3

Developing and Fine-Tuning Your Research Plan

Developing a plan for your inquiry requires careful thought about the ways you will collect data. I've learned that data are everywhere in my classroom. All creating an inquiry plan means for me is charting a course for how to capture it all. I particularly find student work and student interviews powerful data collection tools to help me not only gain insights into whatever my wondering is for a particular inquiry but to get to know my students in ways I never did before I inquired. There's not doubt that becoming an inquirer has made me a better teacher and has allowed me to better understand and reach each individual student in my classroom.

—Stephanie Whitaker, Teacher Inquirer, Dunnedin Elementary School

The Research Plan Defined

A research plan is defined as an organizational structure for the ways the inquiry will be carried out. As a natural outgrowth of the research wondering that has been articulated and refined, the core feature of the

research plan is an articulation of the ways the teacher researcher proposes to collect data. Data collection for the teacher researcher refers to the process of capturing the action and learning that is occurring in the classroom so it can be returned to by the teacher researcher at a later time. Capturing classroom action and learning as data allow the teacher researcher to systematically analyze and reflect on the outcomes of teaching and learning to create new insights and understandings in relationship to the research wondering. For the teacher researcher, the most prevalent form of data collection is usually *student work*, but there are many additional powerful ways that teacher researchers capture action and learning in their classrooms. These include the following:

- Field notes/anecdotal notes/running records
- Documents (such as lesson plans, curriculum guides, school policy, textbooks, Individual Educational Plans [IEPs], district memos, parent newsletters, progress reports, teacher plans books, and correspondence to and from parents, the principals, and specialists)
- Interviews (individual and group)
- Digital pictures
- Video
- Reflective journals
- Weblogs
- Surveys
- Quantitative measures of student achievement (standardized test scores, assessment measures including progress monitoring tools, and grades)
- Feedback from colleagues (often obtained through learning community or critical friend group work)
- Literature

More information and detail about each of the data collectionstrategies named previously can be found in *The Reflective Educator's Guide to Classroom Research: Learning to Teach and Teaching to Learning Through Practitioner Research* (Dana & Yendol-Hoppey, 2009).

How to Define Your Research Plan

To define your research plan, begin by brainstorming a list of data collection strategies you might employ by creating a data collection chart. Title your chart with the wondering you developed and refined in Chapter 2. Next, generate two columns: (1) What information might help me answer my question? and (2) What data collection strategies would generate this information? Figure 3.1 provides an example of a Data Collection Brainstorm Chart. As you develop your chart, don't hold back—list *all* the possibilities in this brainstorming phase.

Once you have completed your chart, it is time to make some choices. Through developing your data collection brainstorm chart, you have compiled a comprehensive list of potential data collection strategies that could provide you with insights into your wondering. Consider each collection strategy on your list one by one.

- What would be the pros and cons of designing an inquiry that incorporated each of these data collection strategies?
- Which data collection strategies have the potential to provide the biggest insights into your wondering?

Figure 3.1 Data Collection Brainstorm Chart

Wondering: In what ways do science talks enhance student understandings of science concepts?	
Information That Would Help Me Answer My Question	Data Collection Strategies That Would Generate This Information
Knowing how students' conceptual knowledge during our astronomy unit develops	Collect the students' science journals
Knowing what students are saying during science talks	Audio taping science talks Taking field notes
My thinking about what happened during the science talks after they occur	Teacher journal
Students' opinions about science talks	Surveys
Literature on science talks; I'm already familiar with Karen Gallas's book Talking Their Way Into Science	Do a search for other books or articles that are connected to science talks, building conceptual knowledge in science, teaching elementary science, etc.

Source: Dana & Yendol-Hoppey (2009). The Reflective Educator's Guide to Classroom Research: Learning to Teach and Teaching to Learn Through Practitioner Inquiry. Thousand Oaks, CA: Corwin. Reprinted by permission.

Based on your answer to these questions, circle a few data collection strategies that you wish to carry forward into the design of your inquiry. Keep your data collection brainstorm chart by your side as you proceed with the next portion of this section.

With your data collection brainstorming completed, the next step in defining your research plan is to create an inquiry brief. An inquiry brief is a one- or two-page outline completed before your research study begins (Hubbard & Power, 1999). A research brief may cover such aspects as the purpose of your study, your wonderings, how you will collect data, what interventions/actions/new strategies you will try (any instructional plans related to the inquiry), how you will analyze data, and a detailed timeline for how your study will unfold. Three sample inquiry briefs appear at the end of this chapter (completed by a high school social studies teacher, a reading coach, and an ESL teacher, respectively). Using these briefs as a guide, pause now to create your inquiry brief, and return to this chapter once you have completed this task.



While you have now articulated a research plan, it's important to realize that rarely does a quality plan for research take shape immediately. It takes time, tweaking, and actually playing with changes and adjustments to your plan as you begin to develop the "big picture" of what your inquiry will look like. Hence, just as you did with your wondering, it is important to take some time to play with your plan. The purpose of the final section of this chapter is to help you do so by taking the inquiry plan litmus test.

The Inquiry Plan Litmus Test

Chemists use a litmus test to determine if a substance is an acid or a base. You will use a litmus test to determine if the plan you created for your inquiry is the best it can be to gain insights into the wondering you created and refined in Chapter 2. Similar to the wondering litmus test, the inquiry brief litmus test consists of a series of questions that will help you refine your plan for inquiry until you feel you have established the best possible route for your inquiry journey. Begin by printing the inquiry brief you created in the last section. You can edit your plan and make notes to yourself on this document as you progress through the litmus test.

Question 1: Do your data collection strategies align with your wondering and all other aspects of your inquiry plan?

When developing a plan for your inquiry, it's important that each piece of your inquiry is in alignment with the others. For example, if the dilemma that led to your wondering was the quest to increase one of your learning disabled student's multiplication fact fluency while simultaneously helping that student develop conceptual understanding of multiplication, you wouldn't do activities with the student focused on fractions and decimals, and you wouldn't incorporate a progress monitoring tool designed to trace reading fluency. While this might seem like an outlandish example, it can be challenging to select data collection strategies that tightly align with your wondering and your plan for action because teaching and learning are such complicated endeavors and there are so many questions we could explore, actions we can try, and potential data sources we could invoke to understand our actions and the impact we are having on student learning.

Putting together your plan for inquiry is like the old children's song "I Know an Old Lady," written by Rose Bonne and Alan Mills. In this song, one fascinating swallowing of an object leads logically and sequentially to the next, building throughout the song to the swallowing of a cow:

She swallowed the cow to catch the goat . . .

She swallowed the goat to catch the dog . . .

She swallowed the dog to catch the cat . . .

She swallowed the cat to catch the bird . . .

She swallowed the bird to catch the spider

That wiggled and wiggled and tickled inside her.

She swallowed the spider to catch the fly.

But I don't know why she swallowed that fly,

Perhaps she'll die.

Your inquiry should be designed to work just like the old lady, swallowing away in a planned, intentional, systematic, and connected way. Your background dilemma, wondering, data collection,

and analysis strategies should all flow logically from each individual component of your inquiry plan to the next.

- The strategies you are invoking to collect data should make perfect sense in relationship to the statement of your wondering.
- Your wondering should flow naturally and logically from your description of an issue, tension, problem, or dilemma in your teaching practice that led to your inquiry.
- Your selection of a teaching action, intervention, or strategy that you might try should make perfect sense in relationship to your articulated dilemma and wondering.
- The data you collect and analyze should emerge naturally from the action/intervention/strategy you employ.

Now it's time for you to assess your inquiry plan for alignment. Before continuing with the litmus test, look carefully at your brief. Do all the components of your inquiry align with one another? If not, adjust and tweak individual components of your inquiry until each component aligns with the next.

Question 2: Are you using multiple forms of data to gain insights into your wondering?

Throughout the litmus test questions about wondering development and inquiry plan design so far, we've been reminded repeatedly about the complexity inherent in the acts of teaching and learning as a primary reason engagement in inquiry is such an important part of teaching in the first place! Teacher researchers inquire because they want to untangle some of that great complexity inherent in their daily work and engage in a continuous cycle of improvement, truly becoming the best teachers they can be!

As teacher researchers work to untangle the complexities of teaching, they know that any one data source, no matter what that data source is and how much stock others put into that data source (such as scores on a standardized test or observational notes that a teacher takes as she carefully observes a student at work), can only provide a limited perspective on the acts of teaching and learning. Hence, most teacher researchers choose to use more than one source of data to gain insights into their wonderings, with perhaps one of the most prevalent data sources simply being student work.

Now, it's time for you to assess your inquiry plan for data sources. Before continuing with the litmus test, look carefully at your brief. Have you incorporated more than one data collection strategy into your inquiry plan? If not, return to the listing of data collection strategies that appear in the opening section of this chapter and/or your data collection brainstorm chart for some additional data collection ideas and incorporate these into your inquiry plan.

Question 3: Does one of the forms of data you will collect include literature and/or have you already used literature to frame your wondering?

Although we often do not think of literature as data, literature offers an opportunity to think about how your work as a teacher inquirer is informed by, and connected to, the work of others. No one teaches or inquires in a vacuum. When we engage in the act of teaching, we are situated within a context (our particular classroom, grade level, school, district, state, country, etc.), and our context mediates much of what we do and understand as teachers. Similarly when teachers inquire, their work is situated within a large, rich, preexisting knowledge base that is captured in such things as books, journal articles, newspaper articles, conference papers, and websites. Looking at this preexisting knowledge base on teaching informs your study. "Literature is an essential form of data that every teacher-inquirer should use so as to be connected to, informed by, and a contributor to the larger conversation about educational practice" (Dana & Yendol-Hoppey, 2009, p. 112).

It is important to note that when conceptualizing literature as one data source to inform your research and practice, you should use the literature rather than letting the literature use you! Teacher researchers let the literature "use" them when they think in terms of developing a traditional exhaustive review of the literature in the same ways academics do when they are writing for publication in referred research journals or as graduate students do when they are writing a dissertation or thesis. While thorough reviews of literature are important for these constituencies as they generate theory and knowledge on a large scale and may be a part of the practitioner inquiry process when undertaken as a part of graduate work at a university, this conceptualization of literature use is not consonant with the daily local work of classroom teachers who may not have access to a university library and do not have the time to spend days and weeks researching and reading articles related to their topic of study when they are simultaneously engaging in the act of teaching every day.

Using the literature, rather than letting the literature use you, simply means selecting *some* reputable works from the preexisting knowledge base on teaching that connect to your wonderings and will give you insights as your study is unfolding. Teacher inquirers generally collect literature at two different times: (1) when they first define or are in the process of defining a wondering (as previously discussed in Chapter 2) and (2) as their studies lead them to new findings and new wonderings. In these cases, teachers use the literature to become well informed on what current knowledge exists in the field related to their topic.

When engaging in the act of inquiry, teacher researchers "treat both their own practice as the site for intentional investigation and the knowledge and theory produced by others as generative material for interrogation and interpretation" (Cochran-Smith & Lytle, 2009, p. 131). Hence, to *use* the literature means critically analyzing what has been written and published related to your topic of study and drawing relationships between the knowledge and the theory produced by others and the knowledge you are generating locally from practice.

Now, it's time for you to assess your inquiry plan for the incorporation of literature. Before continuing with the litmus test, look carefully at your brief. Have you incorporated the exploration of literature into your plan? If not, use a search engine such as Google Scholar to find research related to your study and/or ask other teachers and support personnel in your district (such as the math coach, reading coach, professional development director, etc.) for recommendations of literature that connects to your inquiry topic and might inform your work.

Question 4: Is the design of your study experimental?

When teachers hear the word *research*, one image that is often conjured in their minds is that of a scientist in a lab coat working with lab rats, formulating hypotheses, and setting up comparison groups—one to receive a "treatment" and one to remain "the control." Because the word *research* carries so much baggage with it, it is not uncommon for first-time teacher researchers to be drawn to traditional experimental study designs in the early stages of developing a plan for their research, assigning a child or group of children to continue business as usual in the classroom (serving as a control group) and a child or group of children to engage with the teacher in a new program, intervention, or activity that is the subject of study.

Yet rarely does it make sense for an action research study to take an experimental form, as teacher action research is generally about capturing the natural actions that occur in the busy, real world of the classroom. In addition, by and large, a single teacher's classroom usually is not a ripe place to design an experimental study since the sample size used in the study generally would not be adequate to indicate any statistical differences, and any one treatment variable would almost be impossible to isolate from intervening variables. Finally, one would need to question the ethics of providing a potentially beneficial "treatment" to some children within a classroom but not to all.

Example: A Fourth-Grade Teacher Recasts Her Initial Experimental Research Design

The original conceptualization of a study as experimental is exemplified by Debbi, a fourth-grade teacher I coached in the inquiry process. Debbi was passionate about reading and, in particular, fluency. Debbi's school had been 1 of 13 schools to pilot a statewide program called the Florida Reading Initiative. In addition, her school had set a goal as part of their annual school improvement planning process to raise the fluency levels of their lowest achieving students to increase their performance on the reading portion of their state's standardized test—FCAT (Florida Comprehensive Achievement Test). Finally, Debbi was a voracious reader and had been studying the literature on reading fluency. She knew the research indicated that there is a correlation between fluency and comprehension.

With the knowledge that research indicated repeated readings improve fluency, Debbi began the design of her inquiry seeking to find if there would be a difference in fluency gains between using a commercial reading program her district had purchased called Great Leaps and repeated readings of plays with her students. In particular, Debbi owned a book of "fractured fairy tale plays," humorous takes on traditional fairy tales, that Debbi believed would be very motivational for fourth-grade learners, and more likely than the commercial reading program to elicit a joy of reading in her struggling readers. Debbi proceeded to conceptualize an inquiry that entailed dividing her lowest performing students into two different reading groups using the Great Leaps Program with one group and the fractured fairy tales with the other group. She indicated in her inquiry brief that she planned to compare both groups' scores using a progress monitoring tool designed to measure reading fluency to see which group had higher gains.

In coaching Debbi in the design of her inquiry, I first provided some warm, supportive feedback, but then suggested she might simplify her inquiry a bit and posed the question, "If you weren't about to embark on an action research project, would you, in the natural ways that you think about teaching, assign your struggling readers to two different groups and teach them in two different ways?"

Debbi responded that she would not. Rather, she would just try the use of fractured fairy tales with all of her struggling readers and see what kinds of results she might get.

"Okay then," I replied. "If you wouldn't assign kids to two differently taught groups as a natural part of your teaching, then you might want to rethink your initial plan for inquiry. Would it work for you if you developed a plan to try fractured fairy tales with all of your struggling readers and look closely at the ways the introduction of this new strategy plays out in the classroom? In essence, rather than looking at cause and effect, you would be looking at the general relationship that develops between the reading of fractured fairy tales and fluency development in struggling fourth-grade learners over time."

Debbi agreed that this plan felt more comfortable to her and that she could still use the fluency progress monitoring measure as an indicator of fluency growth for data. She brainstormed other forms of data that also might provide insights into her students' experiences with fractured fairy tale plays. She decided to take observational notes as her students read these plays, collect all work that was generated by the students that related to her reading instruction with fractured fairy tales, as well as have her students compose "Dear Mrs. Hubbell" letters where they would tell her what they liked and disliked about reading fractured fairy tales. With this new plan, she adjusted her inquiry brief accordingly.

Like Debbi, now it's time for you to assess your inquiry plan. Before continuing with the litmus test, look carefully at your brief. Is your study designed with a "comparison" and "control" group? If so, try reframing the study design to capture natural actions that are occurring in the busy real world of your classroom.

Question 5: Is the inquiry plan doable?

The inquiry process is definitely one that causes energy and excitement for many teachers when they are given the opportunity to take charge of their professional learning, sometimes for the first time in their careers! This energy and excitement can sometimes lead to

inquiry overboard syndrome. Inquiry overboard syndrome occurs when a teacher gets so caught up in the possibilities when planning research that the inquiry plan ends up resembling a complex longitudinal research study that would take years to implement and/or would require writing an entire book or even several volumes of a book about the research undertaking to do the inquiry justice!

Teacher researchers know that a certain amount of realism is an important ingredient to planning an inquiry. Furthermore, practitioner researchers have the potential to make real and lasting impact on classroom practice only when engagement in inquiry becomes a part of teaching practice, rather than exist apart from it. Hence, a plan for inquiry must be doable and include the collection of *reasonable* amounts and *reasonable* types of data. Whenever possible, data collection strategies should emerge from what is a natural part of the teaching act already (such as the generation of student work).

The danger of creating an inquiry plan that is too ambitious or overboard is that when the realization of the magnitude of the plan hits the teacher researcher while she is in the midst of doing the research, she is more likely to abandon the process altogether than to adjust her expectations for the research midstream. Furthermore, she is more likely to conceptualize teaching and research as two separate entities, and not feel the dynamic interplay between the two. Marilyn Cochran-Smith and Susan Lytle (2009) call this important interplay "working the dialectic":

The term *dialectic* refers to the tensions and presumed contradictions between a number of key ideas and issues that have to do with research, practice, and knowledge. The first, and perhaps most important of these, is the assumed dichotomy between research and practice; the second is the twin of the first—the assumed disjuncture between the role of the researcher and the role of the practitioner. When research and practice are assumed to be dichotomous, then analysis, inquiry, and theorizing are understood to be part and parcel of the world of research, while action, experience, and doing are considered integral to the world of practice.

In contrast, practitioner research is defined, at least in part, by turning these dichotomies on their heads. With practitioner research, the borders between inquiry and practice are crossed, and the boundaries between being a researcher and being a practitioner are blurred. Instead of being regarded as oppositional constructs, then inquiry and practice are assumed to be related to each other in terms of productive and generative tensions. From this perspective, inquiry and practice are understood to have a reciprocal, recursive, and symbiotic relationship, and it is assumed that it is not only possible, but indeed beneficial, to take on simultaneously the roles of both researcher and practitioner. This means that when school-based educators "work the dialectic" of inquiry and practice, there are not distinct moments when they are only researchers or only practitioner. Rather, these activities and roles are integrated and dynamic. (pp. 93–95)

Now it's time for you to assess your inquiry plan for doability. Before continuing with the litmus test, look carefully at your brief. Does what you are planning to do seamlessly integrate your role as teacher and your role as researcher so your inquiry plan meshes naturally with your daily practice? Is what you are planning to do reasonable to accomplish given all of the many responsibilities that are already a part of your teaching workday? If not, work to downsize your inquiry and limit your inquiry goals and aspirations to something that is reasonable to accomplish, yet meaningful to your practice and to your students' learning. Remember, inquiry is a cycle—you don't have to do everything in one pass through the cycle!

Question 6: Have you considered the possibilities of detours to your inquiry plan and built into your plan the flexibility necessary to take detours, if necessary, along the way?

Keep in mind that although you have used the first five inquiry brief litmus test questions to fine-tune the roadmap for your study, it is common for unexpected happenings to occur as you engage in the process of inquiry that may require you to take a detour from your plan. While you really can't plan for the unexpected, teacher researchers know that it is perfectly natural and normal to make shifts in plans as an inquiry unfolds. Rarely does any teacher inquirer articulate a perfect plan on paper that is tightly constructed and plays out exactly as originally planned.

The value of the inquiry brief is not to create a perfectly articulated document that will play out exactly as planned, but to get something down on paper to get you started on the next leg of your inquiry journey. As you begin to collect data and learn something that might shift the course of your journey, shift away! Have the courage

to take detours in your plan if what you are learning from your data indicates that it is desirable and necessary to do so. Just keep track of changes you make to your plan along the way, as these changes become a valuable part of your learning journey and are important to share with others as a part of your inquiry story.



Sample Inquiry Brief

Gary Boulware

Purpose

As a new high school educator, I was interested in preparing students for college—especially first-generation college students. I noticed that the demographics of my AP students were overwhelmingly white and these students were the product of college-educated parents. After asking some questions, I discovered the school policy, which acted as a filter to signing up for AP classes: Student academic achievements as measured by the FCAT and GPA were the primary requirements for entry into the program. These filters were probably a good statistical indicator of a student's potential to have the work ethic and academics skills to be successful in an AP environment and to pass a rigorous AP exam. However, I wanted more nontraditional AP students to sign up and try an AP class. I wanted students who were previously excluded from being in AP classes afforded the experience of being in an academically rigorous classroom with focused traditional AP students. I believed I could raise the academic expectations of nontraditional AP students without slowing the pace of the class required to complete the AP curriculum.

To entice nontraditional AP students to enroll in AP classes and to provide for the very real possibility of formal assessment failure (such as AP-level unit tests and end of course exam), I decided to offer a "guaranteed C" to all students. The criteria for a quaranteed C was advertised as the following:

- If you attend class regularly,
- if you are not a pain in my backside,
- if you earn a minimum of 70% on every notebook check,
- if you take every test/quiz,
- if you complete points makeup after every test,

you will earn at least a C in my classes.

The intent was to provide a safety net for students new to the rigors of an AP environment and take some of the risk out of taking an AP course. I deeply

believe that the success of this generation of future leaders and economic engine of our country depends on setting high expectations for students while they are still in high school. These standards will hopefully help them at the university level as well as throughout their lives. Existing research generally supports the notion that students who have the opportunity to take AP courses do better in college. The next section summarizes this research.

Background Research

There are a number of studies that indicate students who participate in an AP program derive benefits. In the article *The Relationship Between Advanced Placement and College Graduation*, Dougherty, Mellor, and Jian (2006) found a strong relationship between AP participation and college graduation rates. A similar conclusion may be found in *College Outcomes Comparisons by AP and Non-AP High School Experiences*, by Hargrove, Godin, and Dodd (2008). Research discussed in *Expanding Opportunity in Higher Education: Leveraging Promise* by Patricia C. Gándara, Gary Orfield, and Catherine L. Horn found that university admissions consider student completion of AP courses in admissions' processes.

This relationship, however, may be more complicated as discussed in *The Link Between Advanced Placement Experience and Early College Success.* In this article by Klopfenstien and Thomas (2006), the authors found that the basis for the strong relationship between taking AP courses and success in college might be more attributable to the "self-selection" nature of the type of students who take AP courses versus the impact of the AP curriculum itself and college success. In other words, the real independent variable is self-selection versus the impact of taking AP classes. In the article *Raising the Bar: Curricular Intensity and Academic Performance*, authors Attewell and Domina (2008) arrived at the following conclusion:

Inequalities in curricular intensity are primarily explained by student socioeconomic status....[There are] significant positive effects of taking a more intense curriculum on 12th-grade test scores and in probabilities of entry to and completion of college. However, the effect sizes of curricular intensity are generally modest. (p. 53)

Question

What are the implications for my students in offering a guaranteed C for completing assigned work, regardless of quiz and test performance in the AP classes I teach?

Method

This research involved collecting survey data to try to determine intended and unintended consequences of this practice. I will ask all of my AP students to take the survey and include open-ended questions on the survey as well. Next, I will interview different groups of students based on themes I see emerging after I analyze survey data. Finally, I will engage my teaching colleagues in discussion about the policy and what they have heard from students about this policy.

Calendar

Early October—Create survey—get feedback on survey from my learning community.

November-Administer survey to students.

Late November—Analyze survey results. Create charts and graphs to better understand my students' perspectives.

After Holiday Break (Jan)—Interview students based on what I learn from my survey.

February—Talk with teaching colleagues—Take notes on their perspectives on the guaranteed C policy.

March—Engage in data analysis meeting with learning community.

April—Present my research at P. K. Yonge's Inquiry and Investigations Luncheon.

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Sample Inquiry Brief

Kathy Christensen

Purpose

As a summer school reading coach, I became acquainted with a struggling student who was often referred to me for discipline issues and noncompliant behavior. He is a Fresh Start student who is now in a sixth-grade intensive reading class. Unfortunately, many of his antisocial and alienating behaviors have continued. After reading *Creating Equitable Classrooms Through Action Research*, (Caro-Bruce, Flessner, Klehr, & Zeichner, 2007, in particularly Chapter 7), I began to ruminate about the possible use of service learning to enhance academic achievement and to examine its effects on a particular student's interpersonal skills. Research on service-learning appears to have a variety of learning goals and focus. Generally, elementary schools have schoolwide or gradewide service-learning programs, while middle and high schools are more likely to employ individual classes in service learning. Fostering civic responsibility and meeting community needs are often stated as reasons for using service-learning projects. Many states have service-learning student goals and many mandate service-learning hours for graduation.

In an article in *Phi Delta Kappan* (2000), Shelley Billig shared research on definitions of service-learning; evidence of impact; impact of service-learning on personal, social, and academic growth; and summarized key components of effective projects. Of particular interest to me were the following:

- Students who engaged in service-learning were more likely to treat one another kindly, help one another, and care about doing their best.
- Male middle-schoolers reported increased self-esteem and had fewer behavioral problems after engaging in service-learning.
- Students in service-learning programs in elementary and middle schools showed reduced levels of alienation and behavioral problems.
- Service-learning has a positive effect on students' interpersonal development and the ability to relate to culturally diverse groups.

According to the Wisconsin Department of Public Instruction guide, *High Quality Instruction That Transforms: A Guide to Implementing Quality Academic Service-Learning* (Evers, 2010), the service-learning process includes ongoing reflection and is linked to curriculum. An interesting outcome shared from the National Educational Longitudinal Study of 1988 (NELS) was that students who participated in service-learning scored 6.7% higher in reading achievement and 5.9% higher in science achievement than those who did not participate in service-learning.

Additionally, a study from New England schools (Klute, 2002) showed that sixthgrade service-learning participants in New Hampshire demonstrated statistically significant gains in achievement scores on state assessments relative to their performance in the past.

My wondering began around one challenging sixth-grade male student. Now I'm considering using a small group of sixth-grade students in the project. I'm wondering if the service-learning could be based on a school community need. Almost every year there is a drop in reading comprehension in second grade as compared to first-grade FAIR and SAT 10 scores. We have been working to increase comprehension strategy learning in the second-grade Core instructional time. I am wondering how the additional instructional support of upper-grade students might impact the second graders and meet their need of additional strategy practice.

Wondering

What is the relationship between implementing a buddy reading partnership program between sixth-grade and second-grade students and these students' social and academic growth?

Subwonderings

- Which comprehension strategies will be the most beneficial for each group of learners?
- How will the students' attitudes and confidence change because of this work?
- What will be the effects on the students' behavior regarding classroom behavior and referrals?

Method

I will meet with the sixth-grade students at the beginning of the week to discuss the comprehension strategy they will be teaching that week. We will identify key terms/language stems they can use when working with their second-grade reading buddies. For two more 30-minute sessions, the sixth graders will work with their second-grade buddies around the second graders' books of choice. During the 30-minute sessions, the sixth-grade buddies will model the strategy aloud and help their younger reading partner employ the strategy. The sixth graders will assess how their buddy is doing through observation and questioning. We will debrief and decide when it is time to move on to another strategy. I am hoping we can get through three comprehension strategies in the six weeks of the inquiry. The sixth graders will decide as a group which strategies we will use. We will work together in my classroom.

Data Collection

I will use pre- and post-learning strengths surveys with the sixth graders. I will also take field notes as I observe the pairs working together. Students' reading grades and weekly behavioral reports will also be analyzed. I will also ask the sixth graders to briefly reflect and assess each day's work in a minijournal. I will interview both groups of students at the end of the inquiry, as well as their classroom teachers.

Calendar

Oct. 7, 2010—Teachers select students. I will administer the self-strengths inventory to the sixth graders and introduce the inquiry project.

Week of Oct. 11th—Meet with sixth graders to select the first strategy, discuss, and plan. Introduce pairs and begin work, meeting three times this week.

Week of Oct. 18th—Meet three times this week.

Week of Oct. 25th—Meet three times this week, employing a new comprehension strategy.

Week of Nov. 1st—Meet three times this week.

Week of Nov. 8th—Meet three times this week, employing a new comprehension strategy.

Week of Nov. 15th-Meet three times this week.

Week of Nov. 22nd—Debrief with both groups, post-assess sixth graders, and begin data analysis.

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Sample Inquiry Brief

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Purpose

As an ESOL teacher, I work with ELLs of varying language proficiencies in Grades K–5. An area I have long recognized a personal need to develop further in my practice is in the development of language goals concurrent with content goals for reading specifically and language arts generally. My hope is that through researching and developing my practice in forming language objectives as part of planning, I will recognize more specificity related to language development in my teaching, I will recognize and be able to more effectively document ongoing language development/growth in my students, and the quality of the dialogue within my coteaching relationships related to language development around both ELLs and other students' language needs will increase in terms of analysis and for planning.

Background Research

Literacy development across content areas is a challenge for ELLs in mainstream classrooms. Key to supporting content learning, explicit academic language instruction should be a part of every lesson for minority-language students. NCLB requires that both language development and academic achievement be monitored annually. The reality, however, is that few teachers plan for and explicitly teach language through content area instruction.

CALLA (Cognitive Academic Language Learning Approach) and the Sheltered Instruction Observation Protocol, as well as Classroom Instruction that works with English Language Learners (Hill & Flynn, 2006) each argue the importance of content-based English language instruction in order to support language development while supporting ongoing academic development rather than allowing students to fall behind academically while gaining proficiency in the language.

The process of determining what language functions and structures to include as language objectives alongside content objectives is challenging, however. And though many teachers are aware of the need to document the use of strategies for making content learning comprehensible, they are not as aware of the importance of developing and explicitly teaching clear language goals.

Question

How will researching, developing, and implementing the practice of including language objectives for reading/language arts instruction affect my ability to

recognize and document ongoing language development (as opposed to reading development alone) in my students and the analysis and planning of language instruction within my coteaching relationships?

Subquestions

- In what ways will modeling the practice of including language objectives with content objectives within the reading block affect planning in other content areas for the classroom teacher?
- How will explicit language development accelerate/affect the oral and written language development of ELLs?

Method

I coteach in a first-grade classroom and a third-grade classroom for part of the 90-minute reading block. In the first-grade coteaching environment, I coteach the word work routine, the minilesson for reading, and the teacher and I work together for conferring during independent reading and differentiated reading instruction through small-group guided reading. I am scheduled for an hour and 20 minutes of the first-grade reading block each day. In the third-grade classroom, I am scheduled for an hour and 15 minutes each day during which I support the vocabulary instruction, the minilesson and then confer with students during independent reading and provide small-group instruction. In implementing my inquiry, I plan to seek out resources that I hope will guide me in recognizing opportunities for explicit instruction around language development related to content objectives and that I will be able to discern the difference between language objectives and content objectives specific to a content area that is heavily language based to begin with. To clarify, it is sometimes difficult to separate language objectives from reading or language arts objectives as opposed to language objectives from science, social studies, or math objectives. As I begin to plan for language objectives, I will make them a part of my lesson introductions and wrap-ups to make the objectives explicit to both students and my coteaching partners. Prior to implementation of this teaching practice, I plan to interview the teachers with whom I coteach to learn more about their understanding of language development and planning for it. I also plan to assess oral language development of my first-grade ELL students and a few non-ELL students who may benefit from explicit language teaching as well as my third-grade ELL students for the purpose of gathering data to inform my instruction and to monitor language development, which will assist in planning dialogue between the teachers I coteach with and me. Along the way, my plan is to journal for the purpose of reflecting on my growth in practice as it relates to planning for language instruction as well as its effect on my students' language development and my coteaching efficacy for language instruction for ELLs.

Data Collection

- Field notes of personal journal reflections and teacher interviews
- Oral language pre- and post-assessments using levels sentences and diagnostic sentences—Record of Oral Language and Biks & Gutches (Clay, Gill, Glynn, McNaughton, & Salmon, 1999)
- Anecdotal records of student-teacher conversations related to language proficiency and developmental needs
- Lesson plans
- Documentation of student writing

Calendar

Weeks of Oct. 4-17

- Research resources for developing language objectives tied to content objectives
- Develop and refine inquiry brief
- Develop interview questions for teachers
- Begin reflective journal with a goal of a minimum of three entries per week

Week of Oct. 18-24

- Administer oral language assessment to first- and third-grade students
- Begin including language objectives as part of reading workshop objectives
- Begin including the development of language objectives as part of the planning process with teachers
- Continue reflective journaling
- Collect anecdotal records of language production from students

Weeks of Oct. 25-31 and Nov. 1-21

- Continue including language objectives as part of reading workshop objectives
- Continue including the development of language objectives as part of the planning process with teachers
- Continue reflective journaling
- Continue collecting anecdotal records of language production from students

Week of Nov. 15-21

- Interview teachers for post-study feedback
- Finish data collection of anecdotal records
- Administer oral language assessment to first- and third-grade students

Week of Nov. 22-28

- Begin data analysis
- Begin inquiry summary

References

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