**Description.** Yin (2014) provides a useful definition: "A case study is an empirical inquiry that investigates a contemporary phenomenon (the case) in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident." (p. 16) A fundamental parameter of all case studies is that the investigation is focused on a bounded context. Hitchcock and Hughes (1995) propose that the boundary for a case study can be set by temporal, geographical, organizational, and institutional parameters. Within developmental education the focus could be on a student, a co-requisite class, a reform oriented action research team, or a developmental studies administrative unit. Within learning assistance, the focus could be
on a group receiving or delivering tutorial, SI, or peer-mentoring services or the learning assistance center itself. Furthermore, both individual or group characteristics and roles can be considered in the case study. A case may be representative of a phenomenon, or it might be of outlier (atypical) status, where a developmental education context can be either one. Ultimately, a case study examines a specific instance as an exemplar in order to define issues within the case, illustrating the complexity of the issue. Using a case study frame, researchers may ask “What are the critical aspects of success for students who continue in higher education after a developmental education sequence, or course?” Likewise, researchers may ask “What are the experiences of instructors who are not trained in developmental education, but for some particular reason, end up teaching there?”

The data collection protocols for case studies can draw from both qualitative and quantitative methodologies and techniques as long as appropriate for a systematic and rigorous focus on the bounded context. The researcher, through direct involvement, will observe and then report on real-life relationships and the resultant interactions between people and events. The goal is to develop thick description that permits inductive analysis with triangulation from multiple data sources in support of research validity and controlling issues of reflexivity.

**Instructional impact.** Using the results from a bounded unit under study, the research findings may be deployed to understand and perhaps solve problems faced by the respective basic writing faculty, or issues within a college reading course. Opportunities to generalize findings to another situation and thus impact another instructional situation, are dependent upon the findings but also the design of the case study research and its fidelity to factors of validity. One must, as Schofield (1990, p. 226) suggests, attend to the “matter of fit” between the case studied and a transfer context where an individual is to apply the findings and conclusions from the case study.

Impact is possible in still another manner as a case can itself be used in the processes of pedagogy. A case study on a program’s curricular reform efforts would be an appropriate resource for discussion and study by a reform-oriented group of developmental educators participating in professional development. Finally, learning strategy books written for use in developmental education have begun to include mini-cases of students facing real world issues of higher education. Instructors can in the same manner present their students with cases focused on the local context.

---

**AUTOETHNOGRAPHY**

**Description.** Autoethnography is a form of inquiry related to explicit, narrative self-study that may lead to the researcher’s (and especially a student’s) self-understandings as well as understandings in the wider culture. Autoethnographies are first person dialogues, relying on self-disclosure, within emotional tropes intended to create reader empathy and recognition through the emotional linkages. It is a curious path in that for decades ethnography explicitly delimited itself to not generalize. The current popularity of autoethnography and its claims for self and cultural understandings are part of the post-positive wave of interpretive inquiry. In the case of autoethnography, the predominance of data come from self-analysis and reflection. Researchers are enjoined to systematically analyze personal experience in order to better understand broader cultural experiences. As such, autoethnography has much overlap with more general narrative approaches, in that ethnographies of self are written in narrative genre that include plot, character, and scenes (as events). In addition to these narrative habits and structures, they are deployed as tools to analyze the very experience written about.

Consequently, we view autoethnography as a possible method for both beginning researchers and for college students’ self-study. Following the crisis in representation (van Maanen, 1995) and occasional dissatisfaction with method selection, researchers increasingly turned to autoethnography for inquiry framing that embraced the constructed nature of reality, and openly dealt with values, emotions, and researchers’ engagement with the world. Vicissitudes such as these are endemic for college instructors and staff, graduate students, and undergraduate students. Autoethnographies are purposefully aesthetic, evocative, and engaging. As a result, autoethnography can be deployed as a way of engaging the disaffected or marginalized actors from across the campus community. According to Ellis, Adams, and Bochner (2011), autoethnographers retrospectively and selectively write about epiphanies with the notion that their responses to self will direct readers to similar responses based on cultural similarities and differences. The underlying assumption here is that analyzed, personal experience can illustrate cultural patterns, and that these patterns are subject to transference. Hence, the value of reviewing an autoethnographic study for the developmental educator or learning assistance professional is well beyond a simple surface level perusal. Rather the value emerges with the empathy, emotions, and sympathy evoked from the reading the work as well as the response to any call to action (Ellis & Bochner, 2006) voiced explicitly or implicitly through the researcher’s reflective and retrospective analysis of the socially constructive self (Starr, 2010).
There is overlap with biography and autobiography. Clearly, autobiography has a focus on the self of the author. But distinct from autobiography, is the analytic intent that connects autoethnography with cultural analysis. Clearly there can be a fine line between autoethnography and autobiography. One distinction that would be deeply instructive would be teaching the essential differences between reflexive autobiographical writing and writing that intends to be autoethnographic. The autobiographical aspects of Rose’s (1989) Lives on the Boundary attests to the power of self-examination, immediately for readers, but also one suspects for Rose himself as he struggled to frame his experiences in ways that might inform others. In reflexive ethnography, writers focus on actors other than themselves, but with sensitivity to their interrelationships between self and the focus participants. In an autoethnography, the data and the focus are on some aspect of the writer’s life. Questions for autoethnography are particular and personal. For example, a student may write about the effect of a physical stigma (e.g., thick lens on eyeglass prescription) on life as a student. Faculty members could research their own coming to know gay and/or lesbian students’ lives through particular relationships with students or with designated support groups.

**Instructional Impact.** One does not walk away from the critical reading of an autoethnographic study with a clear mandate for a scaling up of a curricular approach or an instructional method. However, the research should lead to a careful ponderance of one’s own approach to developmental education or learning assistance. Furthermore, the use of autoethnography may be a productive place to start researchers’ and students’ journeys into qualitative methods. For instance, we see value in requiring all doctoral students to go through the process of constructing an autoethnography before reaching the candidacy stage as such self-knowledge is key to developing a conceptual framework for a dissertation. There is potential as well for any faculty and staff member in undertaking an autoethnography at strategic points within one’s career.

Clearly, autoethnography has to do with our teaching and researching selves. While not well explored, it is clear that self-knowledge would impact teaching and research in developmental education, learning assistance, and any other teaching engagement. Bochner’s (2014) Coming to Narrative also reveals the inherent value in academics' self-inspection. Admittedly, we are recommending an approach that is not well documented as it has seen little publishing. Autoethnographies promise academics in developmental education and learning assistance an up-close engagement with themselves situated in their professional lives.

Autoethnography can also create an instructional nature when used with students in a developmental education reading, writing, or IRW class. It is a common practice for classes to begin with students composing a reading or writing autobiography so as to promote a form of metacognition awareness or serve as a diagnostic measure for the instructor. However, the process generally ends there. Personal growth as a learner (reader and/or writer) would be greatly promoted across a semester if students would employ multiple passes to develop an autoethnographic study in reaction to the ensuing course content. Such would also provide a powerful method of assessment of student growth.

**CONTENT/DOCUMENT ANALYSIS**

**Description.** Content analysis, also known as document analysis, is a research method that crosses the borders between quantitative research and qualitative research. Krippendorf (2013) defined it as a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use. While documents are primarily written artifacts such as public sources (e.g., books, newspapers, magazines, journals, Internet sources, meeting minutes), or more private written sources (e.g., letters, diaries, e-mail), content analysis can also be employed in the study of non-written sources (e.g., photos, pictures, films, maps, images, advertisements) as well as sources associated with the new literacies (New London Group, 1996) as they cross traditional boundaries in written text (e.g., social media, Blackboard). Traditional documents in educational settings would include among others: textbooks, workbooks, educational software, videos, curriculum guides, lesson plans, syllabi, or communications with parents or faculty. Finally, the method can be employed in the study of “artifacts,” usually considered to be within the realm of qualitative methods such as conversations, discourse, narratives, biographies, and oral/life histories when a broader definition of document is productive for the researcher. The content of a document itself may be delimited to categories of sounds, words, concepts, phrases, sentences, principles, themes, signs, images, or symbols. The analysis may, on one hand, reflect simple frequency counts or, on the other, involve more sophisticated forms of qualitative inferential and quantitative statistical analysis. It may approach the analysis from any number of theoretical, philosophical, or disciplinary constructs and also investigate models of language use and human thought. Research questions for content analysis can be at the theoretical level (What are the implicit or explicit perspectives of the integration of reading and writing in recently published IRW textbooks?), pedagogical (What pedagogical approaches are identifiable in recently published developmental
A Basis of Qualitative Inquiry for Developmental Educators and Learning Assistance Professionals

Studies. Oral historians ask open-ended questions that of what distinguished them from other interview-based the depth and detail included in oral histories are part revisiting their narratives to develop fuller stories. In fact, histories also afford sufficient time for the narrators' informants' personal experience and reflections. Oral these interviews, but they differ in their in-depth account writing from that data. More generally, oral histories rely on her life, collecting the remembered data, and perhaps writing from that data. More generally, oral histories rely on these interviews, but they differ in their in-depth account of informants' personal experience and reflections. Oral histories also afford sufficient time for the narrators' revisiting their narratives to develop fuller stories. In fact, the depth and detail included in oral histories are part of what distinguished them from other interview-based studies. Oral historians ask open-ended questions that keep the focus on the interview participant (e.g., What were the academic subjects encountered in your past that were most rewarding for you?; Explain how the IRW course prepared you for English 101?; What courses in high school prepared you best for college?) Some interviews are "life reviews," conducted with people at the end of their careers, and sometimes called life history projects. Other oral history projects focus on specific periods of time (for instance, the high school years) or specific events, such as interviewing combat veterans who are returning to higher education or single mothers who are returning to education while raising their families and working jobs. These are interesting, unique, if not outlier stories in higher education contexts. Yet, we see no reason why the methodology cannot be employed to interview groups of students in Career Technical Education programs, Integrated Reading and Writing classes, Stat-way, or STEM-way math classes about their respective experiences with schooling.

The benefits from collecting and analyzing these data accrue to the participants, the researchers, and when disseminated, various groups of stakeholders. For instance, Casazza & Bauer (2006) undertook an oral history project that focused on developmental education and learning assistance where 30 individuals classified as either pioneers, leaders, practitioners, or students were interviewed. While it is not our purpose to fully review this seminal work, it is noted that in analyzing the interview sets, five overriding themes emerged that lead to the researchers offering five recommendations and 16 action steps for future pedagogical, programmatic, and administrative directions of the field.

Instructional Impact. While oral history is a research method, it can also serve as a powerful pedagogy that provides opportunities for developmental education students’ empowerment. From our perspective, student empowerment is a positive outcome, particularly for disenfranchised students. From an educational perspective, oral history involves students in active learning, pursued both in and out of classrooms (Sitton, Mahaffey, & Davis, 1983). Oral history used as curriculum engages living peoples’ recollections about the past to teach content. Students, as oral history researchers, conduct interviews with targeted participants. What the participants remember is taken in by the interviewers as content. Content from a set of student-collected oral histories on an instructor selected topic or the theme from an IRW course can move the curriculum toward meaningful student engagement, while practicing the targeted skills of reading and writing (Wigginton, 1986).

Whether in a stand-alone developmental reading class, a basic writing course, an IRW course, or in a learning community, students interviewing and writing about
the interview do axiomatically learn literacy practices of reading, writing, listening, and speaking. Literacy learning occurs because the practices of interviewing, reading about the context of the interviewee's life, and writing about the interview data are literacy practices. Participating in literacy practices in such an integrated manner can enhance literacy competence. However, it is more likely to occur when the competencies are curated by a more skilled mentor, like an instructor. For instance, this means that the oral history writing is intentionally used as an occasion to improve writing practice.

**Qualitative Data Collection and Analysis Procedures**

At this stage of the paper the focus changes from the coverage of methodological approaches to a brief overview on the processes of collecting, analyzing, and trusting qualitative data. The most commonly used data collection approaches or sources include surveys, interviews and focus groups, archival text and document resources, visual data, and stimulated recall/verbal protocol approaches.

In general, surveys are the collection of facts/data from a well-defined and representative group (sample), so as to determine the present state of a larger group (population) from which the sample is drawn. Baumann and Bason (2011) note that most surveys in the education field focus on questions about attitudes, knowledge, experiences, and behaviors of teachers, students, administrators, parents, policy makers, and other stakeholders.

Interviews and focus groups intend to explore views, experience, beliefs, concepts, ideas, and motivations for individuals on subject matters being explored by the researcher. As qualitative researchers aim to get very close to the social phenomena they are exploring, interviews and focus groups have the capacity to provide a very deep understanding of phenomena.

Qualitative researchers wishing to develop both depth and breadth of knowledge about a group/person under investigation make regular use of archives and artifacts throughout a study. Such is the case during both the stage of discovery and in the confirmatory processes, so as to develop a thick description. Furthermore, textual, audio, and digital resources from archives (physical and digital) as well as artifacts found within the defined and bounded contexts of the study provide valuable components that support the triangulation process. An analysis of artifacts can lead to research questions or can help to answer previously proposed research questions. Whether old or new, artifacts have value in shedding light on a person’s or program’s history and current life/context.

Advances in New Literacy (New London Group, 1996), digital literacies, and multimodal literacies have pointed out what had always been there: reading and writing have always involved many modes of communication, visual as well as alphabetic. But clearly, the interpretation of complex pictures, embedded movies, and other digitized textual information require more in-depth approaches to visual analysis, both for instruction and research.

The use of verbal protocol procedures and the resulting protocols of data seem a likely match to language-based interactions, that is, almost all interactions. But utilizing protocol analysis productively requires a more nuanced use of “language as data.” Verbal reports constitute individuals’ oral descriptions of their mental processes in which they are currently engaged (Ericsson & Simon, 1984/1993). Participants are typically asked to “think aloud” as they complete an academic task. However, it is also important not to tell the participants what to say. Then later on, researchers replay the recordings to see if there are recognizable patterns in what participants verbalized while completing the academic task. (Please refer to Appendix C for a listing of research studies focused on developmental education and learning assistance that employed the varied data collection approaches covered in this section.)

**Recognizing Personal Bias and Strengthening Analysis**

As qualitative research often places the researcher into settings that require a conscious effort by the researcher to restrain from imposing assumptions, biases, and meaning over the context being studied, it becomes very important to check the interpretations and analyses of the data constantly and consistently over the course of data collection. As a result, there are continuous discussions revolving around the problem of bias in qualitative research in terms of how much researcher influence is permitted and, as Ortillp (2008) deliberates, whether or not bias needs to be controlled. Denzin (1994) calls this the “interpretive crisis” (p. 501). Ultimately, to “exercise control over his experiences, the researcher requires an efficient system for recording them...What our researcher requires are recording tactics that will provide him with an ongoing, developmental dialogue between his roles as discovered and as social analyst” (Schatzman & Strauss, 1973, p. 9).

This section suggests reflective journaling and qualitative memo-ing as approaches to interpreting and analyzing data to reduce researcher influence. Keeping a journal enables the researcher to document experiences as a participant; record opinions, thoughts, and feelings; and
even acknowledge how the data is being used, analyzed, and interpreted. Particularly in cases where data may be abundant, the researcher can use journaling to assist in framing research discourse instead of documenting data as a strictly linear form.

Just as reflective journals provide a range of possibilities to support the research process, qualitative memo-ing is also a specialized type of written record that contains products of our analyses (Corbin & Strauss, 2015), but this process largely occurs during the coding process whereas journaling occurs anytime. While memo-ing is more prevalent in grounded theory as a practice, we encourage it here for new and emerging researchers as a way to documenting any growing or developing analyses or interpretations. Arguing that memos are working and living documents, Strauss (1987) stresses that the act of writing memos directs the analyst to think about the data. In addition, Corbin & Strauss (2015) stress that it is not the act of completing memos of each type – code, theoretical, and operational notes – but the simple fact that memos are even being written. Memo-ing is often used to identify aspects of the data worth pursuing further; noting patterns, significance, or uniqueness; asking unanswered questions; and, documenting variations among data. Essentially, for the qualitative researcher, memo-ing is an important step of taking concepts from narrative data and forming theoretical arguments. Then, once data has been collected, analyzed, and interpreted, qualitative researchers work hard to ensure the findings and implications are not only strong, but trustworthy, for readers.

While qualitative data do not undergo the same tests and equations of proofs that quantitative data undergo to document the strength in their findings, qualitative data still undergoes a process of analysis that provides trustworthiness of its findings to readers. Qualitative researchers take great care in considering issues of trustworthiness. Trustworthiness addresses concerns with validity and reliability of data, or as analogies of these constructs in qualitative designs. As recommended by Guba and Lincoln (1998), researchers illustrate trustworthiness by carefully considering credibility, dependability, confirmability, and transferability of their data and findings.

As such, researchers triangulate data sources as well as data collection methods to enhance the methodological validity of the study. Triangulation is the practice of providing a fuller and richer picture of the study by gathering data from multiple sources and through various methods. As for dependability of analysis, researchers triangulate data via peer checks and member checks. Through such practices, then, when inconsistencies arise, researchers return to the data and resolve differences in interpretation often by practicing methods of memo-ing and/or journaling to document any progression of thought processes as well as rationale for certain analysis decisions. This practice also accounts for the confirmability of data analyses. As for transferability of findings, qualitative researchers use thick, rich descriptions of the participants and of the context of the study (Schram, 2003) so that readers of the research may find application to their situations. As such, tracing the process of raw data to interpretive findings becomes an ethical journey.

**Ethics of the Qualitative Inquiry**

As a consumer of qualitative research, one must always look for the careful, ethical accounting of the researcher's behavior and influence on the data and its collection processes. What then are research ethics? Diener and Crandall (1978) offer the following for consideration: Ethics are guidelines and principles that help us uphold our values – to decide which goals of research are most important and to reconcile values and goals that are in conflict. They go on to state: "Ethical guides are not simply prohibitions; they also support our positive responsibilities." (p. 3)

Diener and Crandall (1978) propose a tripartite model for the types of ethics that can guide research endeavors as well as for evaluating the products of research. Wisdom ethics (Garrett, 1968) are the ideal practices for a field or profession in a perfect world. Yet, these are rarely operationalized in real practice due to human limitations and competing values. Content ethics, on the other hand, are a set of generally accepted, explicitly stated rules that delineate which acts are right and which acts are wrong. These types of codes are issued by professional associations such as CRLA. The final classification in the model is ethical decisions and judgments made by each researcher based upon one's own value system. Every researcher has a personal code of ethics that underpins judgments and actions associated with each phase of an investigation. Decisions are based on a personal code rather than simply adhering in a lockstep fashion to a set of guidelines from a professional organization or government body. The processes of knowing guidelines, examining and evaluating alternatives, and making judgments that may likely lead to an ethical decision, as well as accepting responsibility for each decision, are the cumulative actions for ethical research. In a sense these points carry over to the scaling up of research findings by members of the professional community.

In reviewing a qualitative research report with consideration of its ethical stance, the consumer's attention should be directed towards the researcher's close relationships and connections with the study's participants. Qualitative researchers are responsible for informing and protecting
their participants and consumers at all levels of research. Hence, it is imperative that the researcher has maintained constant informed consent through the entire study, while also having maintained confidentiality and/or anonymity of participants.

This inclusion of research ethics points out a second large benefit from using qualitative inquiry. When executed deeply and thoughtfully, qualitative approaches to inquiry invite a flexible and empathic stance on the part of the researcher. The representations created by the researcher are both data-based and influenced by the researcher’s identification with the researched. It becomes the researchers’ responsibility to keep track of this interplay and report it ethically. Such interactive methods and relation-based inquiries require researchers to be circumspect about their research processes.

A cornerstone of ethical behavior in the conduct of qualitative research, as also with quantitative research, is informed consent (Banister, 2007; Halai, 2006; King & Stahl, 2015; Richards & Schwartz, 2002) or titled “autonomy” by Orb, Eisenhauer, and Wynaden (2000). Informed consent requires that an individual knowingly participates in an investigation upon one’s free will and not from any form of coercion based upon power differentials between researcher and participant, as might exist between a developmental educator and a student enrolled in a class or a learning specialist and an undergraduate seeking support services.

The researcher in the fields of either developmental education or learning assistance must also be concerned with the Halai’s (2006) principle of confidentiality and anonymity. Indeed, there are potential consequences should a participant’s identity be revealed. Such an issue is why researchers use pseudonyms when presenting and discussing data provided by the subjects in the research report and in any later presentations or publications. Yet, as Halai (2006) and Orb, Eisenhauer, and Wynaden (2000) point out, the collection of data from within a small bounded community (e.g. a college composition class, a supplemental instruction group) makes the promise of confidentiality and anonymity somewhat unlikely even with the use of pseudonyms. Finally, with the growth of digital technologies in qualitative research (Banister, 2007), a new layer of issues associated with this principle must now be considered by the researcher, the members of an Institutional Review Board (IRB) committee, and ultimately members of the student success community.

A third principle focuses on beneficence and reciprocity (Halai, 2006). Both of these principles present fundamental tenets that no harm can come to the participant and that the process and outcome should be doing good, especially for the study participants (as is a hallmark of developmental education and learning assistance). At the most basic level this principle calls for the investigator to fully explain to the potential subject the risks and the benefits from participation in the project. Since very personal data are likely to be collected via qualitative research methods and since the process often involves deep and probing questioning about beliefs and past actions, both Halai (2006) and Richards and Schwartz (2002) warn that subjects may experience discomfort and even anxiety, distress, or conflict during the inquiry. Hence, the researcher has the responsibility to be aware of how the research process might lead to such issues and be prepared to revise the research protocol when issues become apparent.

As members of the educational research community we are guided by ethical codes for research and pedagogy provided by groups such as the American Association of University Professors, the American Educational Research Association, the American Psychological Association, and the Conference on College Composition. Across the past 50 years, members of the College Reading and Learning Association (CRLA) have been proponents of the ethical use and conduct of research pertaining to developmental education and learning assistance. As such we have advocated a responsibility of demonstrating ethical behaviors as both consumers of research and as participants in the research process. CRLA issued its first set of ethical guidelines in 2003 (Carpenter, Carter-Wells, Enright, Johnen, O’Hear, Sandberg, & Stepp-Bolling, 2003) that served as a basis for decision-making and as a demonstration of the Association’s dedication to the ethically responsible behavior of its members. Within the full set of guidelines, the authors addressed the importance of ethical behavior for researchers and consumers of research. This set of ethical guidelines was updated and expanded recently (Smith-Stephens, Sanberg, Stahl, Ortiz, & Keller, 2016) and can be found on the CRLA web site: https://www.crla.net/index.php/ethics-statement.

**Becoming a Conscientious Consumer of Qualitative Research**

This whitepaper will be disseminated to scholar/practitioners from the fields of developmental education, college reading/learning pedagogy, composition, and mathematics instruction, as well as to professionals in the field of learning assistance, including tutoring, supplemental instruction, peer mentoring, and coaching. As the role of being scholar-practitioners unites us all, we all share the responsibility of being critical consumers of theory and research as we utilize these new ways of
knowing and the latest findings from quality research to design even more effective pedagogy and programs in service to our students and other stakeholders.

Across the decades the traditional routes to achieving such a level of competency have come through enrollment in formal coursework embedded in graduate programs. Yet, research methodology and conceptual frameworks for interpreting research findings evolve on a regular basis (King & Stahl, 2012). Hence, we propose that participating in well-designed and ongoing professional development opportunities can lead to each of us having a greater understanding of the importance and process of inquiry. We can likely agree that a regular practice in expanding both our knowledge of the profession and our sophistication with methodology comes with regular reading of the developmental education and learning assistance-oriented journals (i.e., the Journal of College Reading and Learning, the Journal of Developmental Education, The Learning Assistance Review, and Research in Developmental Education), but equally important is to be aware of articles found in journals that have a wider audience and that can include articles of direct importance to our professional endeavors. A sampling of such journals among others in this category that we would recommend include the Journal of Adolescent & Adult Literacy, Reading Research Quarterly, Community College Journal of Research and Practice, College Composition and Communication. Finally, there are a number of journals presenting qualitative inquiry studies that also include discussions about the various methods of inquiry (e.g., Qualitative Inquiry, Anthropology in Education Quarterly, Contemporary Ethnography, Oral History Review, International Journal of Qualitative Studies in Education, and Qualitative Reporter among others). We fully acknowledge that maintaining currency with all forms of research across so very many publication outlets is a most onerous undertaking; hence, we share a suggestion that faculty and staff teams consider developing monthly TAR meetings (Teachers as Readers) where members share summaries and insights gained from readings.

At the same time, we believe that attendance and participation in sessions and workshops, on qualitative inquiry at our conferences and institutes should be central to one’s growth as a professional development. Opportunities are regularly available at the national, regional, and state conferences delivered by our professional organizations (e.g., the College Reading and Learning Association, National Association for Developmental Education, National College Learning Center Association, Conference on College Composition and Communication, and the Teaching Academic Survival Skills) as well as those conferences that allow us to cross numerous borders (e.g., American Education Research Association, Learning Research Association, American Mathematical Association of Two-Year Colleges). Finally, further, we urge our professional associations to provide ongoing study group sessions during annual conferences as done at the annual conferences of the Literacy Research Association.

Closing Thoughts

We close this whitepaper on A Basis for Qualitative Inquiry for Developmental Educators and Learning Assistance Professionals with a caveat. It is the onus for both scholar-practitioners and researchers to possess a fundamental knowledge of research methods and data collection approaches. While researchers are held to the higher standard of knowledge and competency with research methodology that comes with extensive training and formal course work, practitioners must still be sophisticated consumers of research as it has the potentiality to inform praxis. Indeed, it should.

Given such a premise, this document may serve as a first reader for practitioners who strive to understand, evaluate, and utilize the findings and teachings from qualitative research as they design and deliver curriculum, instruction, and/or academic support services to students. Future researchers who are training in graduate programs should find this first reader in qualitative inquiry a useful preview or a helpful review of the content delivered in an introductory course in qualitative research much the same way Freeman Elzey’s (1974) A First Reader in Statistics serves those preparing for or reviewing the content of a statistics course. (See Appendix A for references, resources, and exemplar studies associated with each research method covered in this whitepaper.)

We note that members of our field have conducted qualitative research over the past decades. Such research has been presented at conferences and also published in professional journals. This text has listed a number of these works that have been published in peer reviewed journals primarily focused developmental education and learning assistance (See Appendix B and Appendix C). Still, these works should be reviewed critically using the appropriate standards of the qualitative research field. Then as one begins to employ the findings and recommendations from any of the listed studies in designing curriculum, instruction and/or programs, it is imperative to remember that the practice of generalizing from even highly impactful qualitative research must be considered through a much different mindset than with quantitative research investigations given the highly contextualized nature of qualitative endeavors.
Finally, we suggest that all scholar-practitioners can and should strive to develop the competencies with qualitative inquiry so as to engage in action research (Herr & Anderson, 2015; Mills, 2018) or formative/design experiments (Reinking & Bradley, 2008) utilizing methods outlined in this whitepaper as a regular part of their professional responsibilities. Qualitative research that asks and answers questions about praxis, instructors, and learners is of interest to a range of stakeholders. Such practices have potentially major benefits for both current and future students as well as developmental educators and learning support professionals at the home institution if not potentially throughout the state and even the nation.

References


Richards, H. M., & Schwartz, L. J. (2002). Ethics of qualitative research: Are there special issues for health services research? Family Practice, 19(2), 135-139.


Appendix A Methodological Exemplars

Appendix A is divided into sections that present references, resources, and exemplar studies focusing on each of the qualitative methods covered in this white paper. The sources provided cross many borders and, in some cases, duplicate the references listed for the approaches above, yet they serve the reader in that each list provides a quality foundation for the respective method. Exemplar studies are highlighted with an asterisk.

REFERENCES, RESOURCES, AND EXEMPLAR* STUDIES: NARRATIVE


REFERENCES, RESOURCES, AND EXEMPLAR* STUDIES: PHENOMENOLOGY


**REFERENCES, RESOURCES, AND EXEMPLAR STUDIES: GROUNDED THEORY APPROACH**


**REFERENCES, RESOURCES, AND EXEMPLAR STUDIES: ETHNOGRAPHIC RESEARCH**


LeCompte, M. D., & Schensul, J. J. (2010). Designing and conducting ethnographic research: An introduction (Ethnographer’s toolkit) (2nd ed.). Lanham, MD: Alta Mira Press. (see the entire series.)


REFERENCES, RESOURCES, AND EXEMPLAR STUDIES: CASE STUDY


Williams, C. L. (1996). *Dealing with the data: Ethical issues in case study research*. In P. Morthensen & G. E. Kirsh (Eds.). *Ethics and representation in qualitative studies of literacy* (pp. 40-57). Urbana, IL: NCTE.


REFERENCES, RESOURCES, AND EXEMPLAR STUDIES: AUTOETHNOGRAPHY


**REFERENCES, RESOURCES, AND EXEMPLAR* STUDIES: CONTENT/DOCUMENT ANALYSIS**


REFERENCES, RESOURCES, AND EXEMPLAR* STUDIES: LIFE/ORAL HISTORIES**


Appendix B Field Specific Exemplars

Appendix B contains sections presenting examples of research from the developmental education and learning assistance fields for each of the eight qualitative research approaches covered in this whitepaper. Sources run the gamut from articles found in high impact journals to those from more field-centric journals along with dissertations, and books. There has been no attempt to be all encompassing as the purpose is to provide varied examples in each section.

Examples of Research from Developmental Education and Learning Assistance Literature using the Narrative Approach


Examples of Research from Developmental Education and Learning Assistance Literature using the Phenomenology Approach


Pacello, J. (2014). Integrating metacognition into a developmental reading and writing course to promote skill transfer: An examination of student perceptions and experiences. Journal of College Reading and Learning, 44(2), 119-140.

Examples of Research from Developmental Education and Learning Assistance Literature using the Grounded Theory Approach


Examples of Ethnographic Research from Developmental Education and Learning Assistance Literature


**Examples of Research from Developmental Education and Learning Assistance Literature using Case Study**


**Examples of Research from Developmental Education and Learning Assistance Literature using Autoethnography**


**Examples of Research from Developmental Education and Learning Assistance Literature using Content/Document Analysis**


**Examples of Research from Developmental Education and Learning Assistance Literature using Life/Oral Histories**


Appendix C Data Collection Exemplars

Research for the fields of developmental studies and learning assistance have been undertaken using various data collection approaches. A sampling of texts can be found in this appendix. We were unable to identify articles within the fields’ publications that explicitly mentioned using visual data, memo-ing and journaling in the data collection process.

Examples of Research from Developmental Education and Learning Assistance Literature using Surveys


Examples of Research from Developmental Education and Learning Assistance Literature using Focus Groups and Interviews


Examples of Research from Developmental Education and Learning Assistance Literature using Archival, Text, and Document Resources


**Examples of Research from Developmental Education and Learning Assistance Literature using Stimulated Recall/Verbal Protocol**

