

**USAID/EQUIP1
Namibia Pilot Study of Teacher
Professional Development**

**Quality in Education, Teaching, and Learning:
Perceptions and Practice**

by

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Executive Summary

Namibia is struggling to preserve the quality of education while rapidly increasing student access to primary school. The resulting strains on the education system are coloring the general perceptions of the quality of education. Namibia is also in the process of implementing complicated curricular and teaching reforms, which creates other demands on the education system. The pre-service teacher education program, the BETD, is well established. However, teachers receive relatively little consistent in-service professional development program. The School Improvement Program (SIP), a pilot school-based professional development implemented by the United States Agency for International Development (USAID)-funded BESII and BES3 programs in the northern regions of the country, is an example of in-service teacher training that is working and which could be useful in Namibia and in other countries facing similar challenges and seeking similar solutions.

This study, the Namibia Pilot Study of Teacher Professional Development, was conducted to learn how to support teacher quality and learning. It was funded through the USAID Educational Quality Improvement Program 1 (EQUIP1) Leader Award by the Academy for Educational Development (AED) in cooperation with the Namibian National Institute for Educational Development (NIED). This is a qualitative study based on interviews and classroom observations of 40 experienced grade 4 teachers in 20 schools in the Oshana and Oshikoto Regions of northern Namibia. The study also draws on interviews with principals, parents, and students in the same 20 schools. These 20 schools include 10 of over 410 SIP schools and 20 teachers from the more than 3,000 teachers who had participated in SIP for about three years. The remaining schools did not participate in SIP. The study was designed to do the following: 1) learn how teachers, principals, parents and students perceive the quality of education, teaching, and student learning; 2) determine how perceptions of quality relate to and shape teaching; and 3) assess how in-service training influences the quality of classroom teaching.

The results of the study suggest that teachers, principals, parents, and students have varied ideas about what defines the quality of education ranging from classroom

materials to student achievement. The responses to the questions fell into a narrow range, however, and often paraphrased Namibia's education policies without giving much evidence that quality had been a topic for significant thought despite the fact that it is at the heart of Namibia's policies and programs. Classroom observations confirmed the impression that teachers seem to lack a profound understanding of the Learner Centered Education (LCE) approach although they are good at using certain of its forms (e.g. group work).

Teachers were very strongly in favor of ongoing, continuing, school- or cluster-based professional development which they see as more effective than episodic or cascade models without follow-up programs in the schools. Almost all of the teachers expressed the need for more professional development and emphasized the benefits of working with their peers and community members.

Because of the small size of the sample, the results of this study are neither statistically significant nor a valid basis for generalization, but they do suggest some trends. Even in this small sample, differences between the SIP and non-SIP teachers and schools did emerge. SIP teachers described quality in greater depth than the non-SIP teachers, for example, referring more often to process rather than solely to inputs and outputs. The SIP teachers also spoke with greater depth, breadth, and inclusiveness about professional development. Classroom observations, although slightly favorable towards SIP teachers insofar as they practiced LCE, did not reveal significant differences in teaching methods. These small differences between SIP teachers and other stakeholders may be attributable to the fact that professional development is part of a whole-school improvement program that includes a school team of teachers, a principal, and parents in a reflective cycle of school planning and self-assessment.

CHAPTER 1: INTRODUCTION

Focus of the Study

Developing countries are seeking ways to improve the quality of basic education while schools struggle with rapidly increasing enrolments and limited resources. Defining quality is less obvious than it might appear; in broad terms, quality means good student learning and is defined by education policies. Quality is the product of a complex interaction of factors, the most important of which is the quality of teachers and teaching (ADEA 2004; ADEA 2005; Boyle et al. 2003; Craig et al. 1998; UNESCO 2004; UNESCO 2006). A teacher's quality is also the result of a complex process that researchers, policy makers, and program designers are all trying to discern.

The Namibia Pilot Study of Teacher Professional Development addresses the question of the quality of teaching, learning and education as perceived by a sample group of teachers, students, pupils, parents, and school principals. It is a qualitative study seeking ways to improve teacher quality and teacher learning. The results lead to suggestions for policy and program approaches to improving the quality of teaching in countries with policy and resource constraints similar to those in Namibia.¹

This study was designed to understand how a group of Namibian teachers and the principals, students and their parents in the schools, think about education quality through an investigation of how perceptions about quality relate to teaching. The results of the study describe and analyze how teachers learn and change their teaching as an outcome of their training, focusing on the impact of in-service professional development on teaching practices. In sum, the following questions frame the study:

- How do teachers, principals, parents, and students define and think about the quality of education, teaching, and learning?
- What is the relationship between teachers' ideas of quality and their teaching?
- What elements in pre-service teacher education and in-service professional development have the greatest impact on teacher learning and teaching?
- How do (or should) in-service teacher professional development programs help teachers to improve the quality of their teaching?

Study Approach

The research for this study was carried out under the USAID-funded Educational Quality Improvement Program 1 (EQUIP1) Leader Award by the Academy for Educational Development (AED) in cooperation with the Namibian National Institute for Educational Development (NIED) which is responsible for curriculum development, teacher pre-service and in-service programs, and research.

The data was gathered from interviews with 40 grade 4 teachers in 20 rural schools in Oshana and Oshikoto Regions of northern Namibia and with the school principals,

¹ A longer version of this study will be available through USAID/EQUIP1.

parents and students in each of the 20 schools. In addition, teachers were observed in their classrooms. The 20 schools include 10 schools that participate in the School Improvement Program (SIP) of the USAID-funded Basic Education Support Programs II and 3 (BESII and BES3) and 10 schools that have participated in the more episodic professional development provided by the regions and other donors. The size of the sample means that the results are neither representative nor statistically significant, but the study does suggest trends and sheds light on potentially promising areas of intervention. For the study methodology, see Appendix 1.

Organization of the Paper

This paper is organized as follows. Chapter 1 introduces the study. Chapter 2 provides the background and policy context of Namibian teacher education and learning opportunities. Chapter 3 summarizes the relevant aspects of the international literature on the quality of education and teacher learning. Chapter 4 presents research findings on perceptions among the teachers, principals, parents, and students at the 20 schools of the quality of education, teaching, and learning. Chapter 5 presents the findings of classroom observations made to determine the relationship between teachers' perceptions of quality and their teaching. Chapter 6 presents research findings on the influence of different learning opportunities for teachers, focusing on in-service school-based professional development. Chapter 7 presents the conclusions and implications of the study.

CHAPTER 2: NAMIBIA'S POLICY AND PROGRAM ENVIRONMENT

Policy Background

The South West Africa People's Organization (SWAPO) that led Namibia to independence sought to change the heavily apartheid education policies and practices, inaugurating a seminal Integrated Teacher Professional Development Programme (ITTP) in 1986, while it was in exile. The ITTP was based on principles of social constructivism, critical and transformative pedagogy, learner-centered and democratic education, conceptual learning; integration of knowledge; and reflective practice (Dahlstrom 1991, p. 7).

After independence, the SWAPO-led government undertook a process of social transformation to change the segregated society of entrenched dramatic inequalities and disparities, including in education. In the new Namibia, education was to serve access, equity, quality, and democratic participation (Swarts in Van Graan *et al.* 2005, p. 19). The social transformation process was guided by a reevaluation and reworking of the positivist, behaviorist, or rote learning education paradigms that had been in place. Since independence, access to basic education has grown rapidly and in the last ten years, very rapidly. Today, for example, previously underserved northern areas of Namibia have almost 90% enrolment rates.

The sweeping changes being sought by the new government required equally sweeping changes in the content and processes of teaching and learning and in teacher education

institutions. The Basic Education Teacher Diploma (BETD) which crowned pre-service teacher education was to be the cornerstone of the new education policies and the engine of systemic change. A new pre-service teacher education program was designed based explicitly on the principles of a dialectical relationship between theory and practice drawn from critical pedagogy; reflective practice; teacher as researcher; and a deep situational understanding (Angula and Lewis 1997; Dahlstrom 1995, p. 281; NIED 2003; Pomuti in Van Graan et al. 2005, p. 65). Teachers who had been trained and received their BETD were to help the government advance its policy changes.

Namibian educators, like educators in many other countries, found it increasingly difficult to understand and apply the new education policies, however. The situation has become even more difficult as classrooms have become overcrowded and under-resourced (NIED 2003). The Namibian education system has come under intense scrutiny for this and several other reasons, and the BETD, as the cornerstone of change, appears to be falling short. The poor learning of Namibian students points to the failures, and is reflected by SAQMEC assessments ranking Namibian students at the bottom of a group of southern African countries. A World Bank sector review has also been critical of achievements (NIED 2003; UNESCO 2004; World Bank 2005 *The Strategic Plan for the Education and Training Sector Improvement (ETSIP) Programme* (GRN 2005) is now in place and is shifting Namibia towards a more pragmatic view of education quality, including more standards-based and behaviorist approaches.

Learning Opportunities for Namibian Teachers

The BETD has been the bedrock of Namibian educational reform. Teachers can earn a BETD by taking a three-year residential program in the four teacher training colleges or by taking a distance in-service upgrading program. The BETD program focuses first on consolidating teachers' knowledge of a discipline and the theoretical and practical aspects of teaching and then on major and minor areas of teaching. Subject areas and pedagogy are, in principal, integrated in the BETD program. Yet, in reality, teachers in training receive virtually no classroom practice before they actually start to teach. While the BETD program also includes extensive school-based studies and action research, critics claim that these have become more form than substance. In sum, the theory and the practice of BETD are not living up to the ideals (NIED 2003).

Only about half of all Namibian lower primary teachers currently teaching have received a BETD, however, which makes in-service training critically important for the quality of teaching. But Namibian teachers receive relatively little in-service professional development beyond the BETD upgrading program. In-service professional development has been decentralized to the regions but no consistent policies, programs or budgets exist to guide them. As a result, most teachers in Namibia receive only episodic support from Advisory Teachers and Circuit Inspectors who visit classrooms and school clusters, or from training workshops. International donors have funded some in-service programs to support the Namibian government, including the USAID-funded School Improvement Program (SIP).

The BESII and BES3 Programs

Since 1995, USAID has supported the Namibian government's policies to improve the quality of primary education in the most disadvantaged schools in the northern regions. The BES1 Program (1995-2000) focused on curriculum development and teacher support, providing structured instructional materials (SIMs) on the effective use of active learning and focused on continuous assessment. BESII (2000-2004) used the comprehensive School Improvement Program (SIP) that works in schools and in school clusters on school planning and assessment; strengthening decentralized school management; providing ongoing teacher professional development; and promoting community involvement in the life of schools. Initiated as a pilot, SIP expanded to 410 schools and over 3,000 teachers by 2004. The follow-on program, BES3 (2004-2008) reaches all 770 schools in the six regions of the north: Caprivi, Kavongo, Oshikoto, Oshana, Omusati, and Oshana.

The SIP includes a School Self Assessment (SSA) component designed to bring teachers, parents and principals into a dialogue about the purposes of education that serves to create change by asking what can be changed, and to help make better informed decisions about improving education so that children learn more and better at school (LeCzel and Liman, 2003; MacBeath *et al.* 1996; USAID/EQUIP1 2004a; USAID/EQUIP2 2005). School self-assessment leading to very concrete school development plans has been so successful that it has become a national standard for all schools. The SIP therefore has a number of components that support in-service teachers while drawing on all the stakeholders in the community that are connected to the school directly or indirectly.

CHAPTER 3: THE LITERATURE ON QUALITY OF EDUCATION AND TEACHER LEARNING

To set this study into a wider context of trends, two sets of literature were examined: the literature on the quality of education and the literature on teacher learning. Both sets are reviewed briefly below.²

Literature on the Quality of Education

A vast literature on the quality of education has been written during the last few decades examining the factors that help improve education and proposing ways to promote better teaching and learning in school. As developing countries pursue Education for All (EFA) and realize that access is only part of the education picture, quality has become an important issue and spawned considerable debate. While "quality" figures prominently in the education discourses and many concur about some of the ingredients of quality, interpretations of quality and approaches to achieving it vary.

² The literature review in Chapter 3 is an abbreviated version of a longer literature review on quality of education and teacher learning available through USAID/EQUIP1.

The *2005 EFA Monitoring Report: The Quality Imperative* points out that “agreement about the objectives and aims of education will frame any discussion of quality and....such agreement embodies moral, political, and epistemological issues that are frequently invisible or ignored” (UNESCO 2004, p. 37). The report further emphasizes that different notions of quality are associated with different education traditions and approaches. Most countries tend to mix some the following in their discussions of quality and, as education policy changes, emphasize one or another factor.

- The humanist approach focuses on learners who construct their own meanings and integrate theory and practice as a basis for social action. Quality is defined by the extent to which learners translate learning into social action.
- The behaviorist approach assumes that students must be led and their behavior controlled to specific ends; quality is measured by incremental learning.
- Critical approaches focus on inequality in access to and outcomes of education and on education’s role in legitimizing and reproducing existing social structures. Quality education is seen as prompting social change, encouraging critical analysis of social power relations, and ensuring that learners participate actively in the design of their learning experience.
- Indigenous approaches to quality reject mainstream education imported from the centers of power, assure relevance to local content, and include the knowledge of the whole community (UNESCO 2004, pp. 32–35).

Namibia shifted its education policy from the humanist and critical approach that dominated during the 1990s towards a behaviorist understanding of quality. Namibia is not alone in shifting its education policy to promote educational goals that are aligned with national goals. Indeed, whatever the broad vision of quality, most national policies define the basis of quality as including students’ cognitive development and their social/creative/emotional development. Cognitive development is an explicit objective of virtually every education system and the quality of the system is a reflection of how well students learn and develop, despite wide disagreement on what and how to measure as cognitive achievement. Learners’ social, creative, and emotional development, considered to be the second basis for evaluating education quality, is almost never evaluated or measured in any significant way (UNESCO 2004, p. 29).

The relative failure of more centralized education systems, the weak link between policy and practice, and the advent of more active forms of student and teacher learning have shifted expectations about where to find quality. Schools, teachers, and communities increasingly have become the focus of expectations (Farrell 2002, pp. 251-252). While it seems obvious to think that schools must offer quality education and generate education quality, policy makers and program implementers have only recently begun looking seriously beyond input and output models to understand the “daily school experience” as the basic ingredient of quality. Recent trends emphasize that schools, teachers, school leader, community members, and students define and create quality (Anderson 2002; LeCzel and Liman 2003; Leu 2005; Nielsen and Cummings 1997; Prouty and Tegegn

2000; Tatto 1997; Tatto 2000; USAID/EQUIP1 2004a; USAID/EQUIP2 2006; UNESCO 2004; UNESCO 2006; Verspoor 2006).

Schools are complex environments, in which pupils, teachers, head teachers and the local decentralized education office and the ambient community are all engaged. The effort to define and achieve education quality has come to rest on teachers. Researchers, policy makers, and program designers, implementers, and evaluators are scrutinizing more closely the quality of teachers as they teach and as they learn to improve quality (ADEA 2004; ADEA 2005; Anderson 2002; Boyle et al. 2003; Craig et al. 1998; Leu *et al.* 2005; Lewin and Stuart 2003; UNESCO 2004; UNESCO 2006; UNICEF 2000; USAID 2002; USAID/EQUIP1 2004a; USAID/EQUIP2 2006; Verspoor 2006). The 2005 EFA report reflects this trend of focusing on teachers as the lynchpin of education quality:

What goes on in the classroom, and the impact of the teacher and teaching, has been identified in numerous studies as the crucial variable for improving learning outcomes. The way teachers teach is of critical concern in any reform designed to improve quality. (UNESCO 2004, p. 152)

The literature indicates that a positive and clear policy environment and adequate support for growth are essential for creating and sustaining teacher quality (Fredriksson 2004; Mulkeen *et al.* 2005) and that ongoing, relevant professional development activities are also necessary for continuing teacher learning and effectiveness (Craig *et al.* 1998, p. 13; Darling-Hammond and Bransford 2005; du Plessis *et al.* 2002; Fenstermacher and Richardson 2000; Hopkins 2001; UNESCO 2004; USAID/EQUIP1 2004b; USAID/EQUIP1 2004c; USAID/EQUIP2 2006). This point is expanded in the following part of the review.

Literature on Teacher Training

The literature on education quality indicates a strong link between teacher professional development and quality. The challenge of new constructivist and active-learning paradigms of teaching and learning cannot be met by imposing codified knowledge, prescriptive practice, and inflexible rules of conduct on teachers. Teachers must own their practice and the reforms that encourage changes in that practice:

Unless teachers are actively involved in policy formulation, and feel a sense of 'ownership' of reform, it is unlikely that substantial changes will be successfully implemented... One of the main challenges for policy makers facing the demands of a knowledge society is how to sustain teacher quality and ensure all teachers continue to engage in effective modes of ongoing professional learning. (Santiago and McKenzie 2006, p. 9)

Experts on teacher learning have long supported the view that successful school reform is best achieved by helping teachers and schools to become inquiring collaborative organizations rather than to prescribe practice from above (Anderson 2002; Craig *et al.*

1998; Darling-Hammond 1993; Lieberman and Miller 1990). This makes teachers and schools engaged subjects, rather than the objects of policy reform (Lieberman and Miller, 1990). Studies support the view that continuous teacher development is a key to raising learner achievement. In the process of improving quality, the entire school community needs to be engaged as a network of support.

A 2002 study of teacher education reform projects in East Africa outlines factors that contribute to teacher professional development (Anderson 2002). The author of the study maintains that every effective project reviewed in his study focused on the teaching/learning process. The most successful in-service learning occurred when teachers had access to teacher-centered and school-based workshops; in-class coaching by consultants, supervisors, or peers; team planning and problem-solving by collegial work groups; action research; teacher inter-visitation; and professional study groups.

The literature on teacher development in US schools supports the international studies. For example, Little found that norms of collegiality and experimentation in schools were most responsible for developing teacher leaders and for fostering teacher professionalism (Little 1988). Teachers' ability to develop and improve throughout their careers may depend largely on creating collaborative organizations, or "communities of practice" in which teachers work together in a group that accommodates and supports continuous inquiry into practice (Darling-Hammond 2006; Grossman et al. 2001; Hatch 2006).

In their professional development, teachers need to acquire the capacity to consider, implement, and make room for changes. The combined processes of efficiency and innovation are assumed to be "complementary at a global level, and they are complementary when appropriate levels of efficiency make room for innovation" (Darling-Hammond and Bransford, 2005, p. 362). In other words, teachers need to develop practices and routines that will free them up by providing flexibility and room for experimentation and innovation in the classroom so that they can become, in Darling-Hammond's words, "adaptive experts." Darling-Hammond suggests the following professional development strategies for teacher learning:

- Experiential, engaging teachers in concrete tasks of teaching, assessment, and observation;
- Grounded in participants' questions, inquiry, and experimentation;
- Collaborative, involving sharing knowledge among educators;
- Connected to and derived from teachers' work and examination of subject matter and teaching methods;
- Sustained and intensive, supported by modeling, coaching, and problem solving around specific problems of practice; and
- Connected to other aspects of school change (1998, pp. 4-5).

This literature of education quality and teacher learning sets the research findings into a broader context of trends in theory and practice.

CHAPTER 4: PERCEPTIONS OF QUALITY EDUCATION: RESEARCH FINDINGS

Teachers are primarily responsible for implementing the constructivist, critical, and learner-centered visions of quality that underlie Namibia's policies. If we understand how they and other stakeholders perceive quality, we may better explain how well the policies have been implemented. The next three chapters present the findings of the research based on interviews and observations with teachers, interviews with principals, and focus-group discussions with parents and students. This chapter describes how teachers, principals, parents, and students think about and understand the quality of education, of teaching, and of learning.

Teachers' Perceptions of Quality

Teachers generally perceive the quality of education as a means to achieve students' individual goals which include good results and good school performance leading to jobs and skills. Teachers perceive learning as meeting national and local needs by creating good citizens who are socially committed and display appropriate social skills, are responsible, disciplined, punctual, respectful, and listen well. Teachers also consider that a quality education includes a positive environment in the community as exhibited by cooperation among teachers, parents, other schools, and the community. The availability of resources and of classroom teaching materials is also considered to contribute to quality.

Teachers consider that quality teaching requires resources and adequate preparation, including lesson planning and the use of teaching aids and materials in the classroom. Teachers frequently discussed the importance of learner-centered education (LCE) and of active participation and good classroom performance. They believe that pupils must learn to read and write, receive good marks and pass examinations and that continuous assessment is necessary to gauge student learning and to adjust teaching strategies to reach all students.

Principals' Perceptions of Quality

Principals and teachers generally agree in their perception of quality education with the exception that principals include qualified, competent teachers in their list. Qualified teachers are those who prepare lessons thoroughly, use learner-centered pedagogy, appropriate materials, and know the subject matter and the students. Prepared teachers use lesson plans and teaching aids, varied teaching methods and strategies, all of which creates an environment where learners feel comfortable asking questions and are motivated to participate. A good teacher, for the principals, is patient and loves the learners. Almost half the principals consider that quality teaching is learner-centered and participatory (role playing, learning by doing, group work, etc.). Principals view the quality of learning primarily in terms of academic achievement and performance – learning to read and write and passing subjects with good grades – that are related to life skills and acquiring jobs. They also emphasize the need for classroom resources. Principals also focus on social behavior and consider that quality learners are punctual,

responsible, listen well, and set examples to others. Principals also emphasize learners' participation, advocating that learners ask questions, share information with other learners, and be actively involved in all classroom activities.

Principals believe that learners must meet the needs of the larger community and that all stakeholders must be involved in the education system. A good relationship between parents and the school is essential.

Parents' Perceptions of Quality

Parents generally relate quality education to good student performance, emphasizing reading and writing and passing with good grades. They, more than teachers and principals, stress that learning should lead to employment and serve career goals. Parents also stress the importance of good behavior, discipline, good manners, respectful behavior, and, much like teachers and principals, stress resources -sufficient classrooms, teaching materials, textbooks, and qualified teachers- as fundamental. They also consider that cooperation among parents, teachers, and learners is critical for quality.

Parents tend to associate quality teaching with the degree to which teachers encourage parents to be involved by coming to the classroom to teach, telling stories, or talking to teachers. Parents see learner performance/progress as essential to quality teaching and emphasize reading and writing skills, having children able to speak English, and receiving good grades. They highlighted the importance of being informed about children's performance and progress. Good teaching, for parents, also includes regular homework and varying teaching strategies, like group work and taking learners outside of the class.

When parents see their children learning or mentioning new topics or asking questions, when teachers hold meetings with parents, and when parents look at children's exercise books and homework, they consider that good learning is taking place. Parents mentioned HIV/AIDS, sports, mathematics, science, and arts as important and most parents equate learning with the ability to speak English; if their children can read and speak English, they are learning.

Students' Perceptions of Quality

Depending on their ages, students perceive quality differently. Grade 4 students were asked different questions such as which teachers they liked best and why, when they felt they were learning the most and why, etc.

For learners, teachers are the most important feature of quality education: teachers should be kind and friendly, loving, tell jokes, and demonstrate that they care for children; they frequently said that they value teachers who do not beat them. Students also focus on outcomes, stressing the importance of teachers who explain well and are willing to explain difficult topics in the local language. They also consider reading, writing, math, art, and English as important topics and consider passing grades and jobs to be important.

Students' perceptions of quality teaching are virtually the same as their general perceptions of quality. They focus on teachers' kindness, patience, and not being beaten and learning to read and write. Teaching strategies are also important, and students preferred teachers who involve students, give them a chance to ask questions and participate in group activities. Several student groups mentioned the importance of learning to correct their own errors.

Students believe that they are learning when they get good grades. Somewhat in contradiction to the importance of learning to correct their own mistakes, some students said that they learn when the teacher puts corrections on the board and they copy them.

The following table summarizes some of the points emphasized by the teachers, principals, parents and students.

Table 1. Perceptions of Quality

Quality of	Teachers	Principals	Parents	Students
Education	<i>Outputs</i> Academic achievement that leads to jobs; responsibility to community; good behavior <i>Inputs</i> sufficient resources	<i>Outputs</i> academic achievement that leads to jobs; responsibility to community; good behavior <i>Inputs</i> sufficient resources; qualified, competent teachers	<i>Outputs</i> academic achievement for jobs, responsibility to community; good behavior <i>Inputs</i> sufficient resources; quality of teachers	<i>Outputs</i> achievement for jobs <i>Process</i> kindness of teachers; positive learning environment
Teaching	<i>Inputs</i> sufficient resources; lesson planning <i>Process</i> - LCE, assessment	<i>Inputs</i> sufficient resources; lesson planning <i>Process</i> - LCE, assessment; good environment	<i>Outputs</i> Good performance; student progress; good English acquisition <i>Process</i> – Parents' involvement in student learning	<i>Process</i> feeling comfortable in class; varied teaching strategies; classroom discussions
Learning	<i>Outputs</i> performance and results <i>Process</i> participatory learning	<i>Outputs</i> performance and results	<i>Outputs</i> Performance and results <i>Process</i> Participatory learning	<i>Outputs</i> Performance and results

Comparing the Responses at SIP and non-SIP Schools

The study was designed to determine how participation in the SIP program changed perceptions of education, teaching and learning quality among teachers, principals, parents and students in 20 different schools. Ten of these schools had participated in the SIP program and 10 had not. The following highlights the differences in perceptions of quality between these two groups of schools.

1. *Teachers* in SIP and non-SIP schools have, at first glance, remarkably similar views of quality although differences emerge in the way teachers describe "quality of teaching." Non-SIP teachers describe quality teaching in a more mechanical way, emphasizing lesson planning, general preparation, preparation of teaching aids, presentation of material, and availability of resources, with a heavy emphasis on inputs. SIP teachers refer to the same elements but refer more frequently to process

and result, the relevance of teaching to what learners know, the use of relevant practical examples, teaching to different student abilities, and active, hands-on learning.

2. *Principals* from SIP and non-SIP schools talk about quality of education, teaching, and learning in very similar ways. Both groups of principals cite a fairly narrow range of attributes of quality like those identified by teachers: teacher qualifications and lesson preparation, availability of resources, and, in some cases, community participation. SIP principals mention learner-centered education slightly more frequently than non-SIP principals. The principal's role in shaping school quality varies, as SIP principals are more participatory in tone and example when they talk about their role and non-SIP principals are more directive.
3. *Parents* of children in SIP and non-SIP schools discussed quality of education in generally similar terms, with an emphasis on the academic achievement of students and the availability of resources. Several areas of difference appeared however. First, SIP parents emphasized parental involvement more than the non-SIP parents, and thought that their children were receiving a good quality of education. By contrast, only two-thirds of the non-SIP parents thought that their children were receiving a good education. All SIP parents thought that teachers were doing a good job by contrast to half the non-SIP parents.
4. *Students* in SIP and non-SIP schools gave remarkably similar responses focusing on teacher kindness, ability to explain well, speak English well, and use the local language. Both groups of students prefer teachers who do not beat them. SIP students considered learning to be fun and exciting slightly more often than non-SIP students.

Discussion of Perceptions of Quality

This section discusses the research findings and the fact that respondents gave little thought to or consideration of process in responding to questions about education quality.

Similarities and Differences in Perceptions of Quality

All of the groups had similar perceptions of quality concentrating on education outcomes at various levels. Parents and students focus primarily on learning specific skills and competencies to prepare for jobs; teachers and principals include individual gains and development for the larger community and country; teachers, principals, and parents emphasize the need for sufficient resources and cooperation among stakeholders and agree that quality education should promote good behavior. Principals focus on teachers, stressing the need for qualified and competent teachers whereas students are more concerned with teacher kindness, patience, and the care that make a positive learning environment.

The perceptions about the quality of teaching were similarly very comparable across the groups. Teachers and principals stress the importance of resources, lesson planning, assessment, and learner-centered teaching. Principals highlight the need for teachers to create a classroom that is conducive to student learning. Students prefer teachers who make them feel comfortable and promote the tenets of LCE, expressing a preference for varied teaching strategies, student questions and discussion. Students and parents define quality teaching in terms of performance or progress and learning specific topics like English. Parents also consider that quality teaching is reflected by how much teachers want them involved in school visiting classes or in attending parent-teacher meetings.

Teachers, principals, parents, and students all define quality learning in terms of performance and results. Parents and students focus on learning specific subjects and grades while teachers and parents consider that learning prepares students for future achievement and concentrate on active students who also learn social skills in school.

Limited Reflection on Quality

All stakeholders have ideas about what constitutes the quality of education but many responses suggested that little thought had been given to the quality of education despite the use of the language of policy initiatives. This is noteworthy given the explicit role of theory in Namibia's education policies and the emphasis on reflective practice. Teachers and principals, when asked to elaborate, could add very little depth or explanation to terms such as "learner-centered education" or "learning to understand." Stakeholders also find it difficult to differentiate between general perspectives, quality of teaching and of learning. This suggests that discussions about quality in pre-service and in-service programs, schools and communities do not go very far, if they take place at all.

The Role of Process in Perceptions of Quality

Responses focus heavily on inputs and outputs -- resources, qualified teachers and learners, good academic results, socially responsible behavior of students -- and only superficially on classroom process factors. They seem to miss the point that resources, qualified teachers, and receptive learners do not automatically result in quality of education and favorable systemic outcomes without meaningful processes in schools and classrooms. The fact that LCE is mainly about process was mentioned frequently by teachers and principals but it sounded almost like an input; the responses suggested little depth of understanding. Are teachers and principals engaging in reflective dialogue or critical analysis of practice – the bedrock of educational theory, policy, and practice in Namibia?

SIP and non-SIP Similarities and Differences

The slight differences in tone and substance in the responses from SIP and non-SIP teachers suggest that SIP stakeholders are more collaborative and reflective and participate more in creating school quality. This may reflect the fact that the SIP schools and communities engaged in a self-assessment process that is, in itself a participatory reflection process.

CHAPTER 5: RELATIONSHIPS BETWEEN CONCEPTS OF QUALITY AND PRACTICE: RESEARCH FINDINGS

How do teachers' ideas of quality relate to and help shape their teaching? Thirty-nine of the 40 teachers were observed during one science, mathematics, or English class.³ The results of the observations are presented below and organized around 10 themes that play an important role in Namibia's LCE policies. Teachers were more successful in four areas: 1) the use of the physical classroom; 2) affective atmosphere; 3) use of resources; 4) involving learners -- but showed serious shortcomings in six other areas that comprise the building blocks of LCE: 1) Cooperative learning (pair and group work); 2) use of higher-order thinking skills; 3) elicitation and effective questioning; 4) reinforcement and feedback; 5) contextualizing knowledge, and 6) written work. Teacher performance was rated as positive, mixed, or negative.⁴

Classroom Observation Findings

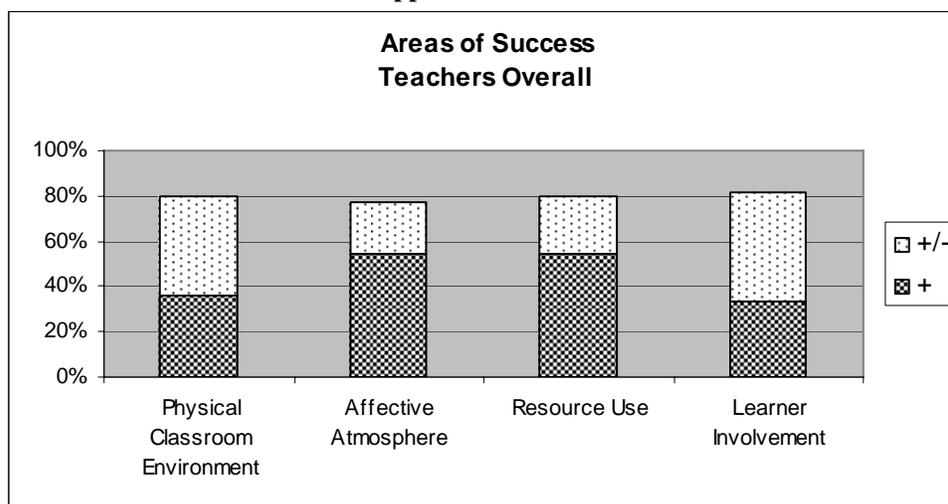
Four Areas of Success

Teachers received the highest overall ratings in the following:

1. *Physical Classroom Environment* means a good use of space, attractive classrooms, good arrangement of desks, display of students' work and other relevant visual material in the room. Here, 36% of the teachers used the physical classroom well, an additional 44% created an acceptable or mixed physical environment. A combined total of 80% of teachers rated positive or mixed.
2. *Affective Atmosphere* reflects positive interaction between teachers and students, a supportive, trusting, and non-threatening classroom environment, 54% of the teachers rated positive and 23% had mixed ratings. A total of 77% of teachers rated positive or mixed.
3. *Resources* include textbooks, chalkboard, and other teaching and learning resources that are used effectively: 54% of the teachers used materials and resources well to support their lessons and 26% used resources in an acceptable or mixed way. A total of 80% of teachers were rated positive or mixed.
4. *Learner Involvement*: Teachers' ability to involve learners or keep them engaged in tasks: 33% of the core teachers received a positive rating and 49% were rated as either acceptable or mixed. A combined rating of 82% positive or mixed.

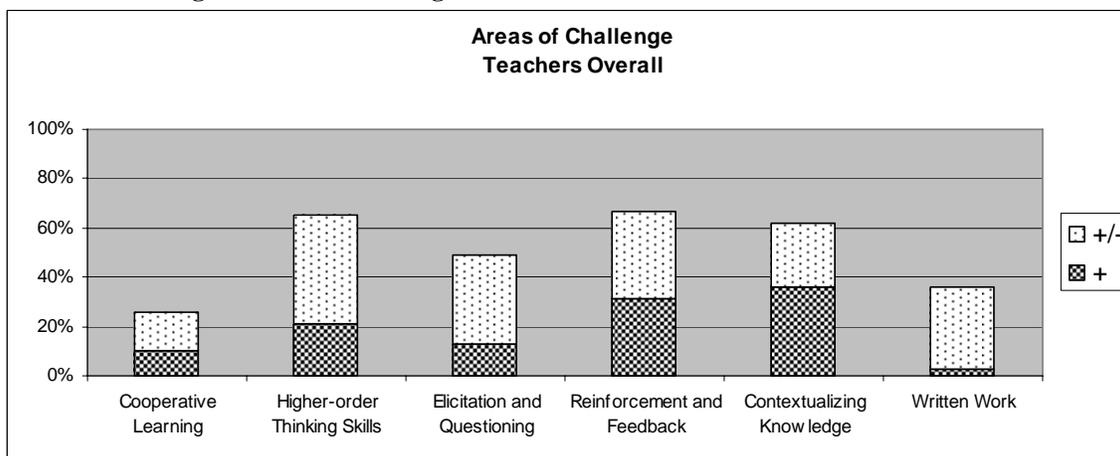
³ Of the 40 teachers interviewed one SIP teacher could not be observed because of a scheduling problem.

⁴ Appendices 2-5 provide detailed ratings for each class. Appendices 2 and 3 describe teacher performance in SIP and non-SIP schools in detail. Appendices 4 and 5 organize the same information according to whether teachers had been trained in the BETD in-service or pre-service program. Rating criteria and detailed findings are in Appendix 6.

Table 2. Successful Uses of LCE Approaches

Six Areas of Challenge

Teachers appear to be able to adopt some of the forms without understanding the underpinnings of LCE. The areas in which their LCE teaching was weak are summarized in the following table and discussed below.

Table 3. Challenges for Teachers using LCE

1. *Cooperative Learning (Pair and Group Work)*: Cooperative learning means pair or group work where learners are engaged in learning in a group to make meaning or solve problems together: in this category, teachers' ratings drop sharply. Only 10% of the core teachers received a positive rating; 16% were placed in the acceptable or mixed category for a total of 26% of the teachers engaged in cooperative learning in a positive or acceptable/mixed manner.

2. *Higher-order Thinking Skills* covers activities that require students to apply, analyze, synthesize or evaluate information. Only 21% of the teachers were thought to use higher-order thinking skills positively while 44%, were rated as showing signs of attempting related practices, for a combined 65% of positive or mixed ratings.
3. *Elicitation and Questioning* reflects a teacher's skill in asking questions and reinforcing the answer by rephrasing, using various techniques to assure that students understand and verifying that they understand, only 13% of the teachers were rated as having an effective practice; 36% were thought to be trying with mixed success, for a total of 49% of the teachers using this practice in a positive or mixed/satisfactory manner.
4. *Reinforcement and Feedback*: Teachers' use of multiple and meaningful examples, reinforcing student learning, giving concrete and timely feedback that helps students learn was judged positively for 31% of the teachers and mixed for 36% of teachers, for a total of 67% of teachers rated in these two categories.
5. *Contextualizing Knowledge* reflects a teacher's ability to make lessons relevant by accessing prior knowledge or relating material to the students' world. Of the 20 teachers, 36% were rated positively while 26% used this strategy in an acceptable or mixed manner. A combined 62% of teachers were in the top or mixed category.
6. *Written Work* covers a student's own writing as opposed to fill-in-the-blank writing or single word or copied written answers. Only 3% of the teachers received a positive rating and 33% were rated as mixed for a total of 36% in the two categories.

Findings on the Practice of SIP and non-SIP Teachers

In the successful areas, SIP and non-SIP teachers received overall nearly the same ratings although SIP teachers were 10% more successful (positive plus mixed categories combined) in physical classroom environment and 4% more in learner involvement. The non-SIP teachers were rated overall 6% higher in affective atmosphere and 11% higher in resource use. The challenging areas had similar ratings and differences among categories. Non-SIP teachers received slightly higher ratings (positive plus mixed combined) on four items, while SIP teachers received higher combined ratings in two areas. However, SIP teachers had a substantially higher number of ratings in the positive category, 21% higher on reinforcement and feedback and 26% higher on contextualizing knowledge. These are small differences and the observation results reveal more about overall challenges in implementing policy than about the differences between SIP and non-SIP teachers.

Findings on the Practice of BETD Pre-service and BETD In-service Teachers

All teachers in the study had a BETD (15 of the 39 teachers had earned the BETD through the pre-service program and 24 of the 39 through the in-service program). Pre-service teachers rated significantly higher overall in the observations, with five out of the

15 teachers receiving positive ratings in over half of the items compared with only 3 of the 24 in-service teachers who received positive ratings in over half of the items. The results clearly suggest the relative strength of BETD pre-service teachers (see Appendices 4 and 5). The difference could be attributed to the quality of the two programs or to the age of the teachers: those with the BETD pre-service diploma are usually younger, have better English language skills, and have received their education and their teacher education entirely in the learner-centered policy context. The older BETD in-service teachers speak English less well because they were educated in a system that emphasized Afrikaans and was less child-centered. It is important to note that more SIP teachers received their BETD in the in-service program, which might have skewed the results in the sample in favor of the non-SIP teachers.

Discussion of the Link between Perceptions of Quality and Classroom Practice

How do teachers' ideas of quality relate to and help shape their teaching practice? The discussion of the successes and challenges is followed by comments on the relatively weak link between the notion of quality and teaching practice. The use of cooperative learning in groups or pairs is also discussed because it is so often used in teaching strategies.

Discussion of Areas of Success

The ratings overall are remarkably positive in the four areas of physical classroom environment (80% either positive or mixed); affective classroom atmosphere (77% either positive or mixed); resource use (80% either positive or mixed); and learner involvement (82% either positive or mixed). However, only two items received an overall positive rating of more than 50%: affective atmosphere (54% positive) and resource use (54% positive). Learner involvement also achieved a very high overall rating (82%), but only a 33% positive rating.

The fact that so many of the positive results in these four areas (and in the additional six observation items) were bolstered by acceptable/mixed results suggests that many teachers are attempting but not yet skilled at teaching differently. The four areas of generally greater success are arguably easier to achieve formally and require less profound understanding of learner-centered education.

Discussion of Areas of Challenge

All 39 core teachers were less successful in conceptual learning. The observation categories were cooperative learning (pair and group work), the use of higher-order thinking skills, elicitation and questioning, reinforcement and feedback, contextualizing knowledge, and written work. The teacher observers were looking specifically for teaching strategies, learning content, and learning activities that encouraged conceptual and meaningful learning, the development of higher-order thinking skills, and successful independent production of knowledge and communication. Success in these areas is

central to the constructivist, learner-centered approaches and requires a good grasp of the substance, not just the form, of active learning.

First, the 39 core teachers received the highest ratings in observed was given in contextualizing knowledge. Only 36% were rated positive in this category. Fewer teachers had positive ratings in the other areas: reinforcement and feedback (31%), use of higher order thinking skills (21%), elicitation and questioning (13%), cooperative learning - pair and group work (10%), and written work (3%).

Things look better when the positive rating is combined with the acceptable/mixed rating, suggesting teachers are starting to make progress albeit with mixed success. In three categories, the combined rating was well over 60%: reinforcement and feedback (67%), use of higher-order thinking skills (65%), and contextualizing knowledge (62%). Elicitation and questioning were somewhat successful among 49% of the teachers and written work jumps from just 3% to 36% when combined with the mixed-success ratings. The lowest and penultimate combined ratings is in pair and group work – a 10% positive rating and 26% combined positive and mixed success rating. This is particularly significant because pair and group work is the most frequently used teaching strategy in Namibia and elsewhere where teachers are implementing constructivist-based policies focusing on active learning and student-centered approaches.

Concepts-in-Use: The Link between Concepts of Quality and Practice

Teacher interviews concerning learner-centered education suggested that they gave relatively little thought or had relatively little understanding of learner-centered or constructivist pedagogy beyond some terms and techniques. Classroom observations confirmed that teachers generally lack understanding about LCE: The pedagogy was relatively limited in terms of teaching and learning strategies and rarely encouraged the development of conceptual learning or higher-order thinking skills which are at the base of constructivist and learner-centered education. Understanding is missing along with the knowledge of appropriate strategies. This may reflect a lack of confidence to practice new ideas, lack of support within the schools for the practice of new ideas, or lack of sufficient resources to back up changing practice.

Cooperative Learning in Pairs and Groups

Cooperative learning, usually done as pair or group work, is the most common - and often the only - classroom or teaching strategy associated with learner-centered education and active learning. Unfortunately, group work often amounts to re-arranging classroom furniture without LCE, imitating the form but not the spirit of LCE.

Many teachers, parents, principals, and learners in this study suggest that learning in groups and pairs contributes to quality of education, teaching, and learning. There was much classroom group and pair work but few examples of real cooperative learning in the conceptual sense. The work assigned in groups and the dynamics required to accomplish the work are a problem. There was often no reason to do a group task at all, no reason for

discussion or any process or response of a conceptual nature. The group work was often very quiet, a leader typically had a pen or pencil and seemed to decide, based on notes given by the teacher, on the correct answer. This opportunity for learners to think or speak was missed.

CHAPTER 6: RESEARCH FINDINGS: TEACHERS' LEARNING AND ITS INFLUENCE ON PRACTICE

This chapter reflects the research on what teachers perceive to be the most influential factors for learning and improving practice in pre-service teacher education and in-service professional development and on the specific role of localized, continuous in-service teacher professional development programs on supporting teacher quality.

Teachers reflected on how learning opportunities influence their practice; principals and parents described the influence of different programs good school teaching and quality. The results are important in relation to the interviews concerning perceptions of quality of education and teacher observations reported in the previous two chapters. Those results suggested that teachers had only a limited awareness and understanding of LCE and used the forms but lacked the substance.

Influence of the BETD Teacher Education Diploma Program

Teachers and other stakeholders described the influence of the BETD teacher diploma program and their perceptions of how the program influences quality of education. Only about 50% of all Namibian primary teachers have completed the BETD, whereas all teachers in the study had a BETD. Their experience of the diploma program varied, as 25 of the 40 teachers had completed the in-service program (more SIP than non-SIP teachers were in this category) whereas 15 teachers had completed the pre-service BETD program. Classroom observations showed relatively minor differences between SIP and non-SIP teachers but a distinct difference between BETD pre-service and in-service teachers (see Appendices 4 and 5). The BETD in-service teachers receiving significantly lower ratings than the pre-service teachers.

The following findings emerged from interviews with teachers about the influence of the BETD:

- Teachers highly value the BETD as a professional qualification and say they have learned from it. Teachers most frequently named LCE as the most important way in which the BETD had shaped their practice.
- The important LCE aspects that they claim to practice include teachers assisting learners; teachers acting as facilitators and co-learners rather than as the source of all knowledge; learners involved in their own learning; learner interaction; integrated learning; continuous assessment; and respectful and democratic classroom environments.

- Teachers frequently mentioned the importance of involvement and communication with parents as an important aspect of the BETD. Several references were made to the value of the education theory and practice course in which, according to teachers, they learned to relate theory and practice and valuable things about human development which enabled them to understand the needs of their learners at different stages of their lives.

The results discussed in Chapter 6 suggest that these teachers were more successful in describing than in implementing good practice. Several things were conspicuous by their absence in the responses, especially given their importance in theory in the BETD: 1) reflection was not a strong theme; 2) there is very little reference to school-based studies; 3) there is very little reference to conceptual learning, meaningful learning, learning for understanding, within the context of describing LCE, beyond naming five or six well-know strategies associated with this essential aspect of LCE; 4) there is no explanation of how theory informs practice despite references to the value of the Education Theory and Practice course, and 5) there is only brief mention of little subject content in the BETD.

Influence of In-service Teacher Professional Development Programs

Teachers and other stakeholders were asked to describe the influence of their professional development opportunities. In the study, only half of the schools participate in the School Improvement Program (SIP). Professional development in SIP schools is more school-based and embedded in the school-wide process of planning, reflection, and assessment in which teachers, principals, and community members participate. Since the school planning and self-assessment process is now government policy, the non-SIP schools have some experience but less support for the process.

Teachers' Perspectives on Professional Development

The results for teachers are summarized below for 1) available in-service professional development opportunities; 2) influence of in-service professional development on practice; and 3) support needed to become better teachers.

1. *Available in-service professional development opportunities:* All 20 SIP teachers said that they had participated in professional development activities organized by SIP and enumerated a comprehensive list of workshop topics.⁵ Teachers also mentioned attending SIP teacher-principal conferences and participating in circuit support team activities. The 20 non-SIP teachers attend few in-service cluster or circuit workshops whose subjects seem to be somewhat random⁶.

⁵ LCE; continuous assessment; mathematics and English; teaching students with learning disabilities; the use of games and other activities in teaching; making and using teaching aids; lesson planning; teaching themes across the curriculum; and self-evaluation to improve practice.

⁶ On mathematics, assessment, and preparing teaching aids, and one on challenges that face lower primary teachers.

2. *Influence of in-service professional development on practice:* The SIP teachers described many ways in which their participation in SIP activities has influenced their practice. About half of the answers referred directly to how well they understood and used LCE. Some SIP teachers referred to self-evaluation (or “reflection”) as a way to improve practice. The other half described better understanding and use of specific teaching strategies.⁷ SIP teachers also referred to the effects of the wider activities under SIP on their teaching -- parents’ involvement; working in a school team; working together on the projects funded by small grants under SIP; and the benefits of “initiatives from within.”

All non-SIP teachers describe the influence of the workshops on teaching, often in general terms: “improves my knowledge because I gain skills and use them in the classroom;” “learner-centered approach, being a facilitator not a teacher;” or “it motivates me and the learners to get new ideas.” Most focus on specific new teaching strategies that they apply in their classes.⁸ Some of the non-SIP teachers said that they learned everything about teaching from BETD, suggesting that little subsequent learning.

3. *Support needed to improve the quality of teaching:* SIP teachers overwhelmingly identified additional professional development opportunities and said that more SIP activities would be the most helpful form of support for becoming a better teacher. The workshops they named were in English, mathematics, and environmental studies. SIP teachers also mentioned the value of visits of Advisory Teachers, Resource Teachers, other outside support, more peer collaboration and additional community involvement in the school. They also mentioned but did not stress additional resources (books and photocopiers, especially) as the kind of support they needed.

Non-SIP teachers also identified professional development as the most needed form of support, emphasizing the need for regular and school-based workshops. Several non-SIP teachers asked for more support from Advisory Teachers. One said that English should be emphasized more in rural schools, just as it is in town schools. Several mentioned the need for better relationships with the community and the need for additional resources (by order of frequency: books, teacher accommodation and additional salary).

Principals’ Perspectives on Professional Development

The results for principals are reported in three areas: 1. programs with the greatest impact on improving quality; 2. professional development impact on teaching and learning; and 3. sustainability of professional development programs.

⁷ The use of teaching aids and games; use of visual aids in explaining material; integration across subjects such as mathematics and environmental studies; lesson preparation; and identifying and supporting students at risk or those living in difficult circumstances.

⁸ Using activities and visuals in teaching multiplication; using group work; displaying the classroom with learners’ work and teaching aids; and having learners write their own stories.

1. *Programs with the greatest impact on improving the quality of education the region:* All 10 SIP principals identified SIP or BESII/BES3 as having had the greatest impact on improving quality in the region. One principal cited the clustering system for teachers and principals, the resources available through small grants, and the good relationships established between parents and teachers. Molteno was the other most frequently mentioned program.⁹ Five of the 10 non-SIP principals also named SIP or BESII/BES3 as having had the greatest impact; three principals named Molteno; others could not think of a program that had an impact. One principal indicated that projects were ineffective because they were not given enough time to take root, the school was not well enough equipped, and no time was given for reflection. Another principal said that SIP should be expanded region-wide because it involves community knowledge, teacher and school and improving teaching and learning practices but cautioned that SIP had too few facilitators to reach all schools.
2. *Professional development impact on teaching and learning:* SIP principals were overwhelmingly positive about SIP, giving similar responses that were focused on new forms of collective decision-making, school planning and assessment, community involvement in the school, parental involvement in the classroom, and improved teaching using LCE; using more teaching aids; more “joyful” learning with songs and plays; more sharing of ideas among learners; better involvement of parents in their children’s learning; and more cooperation among teachers. The non-SIP principals’ responses were predictably more scattered as they had participated in fewer programs. Some described trying to involve parents in schools, others mentioned Molteno.
3. *Sustainability of professional development programs:* All SIP principals said that the program was sustainable because they were “equipped with knowledge and skills which will enable us to continue and sustain the changes, even when the program has come to an end” (Principal of school 5). The non-SIP principals were generally less optimistic about the sustainability of the programs available to them; a few raised the issue of funds which the SIP principals did not mention. One said that “the school is able to sustain the use of group work, but other things like the proposed project at the school will not be sustained because there is no money” (Principal of school 11).

Parents’ Perspectives

Parents’ responses reported here address parents 1. knowledge of professional development programs, and 2. involvement in decision-making and learning.

1. *Knowledge of professional development programs:* Nine of the ten groups of SIP parents mentioned SIP or BESII/BES3 by name; the other group described SIP without naming it. SIP parents were very knowledgeable about the effect of these

⁹ An English language program that preceded BES in some areas of the north.

programs on school management, on teaching, and on their children’s learning. They described a positive effect on school management and their participation in the School Development Plan and described the value of defining vision and mission statements for the school. They said that SIP had empowered parents to fully participate in their children’s education. The non-SIP parents had little to say about professional development programs at their schools. Two groups mentioned SIP because they had heard of it in other schools.

2. *Involvement in decision-making and learning:* All ten groups of SIP parents said that they were involved in school decision-making, giving many examples of what they do and why it is important. One group of non-SIP parents thought they were uninvolved in making decisions at the school, three groups described involvement as “being called to meetings,” and the other six groups described what sounded like some degree of real involvement. The table summarizes the responses of SIP and non-SIP teachers, principals and parents:

Table 4. Parents’ Perspectives on Professional Development

		Teachers	
SIP		<ul style="list-style-type: none"> ▪ Frequent participation in workshops covering a variety of topics ▪ Teacher-principal conferences ▪ Improved LCE, self-evaluation and specific teaching strategies ▪ Involvement of parents ▪ Need for additional professional development opportunities 	
Non-SIP		<ul style="list-style-type: none"> ▪ Infrequent participation in cluster workshops that cover few topics ▪ Improved specific teaching strategies but limited learning beyond BETD ▪ Need for additional regular school-based professional development opportunities 	





		Parents		Principals	
SIP		<ul style="list-style-type: none"> ▪ SIP greatest impact on improving quality ▪ Advanced new forms of collective decision-making, community involvement, and improved teacher implementation of LCE. 		SIP	<ul style="list-style-type: none"> ▪ Improved school management, student learning, and teachers skills. ▪ Parental involvement in school decision-making
Non-SIP		<ul style="list-style-type: none"> ▪ Acknowledge benefits of SIP but questioned program sustainability. 		Non-SIP	<ul style="list-style-type: none"> ▪ Little to no involvement in school decision-making

The Influence of Teacher Learning on Teaching

Perceptions of the influence of the BETD, the pre-service teacher education program, and various in-service programs are discussed below in answer to two questions: What are the factors of pre-service teacher education and in-service professional development having the greatest impact on teacher learning and improved practice? What is the specific role of localized, continuous in-service teacher professional development programs on supporting teacher quality?

Influence of Pre-service Teacher Education

All 40 teachers interviewed and 39 teachers observed in this study had completed the BETD, most in the in-service program. All 40 teachers strongly supported its value whether as a pre-service or in-service program, claiming that it had strongly influenced their LCE practice. Classroom observations belied the claim however in that LCE practices were narrowly defined and most teachers received low ratings in the most central areas of LCE that focus on the conceptual substance of teaching and learning.

Influence of In-service Teacher Professional Development

Stakeholders at all of the SIP schools reported a strong impact of the in-service program, often mentioning the whole-school nature of SIP activities that includes teachers, principals and parents in planning and reflection. Most non-SIP teachers reported the positive influence of workshops on their teaching, and requested professional training, particularly in their schools. Teachers, principals and parents all clearly indicate a high demand for programs like the SIP although none of the professional development programs have left teachers with a deep understanding of Namibia's policies or the practice of LCE.

Very high demand and enthusiasm for a program like the SIP leaves the question of why an extensive pre-service program together with a very popular in-service program have not produced better results, at least in this small sample. The study may not be representative or conclusive, but it does suggest problems and possible solutions in the present system. A wider study of the issues is urgently needed in Namibia and elsewhere.

CHAPTER 7: CONCLUSIONS AND IMPLICATIONS

The perceptions of education, teaching and learning quality were generally narrow (Chapter 4). Teachers, principals, parents, and students all perceived quality of education in overlapping ways and had different emphases on inputs such as sufficient resources and well-trained teachers, and outputs such as academic success and appropriate community-oriented attitudes. They emphasized process less but frequently linked LCE and parental involvement to quality. These results suggest little depth of understanding about LCE.

Classroom observations (Chapter 5) also suggested a narrow grasp of LCE. While teachers used some LCE strategies, they gave little indication that they truly understood the process. The patterns are similar to those reported in Chapter 4.

The perceptions of the effects of professional development on teaching and school quality (Chapter 6) indicate a strong demand for the BETD and for professional development programs in schools that involve the entire school community in planning, reflection, and assessment to improve quality. It is not clear however that professional development,

pre-service and in-service have led to LCE. SIP stakeholders seem to better understand LCE but SIP and non-SIP teachers taught in very similar ways.¹⁰

Implications of the Findings

The results presented above in relation to the general literature and to the policies and programs of Namibia suggest several ideas about the consistency of policy and practice; teacher development; and local-level process and empowerment that may be of interest to policy makers and program designers in countries with similar policies and conditions.

Quality and Consistency of Policy and Practice

The evolution of LCE in Namibia is not unusual and it offers opportunities to make policy, curriculum, syllabi, teacher training and examinations consistent with respect to LCE, which is needed. Today in Namibia, policy, practice, concepts and the use of concepts are weakly linked in general. Policies designed to promote quality based on constructivism, critical pedagogy, democratic approaches to teaching and learning, LCE and conceptual learning are narrowly understood and difficult to implement. One document indicates that educators themselves disagree about the theory and practice of LCE and points out the inconsistencies among the primary curriculum, subject syllabi, textbooks, the BETD, and the examinations that all seem to interpret it differently. It is not surprising, therefore, that teachers are somewhat confused about what to do in their classrooms (NIED 2003, p. 21). They are involved in a complicated education reform while access is being expanded, which makes teaching even more difficult. To improve teaching practices and to make teaching more learner-centered, the basic definitions must be clear and used consistently in all of the documents, guidelines, manuals, etc. created and used in the education system.

Quality and Teacher Development

Teacher training (pre-service) may be one of the roots of the challenges, as LCE training may be more rhetorical than practical (NIED 2003). Classroom experience would let teachers apply what they are learning before they begin teaching full-time. A coherent in-service policy and professional development program are needed.

The literature emphasized the trends of effective teacher learning in many countries that engage teachers in their own learning; are grounded in thinking and experimentation; are collaborative; sustained, and connected to other aspects of school change. The SIP program shares many of these features and should be looked to as policy is being decided. The whole school-planning program and self-assessment have already become national policy.

¹⁰ This might be skewed by demographic factors and the fact that a higher percentage of the SIP teachers were BETD in-service graduates who received, overall, substantially lower ratings than the BETD pre-service teachers.

The results of this study suggest that teachers and others at SIP schools are somewhat better able to discuss quality and the goals of LCE than those in non-SIP schools and that they are enthusiastic about LCE. SIP school teachers were not significantly better, however which could reflect the demographics and suggest ways to refocus the teacher professional development aspect of the SIP. Alternatively, this might also simply reflect the length of time that it takes for people to understand, accept, internalize and translate the complex ideas underlying an education reform into teaching practice.

It is difficult to establish any relationship between teaching and student learning in Namibia, because until quite recently, government policy did not support student assessment although Namibia did participate in the SAQMEC studies. In 2005, a pilot national assessment was conducted and a national assessment system may be developed. Should this take place, it may be possible to establish the relationship between different forms of teacher learning and student achievement.

Quality, Process, and Local-level Empowerment

Namibia, like many countries, is decentralizing many services to the regions and to the schools as it is commonly believed that “change at this fundamental level rarely, if ever, occurs as a result of centrally driven, top down, decree-and regulation driven change models” (Farrell 2002, p. 252). Local engagement is necessary for the quality of education to improve; the question is how to encourage that engagement.

Stakeholder enthusiasm for the SIP suggests that it is a promising model for a process of including the local levels, particularly because it integrates teacher development and community participation in a way that acknowledges the complexity of the process. The question remains of why participants had such a narrow range of responses about quality and an apparently limited understanding of Namibia’s policies of LCE. Why did teachers use so few LCE teaching strategies and have such a superficial understanding of the ideas behind LCE? This study does not cover a representative sample of schools, which were mainly remote and particularly under-resourced, but these are the schools on which SIP initially concentrated.

Concluding Remarks

The challenges to implementing learner-centered policies suggests the difficulty of understanding and adapting highly complex, occasionally unclear policies designed to promote new visions of quality and new paradigms of education, teaching, and learning. Policy objectives and the means of implementing the policy need to be made clearer. This information needs to be better disseminated as well. Stronger pre-service and in-service teacher training are needed and the SIP whole-school process of planning, reflection, and assessment is probably the most promising vehicle for systemic change.

It will be useful to bear in mind the following suggestions: i) clarify policies and ensure that policy and practices are clear so that teachers understand them; ii) have clear guidelines for policy and practice leading to consistent, comprehensive strategies for

continuing teacher development so that everyone in the system understands the objectives and so that whole-school groups of stakeholders work on planning, reflection, and assessment of quality initiatives; and iii) focus on the school and local voices so that everyone understands and agrees so far as possible about the definition of quality and how to achieve it, and iv) developing policies and programs involves a complex process that leads to quality teaching and student learning.

Appendix 1: Study Methodology

The research was carried out in cooperation with the Namibian National Institute for Educational Development (NIED), an institution of the Ministry of Education responsible for curriculum development, teacher pre-service and in-service programs, and research. The NIED Research Head, working closely with EQUIP1/AED, participated in the research design and oversaw the data collection. NIED and EQUIP1/AED jointly carried out the analysis and report drafting.

Sampling

In order to gather information to respond to the guiding questions, a qualitative study of a core group of 40 experienced, mainly grade 4 teachers in 20 schools was carried out in Oshana Region and Oshikoto Region of northern Namibia. The majority of schools in these regions are rural and similar to schools throughout the northern areas of the country. The populations of Oshana and Oshikoto are relatively homogeneous. Two national languages are widely spoken and understood and, in many rural areas, there is little exposure to English except in school. Schools in northern Namibia were chosen because this area holds approximately 75% of the country's population that was severely marginalized and impoverished as a result of the colonial government's apartheid policies. The north was also chosen because this has been the location of a series of USAID-funded projects to strengthen the quality of basic education.

The 20 schools in the sample are all grade 1-7 primary schools of comparable size. Each of the 20 schools was given a number, starting with 01 through 20. The schools numbered 01 through 10 were schools that have participated in the School Improvement Program and schools numbered 11 through 20 have participated in the more episodic and centralized professional development programs available through the regions and other donor programs. Each of the 40 core teachers was given a four-digit number starting with the number of his or her school followed by either 01 (always male) or 02 (always female). For example, teacher number 0101 comes from school number 01 and he is teacher number 01 in that school (teacher number 01 is always the male). Teacher number 0102 also comes from school number 01 and is teacher number 02 in that school (therefore the female teacher). Likewise, teacher number 1502 comes from school number 15 and is the second of the two core teachers interviewed in the school, therefore the female.

The sample is made up of two sub-groups of 10 schools each. Ten of the schools have participated for three to four years in ongoing school-based teacher professional development programs through the School Improvement Program (SIP) which is part of the USAID-funded Basic Education Support II (BESII) and Basic Education Support 3 (BES3) programs. The other ten schools in the sample have not participated in SIP, but have participated in the more episodic and centralized in-service programs which are

carried out under the aegis of the regions and by various donor programs. The majority of schools in the sample are rural and only two schools in each of the two sub-sets could be regarded as urban or semi-urban. In the selection process, no effort was made to select “especially good” or “especially bad” SIP or non-SIP schools.

Two experienced teachers, a male and a female, were interviewed in each of the 20 schools. Thirty-nine of the 40 teachers were observed while teaching a class in English, mathematics or science (one of the teachers could not be observed because of unavoidable scheduling difficulties).

All 40 teachers in the sample had completed the Basic Education Teaching Diploma (BETD) program either through the three-year residential pre-service program, one of the four colleges of education, or through a distance in-service program which upgrades “unqualified” teachers to diploma status. In two cases where there was no BETD teacher in Grade 4 and the school qualified for the other criteria, a grade 3 and a grade 2 teacher were selected for interviews and observations.

Through the use of open-ended interview questions, the 40 core teachers were asked to reflect in depth on their interpretations of education quality and talk about their perspectives on learning opportunities that had made the greatest impact on improving their practice. The core teachers were observed while teaching one lesson in English, mathematics or science in order to establish a sense of how teachers’ perceptions of quality correspond to their practice. The role of the BETD teacher education diploma program was investigated in the study, although the main focus is on the influence of participation in in-service professional development programs.

In addition to the interviews with 40 core teachers and observations of 39 of the teachers, the principal from each school was interviewed in depth. Parents, both male and female, who were active in the school committee and selected by the principal, were interviewed in focus groups of about six in each of the 20 schools. Students or learners (Students in Namibia are referred to as “learners.” Because this study is designed for a wider audience than Namibia alone, the study usually uses the term “student.”) from each of the core teacher’s classes were also interviewed in focus groups made up of approximately even numbers of male and female students.

The sample of schools and teachers was selected purposively with school and teacher characteristics held as constant as possible, making participation in the SIP program the major difference between the two sub-groups of schools and teachers. It should be emphasized, however, that the study is not meant to be an evaluation of the SIP program; this is not the purpose of the study and, in any case, the number of schools in the study is much too small to serve this purpose. The purpose of the study is to detect overall trends; the purpose of dividing the sample into SIP and non-SIP was to see if differences emerged that warrant further attention from researchers and policy makers.

Since the sample of schools and teachers is small, the results are not representative or statistically significant, as is the case in most qualitative studies. However, as the results reported below indicate, there is a high degree of internal consistency within overall data as well as in the data that compare SIP and non-SIP schools. This indicates that the results can be considered valid. The study, therefore, has the power to indicate significant trends in Namibia and, by extension, in countries with similar conditions and policies.

Data Collection

Interviews and classroom observations were conducted between April and July 2005 (the school year in Namibia runs from January to December). Single interviews with teachers and principals and group interviews with parents and students were conducted by two regional Advisory Teachers, a school principal, a literacy officer, and a college lecturer. These education professionals are all enrolled in a distance MA degree program at Rhodes University and have carried out qualitative research in the past. They were trained to interview, through simulated and role-played situations, using the pilot study interview protocols and learning to use probing questions to get in-depth information. Interviews in the study were conducted in Namibian languages; the data collectors were trained in the process of taking field notes and transcribing the notes into English. Classroom observations were conducted by two senior education professionals, the NIED research head and an international consultant who has extensive experience in Namibian schools.

Data Analysis

This research falls within the interpretive paradigm in which the researchers, through intense study and cyclical re-study of the data, come to a deep understanding of the subject of enquiry leading to interpretation of meaning. Frequency and nuance of response are identified through this process. In order to increase the validity of the data and eventual findings, the constant comparative method was used in which the researchers' growing understanding of the subject is re-examined and re-stated in stages and through comparison with other data sources – resulting in a triangulation of the data. In this study, the main triangulating mechanism was the emerging evidence of internal consistency from interview data sources (teachers, principals, parents, and students) and from the observation data.

The data were recorded, organized, displayed, compared, and analyzed mechanically. A team at NIED and at AED participated in the data analysis. Two independent researchers from the Namibia Educational Research Association (NERA) conducted the initial analysis of the parent, learner, and principal data.

All data analyzers looked for themes that emerged from high frequency responses and indicated that these responses were repeatedly mentioned by the stakeholders, although even single responses from stakeholders were captured in the summaries of the

interviews. From these summaries, abstractions were made by the main researchers in order to come to a deeper understanding of the data, and these were refined to findings. As the findings were formulated, they were shared with the other data analyzers to make an attempt to increase the validity of the findings further. Regular bi-weekly meetings were held at NIED to discuss the process of analysis and the key themes emerging from the study; meetings were also held by the team at AED to conduct a parallel analysis, incorporating and augmenting the process taking place at NIED. The final report was drafted by the teams at NIED and AED working together.

Document Analysis and Literature Review

An analysis of relevant documents on the background of education, the evolution of education policies, and the programs available for teacher professional development in Namibia provides important context information for the pilot study, a short review of which is given in Chapter 2. A brief review of the international literature on quality of education and teacher learning in Chapter 4 situates the pilot study within a wider context of theory and practice.

Appendix 2: Classroom Observations - SIP Schools

Grid:

Positive evidence of behaviour +
 Negative evidence of behaviour -

Behaviour attempted with mixed success ±
 Behaviour not appropriate/relevant/absent ∞

	Physical Classroom Environment	Affective atmosphere	Resource use	Learner involvement	Cooperative learning	HOTS	Elicitation and Effective questioning	Reinforcement and Feedback	Contextualising knowledge	Written work	Homework	+	±	-	∞
101-Ins	-	+	+	+	∞	+	+	+	+	-	∞	7	0	2	2
102-Ins	±	-	-	-	∞	-	-	-	-	-	∞	0	1	8	2
201-Ins	±	-	-	±	∞	±	-	-	-	±	±	0	5	5	1
202-Ins	±	-	±	±	∞	-	-	±	-	-	-	0	4	6	1
301-Pre	±	+	-	-	∞	-	-	-	-	-	∞	1	1	7	2
302-Pre	±	±	+	±	-	-	-	+	±	±	∞	2	5	3	1
401-Pre	±	±	+	+	-	-	±	±	+	-	∞	3	4	3	1
402-Ins	±	±	+	±	±	+	∞	+	+	±	∞	4	5	0	2
501-Ins	+	+	+	+	±	±	+	+	∞	-	∞	6	2	1	2
502-Pre	+	+	+	+	±	±	±	±	+	±	∞	5	5	0	1
601-Ins	+	+	+	±	∞	±	±	-	±	-	∞	3	4	2	2
602-Ins	±	+	±	±	∞	-	-	+	±	-	∞	2	4	3	2
701-Ins	-	±	-	-	-	±	∞	-	-	-	∞	0	2	7	2
702-Pre	±	+	∞	+	∞	±	±	+	∞	±	∞	3	4	0	4
801-Pre	+	+	+	+	+	±	∞	+	+	±	∞	7	2	0	2
901-Pre	+	+	+	+	±	+	+	+	+	±	∞	8	2	0	1
902-Ins	+	+	+	±	-	-	±	-	+	±	∞	4	3	3	1
1001-Ins	±	-	±	±	∞	-	-	±	∞	±	±	0	6	3	2
1002-Ins	-	±	+	±	∞	+	±	-	+	-	∞	3	3	3	2
+	6	10	11	7	1	4	3	8	8	0	0				
±	10	5	3	9	4	7	6	4	3	9	2				
-	3	4	4	3	4	8	7	7	5	10	1				
∞	0	0	1	0	10	0	3	0	3	0	16				

Appendix 3: Classroom Observations - Non-SIP Schools

Grid:

Positive evidence of behaviour +
Negative evidence of behaviour -

Behaviour attempted with mixed success ±
Behaviour not appropriate/relevant/absent ∞

	Physical Classroom Environment	Affective atmosphere	Resource use	Learner involvement	Cooperative learning	HOTS	Elicitation and Questioning	Reinforcement and Feedback	Contextualising knowledge	Written work	Homework	+	±	-	∞
1101-Ins	±	±	±	±	∞	±	±	-	±	±	∞	0	8	1	2
1102-Ins	-	-	±	±	∞	±	±	-	±	-	∞	0	5	4	2
1201-Ins	+	+	+	+	+	+	+	+	+	-	±	9	1	1	0
1202-Ins	+	±	+	±	∞	±	±	±	±	-	∞	2	6	1	2
1301-Pre	+	+	+	+	∞	-	±	+	±	-	∞	5	2	2	2
1302-Pre	±	-	-	±	-	+	∞	±	-	±	∞	1	4	4	2
1401-Pre	+	+	+	+	+	+	+	+	+	±	∞	9	1	0	1
1402-Ins	-	±	+	±	∞	±	-	±	+	-	±	2	5	3	1
1501-Ins	±	+	+	+	∞	±	±	±	+	-	∞	4	4	1	2
1502-Pre	+	+	+	+	+	±	±	+	+	+	∞	8	2	0	1
1601-Ins	+	±	+	±	±	-	-	±	-	-	∞	2	4	4	1
1602-Ins	±	-	±	-	-	±	-	±	-	-	∞	0	4	6	1
1701-Ins	-	+	±	+	∞	-	-	±	+	-	∞	3	2	4	2
1702-Pre	±	-	+	±	∞	±	-	-	±	-	∞	1	4	4	2
1801-Pre	±	+	+	±	±	-	±	±	-	-	∞	2	5	3	1
1802-Pre	-	+	±	-	∞	-	-	-	-	-	∞	1	1	7	2
1901-Pre	+	+	±	±	∞	-	-	±	∞	-	∞	2	3	3	3
1902-Ins	+	+	±	±	-	+	±	±	±	-	∞	3	5	2	1
2001-Ins	±	-	-	-	∞	±	-	-	±	±	+	1	4	5	1
2002-Ins	∞	+	-	-	∞	±	-	-	∞	-	-	1	1	6	3
+	8	11	10	6	3	4	2	4	6	1	0				
±	7	4	7	10	2	10	8	10	7	4	4				
-	4	5	3	4	3	6	9	6	5	15	16				
∞	1	0	0	0	12	0	1	0	2	0	0				

Appendix 4: Classroom Observations – BETD Pre-service Teachers

Grid:

Positive evidence of behaviour +
 Negative evidence of behaviour -

Behaviour attempted with mixed success ±
 Behaviour not appropriate/relevant/absent ∞

	Physical Classroom Environment	Affective atmosphere	Resource use	Learner involvement	Cooperative learning	HOTS	Elicitation and Effective questioning	Reinforcement and Feedback	Contextualising knowledge	Written work	Homework	+	±	-	∞
301-Pre	±	+	-	-	∞	-	-	-	-	-	∞	1	1	7	2
302-Pre	±	±	+	±	-	-	-	+	±	±	∞	2	5	3	1
401-Pre	±	±	+	+	-	-	±	±	+	-	∞	3	4	3	1
502-Pre	+	+	+	+	±	±	±	±	+	±	∞	5	5	0	1
702-Pre	±	+	∞	+	∞	±	±	+	∞	±	∞	3	4	0	4
801-Pre	+	+	+	+	+	±	∞	+	+	±	∞	7	2	0	2
901-Pre	+	+	+	+	±	+	+	+	+	±	∞	8	2	0	1
1301-Pre	+	+	+	+	∞	-	±	+	±	-	∞	5	2	2	2
1302-Pre	±	-	-	±	-	+	∞	±	-	±	∞	1	4	4	2
1401-Pre	+	+	+	+	+	+	+	+	+	±	∞	9	1	0	1
1502-Pre	+	+	+	+	+	±	±	+	+	+	∞	8	2	0	1
1702-Pre	±	-	+	±	∞	±	-	-	±	-	∞	1	4	4	2
1801-Pre	±	+	+	±	±	-	±	±	-	-	∞	2	5	3	1
1802-Pre	-	+	±	-	∞	-	-	-	-	-	∞	1	1	7	2
1901-Pre	+	+	±	±	∞	-	-	±	∞	-	∞	2	3	3	3
+	7	11	10	8	3	3	2	7	6	1	0				
±	7	2	2	5	3	5	6	5	3	7	0				
-	1	2	2	2	3	7	5	3	4	7	0				
∞	0	0	1	0	6	0	2	0	2	0	15				

Appendix 5: Classroom Observations – BETD In-service Teachers

Grid:

Positive evidence of behaviour +

Negative evidence of behaviour -

Behaviour attempted with mixed success ±

Behaviour not appropriate/relevant/absent ∞

	Physical Classroom Environment	Affective atmosphere	Resource use	Learner involvement	Cooperative learning	HOTS	Elicitation and Effective questioning	Reinforcement and Feedback	Contextualising knowledge	Written work	Homework	+	±	-	∞
101-Ins	-	+	+	+	∞	+	+	+	+	-	∞	7	0	2	2
102-Ins	±	-	-	-	∞	-	-	-	-	-	∞	0	1	8	2
201-Ins	±	-	-	±	∞	±	-	-	-	±	±	0	5	5	1
202-Ins	±	-	±	±	∞	-	-	±	-	-	-	0	4	6	1
402-Ins	±	±	+	±	±	+	∞	+	+	±	∞	4	5	0	2
501-Ins	+	+	+	+	±	±	+	+	∞	-	∞	6	2	1	2
601-Ins	+	+	+	±	∞	±	±	-	±	-	∞	3	4	2	2
602-Ins	±	+	±	±	∞	-	-	+	±	-	∞	2	4	3	2
701-Ins	-	±	-	-	-	±	∞	-	-	-	∞	0	2	7	2
902-Ins	+	+	+	±	-	-	±	-	+	±	∞	4	3	3	1
1001-Ins	±	-	±	±	∞	-	-	±	∞	±	±	0	6	3	2
1002-Ins	-	±	+	±	∞	+	±	-	+	-	∞	3	3	3	2
1101-Ins	±	±	±	±	∞	±	±	-	±	±	∞	0	8	1	2
1102-Ins	-	-	±	±	∞	±	±	-	±	-	∞	0	5	4	2
1201-Ins	+	+	+	+	+	+	+	+	+	-	±	9	1	1	0
1202-Ins	+	±	+	±	∞	±	±	±	±	-	∞	2	6	1	2
1402-Ins	-	±	+	±	∞	±	-	±	+	-	±	2	5	3	1
1501-Ins	±	+	+	+	∞	±	±	±	+	-	∞	4	4	1	2
1601-Ins	+	±	+	±	±	-	-	±	-	-	∞	2	4	4	1
1602-Ins	±	-	±	-	-	±	-	±	-	-	∞	0	4	6	1
1701-Ins	-	+	±	+	∞	-	-	±	+	-	∞	3	2	4	2
1902-Ins	+	+	±	±	-	+	±	±	±	-	∞	3	5	2	1
2001-Ins	±	-	-	-	∞	±	-	-	±	±	+	1	4	5	1
2002-Ins	∞	+	-	-	∞	±	-	-	∞	-	-	1	1	6	3

Appendix 6: Classroom Observation Criteria and Findings

Physical Classroom Environment

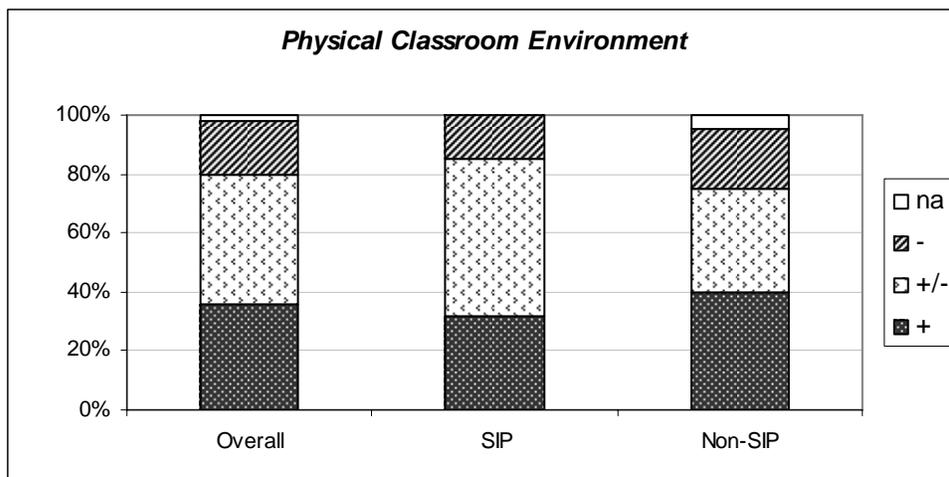
- **Item observed:** The use of physical space in the classroom, cleanliness, organization, and the display of materials around the room
- **Observation criteria:**
 - + Classroom is well-organized and visually rich and appealing. Displays include current, meaningful student work (not just un-labeled drawings) in addition to teacher-made or manufactured materials. The room is generally clean and tidy.
 - +/- Classroom is well-organized. Displays are neat, current, and meaningful but may not include student work. The room is generally clean and tidy.
 - Classroom is lacking one or more of the main criteria. This may be the absence of displays or dated or torn displays, desk arrangements that limit movement (when this can be overcome), or lack of cleanliness that could easily be taken care of.
- **Data from observations:**

Rating	Overall	SIP	Non-SIP
+	14 out of 39 36%	6 out of 19 32%	8 out of 20 40%
+/-	17 out of 39 44%	10 out of 19 53%	7 out of 20 35%
-	7 out of 39 18%	3 out of 19 15%	4 out of 20 20%
na	1 out of 39 2%	0 out of 19 0%	1 out of 20 5%

Overall: While 36% of the 39 core teachers used physical space in the classroom, according to the above criteria, in a positive manner (+ criteria above), an additional 44% created an acceptable or mixed physical environment (+/- criteria above). Therefore a combined 80% of the 39 core teachers had either a positive or acceptable/mixed physical classroom environment. However, 18% of the teachers were thought to have a negative classroom environment (– criteria above).

SIP: While 32% of SIP teachers had a positive physical classroom environment, an additional 53% had an either acceptable or mixed classroom physical environment. Therefore, a combined 85% of the SIP teachers had either positive or acceptable/mixed physical classroom environment. However 15% of the teachers had a negative classroom environment.

Non-SIP: While 40% of the non-SIP teachers had a positive classroom environment, an additional 35% had an acceptable or mixed classroom physical environment. Therefore, a combined 75% of the non-SIP teachers had either a positive or acceptable/mixed physical classroom environment. However, 20% of the teachers had a negative classroom environment.



Affective Atmosphere

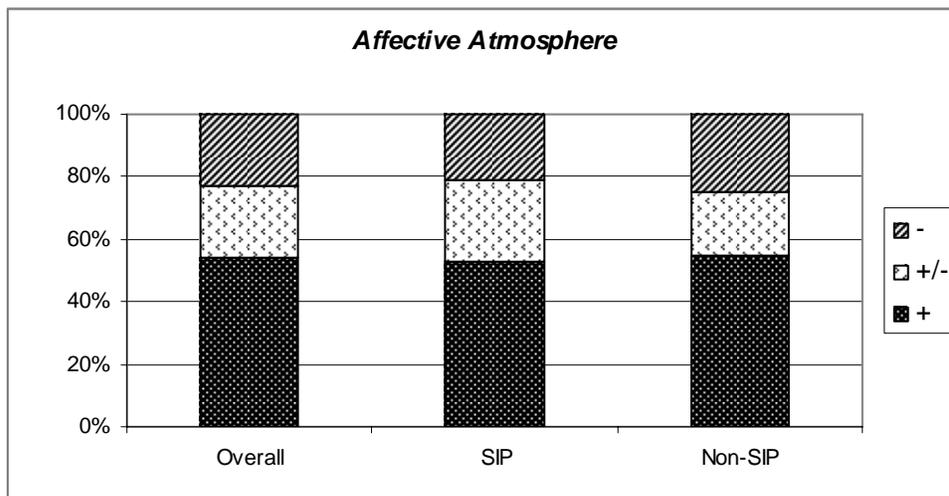
- **Item observed:** The social interaction between teachers and students
- **Observation criteria:**
 - + Teacher builds a positive classroom environment: trusting, caring, friendly, and encouraging to all students. The teacher seems to know the students including their names and interests. The teacher and students smile and show enthusiasm.
 - +/- Relationships between learners and the teacher are neither positive or negative—this may be because teacher-talk dominates the classroom or it may be that the teacher is firm (but not threatening) and the students seem to feel comfortable.
 - Teacher is critical of students, yells, hits or threatens to hit. Laughing at students is tolerated without comment. Teacher does not know students’ names.
- **Data from observations:**

Rating	Overall	SIP	Non-SIP
+	21 out of 39 54%	10 out of 19 53%	11 out of 20 55%
+/-	9 out of 39 23%	5 out of 19 26%	4 out of 20 20%
-	9 out of 39 23%	4 out of 19 21%	5 out of 20 25%
na	0 out of 39 0%	0 out of 19 0%	0 out of 20 0%

Overall: While 54% of the 39 core teachers were thought to have positive social interactions with their students in the lesson observed (+ criteria above), an additional 23% created acceptable/mixed social interactions (+/- criteria above). Therefore, a combined 77% of the 39 core teachers had either a positive or acceptable/mixed affective atmosphere in their classrooms. However, 23% of the teachers were thought to have a negative affective atmosphere (– criteria above) in the lesson observed.

SIP: While 53% of SIP teachers had positive social interactions with their students in the lesson observed, an additional 26% created acceptable/mixed social interactions. Therefore, a combined 79% of SIP teachers had either positive or acceptable/mixed affective atmosphere in their classrooms. However, 21% of the SIP teachers were judged to have a negative affective atmosphere in the lesson observed.

Non-SIP: While 50% of non-SIP teachers had positive social interactions with their students in the lesson observed, an additional 35% had acceptable/mixed social interactions. Therefore, a combined 85% of non-SIP teachers had either positive or acceptable/mixed affective atmosphere in their classrooms. However, 15% of the teachers were judged to have a negative affective atmosphere in the lesson observed.



Resource Use

- **Item observed:** The use of materials and resources to support the lesson
- **Observation criteria:**
 - + Resources beyond chalkboard/ text book used generally effectively.
 - +/- Chalkboard and text books are used well. There may be ineffective use of other resources.
 - No evidence of resources used or poor use of text book/chalkboards.
- **Data from observations:**

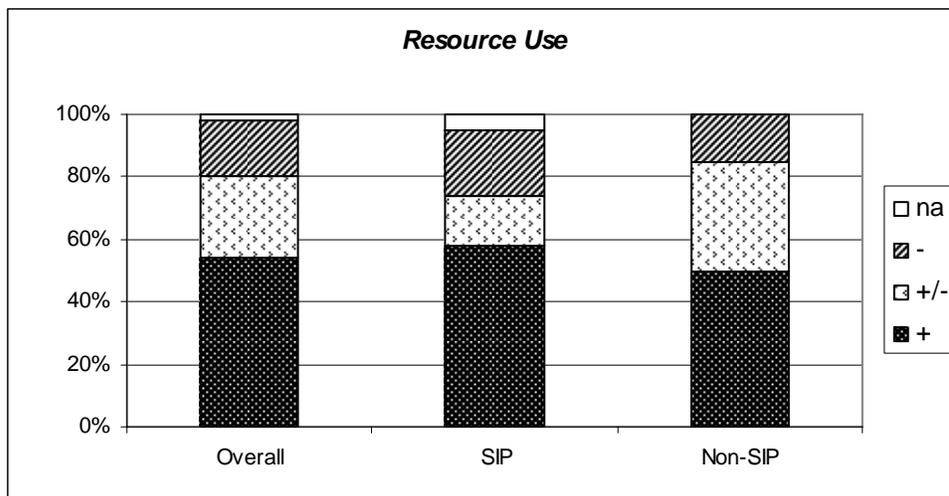
Rating	Overall	SIP	Non-SIP
+	21 out of 39 54%	11 out of 19 58%	10 out of 20 50%
+/-	10 out of 39 26%	3 out of 19 16%	7 out of 20 35%
-	7 out of 39 18%	4 out of 19 21%	3 out of 20 15%
na	1 out of 39 2%	1 out of 19 5%	0 out of 20 0%

Overall: While 54% of the 39 core teachers were thought to use materials and resources to support their lessons in a positive manner in the lesson observed (+ criteria above), an additional 26% used materials and resources in an acceptable/mixed way (+/- criteria above). Therefore, a combined 80% of the 39 core teachers used resources in either a positive or acceptable/mixed manner. However, 18% of the teachers were thought to use few resources or use resources poorly (– criteria above) in the lesson observed.

SIP: While 58% of the SIP teachers used materials and resources to support their lessons in a positive manner in the lesson observed, an additional 16% used materials and resources in an acceptable/mixed way. Therefore, a combined 74% of the SIP teachers used resources in either a positive or

acceptable/mixed manner. However, 21% of the teachers were thought to use resources poorly in the lesson observed.

Non-SIP: While 50% of the non-SIP teachers used material and resources to support their lessons in a positive manner, an additional 35% used materials and resources in an acceptable/mixed way. Therefore, a combined 85% of non-SIP teachers used resources in either a positive or acceptable/mixed manner. However, 15% of teachers were thought to use resources poorly in the lesson observed.



Learner Involvement

- **Item observed:** The teacher’s ability to manage the class and involve students in the lesson
- **Observation criteria:**
 - + Majority of students are engaged in the lesson for all or most of the period. Students are actively involved in some way, either in answering questions, doing assignments, or participating in cooperative learning activities.
 - +/- Students are attentive and listening, but may not be actively engaged, or students are involved positively for most of the lesson, but a few students are off-task at the end.
 - Learners spend significant time off task (behavior, lack of teacher preparation or lack of meaningful work to do.) Students seem bored/ unengaged for a large part of the lesson.
- **Data from observations:**

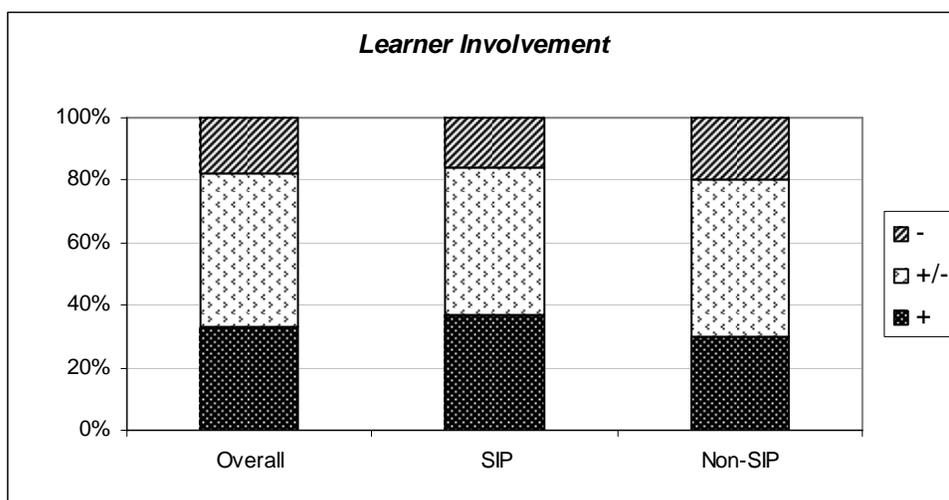
Rating	Overall	SIP	Non-SIP
+	13 out of 39 33%	7 out of 19 37%	6 out of 20 30%
+/-	19 out of 39 49%	9 out of 19 47%	10 out of 20 50%
-	7 out of 39 18%	3 out of 19 16%	4 out of 20 20%
na	0 out of 39 0%	0 out of 19 0%	0 out of 20 0%

Overall: While 33% of the 39 core teachers were thought to have positive learner involvement in the lesson observed (+ criteria above), an additional 49% had either acceptable or mixed learner

involvement (+/- criteria above). Therefore, a combined 82% of the 39 core teachers observed had either positive or acceptable/mixed learner involvement. However, 18% of teachers were thought to involve learners poorly in the lesson observed (- criteria above).

SIP: While 37% of the SIP teachers were thought to have positive learner involvement in the lesson observed, an additional 47% had either acceptable or mixed learner involvement. Therefore, a combined 84% of the SIP teachers had either positive or acceptable/mixed learner involvement. However, 16% of the teachers involved learners poorly in the lesson observed.

Non-SIP: While 30% of the non-SIP teachers had positive learner involvement in the lesson observed, an additional 50% had acceptable or mixed learner involvement. Therefore, a combined 80% of the non-SIP teachers had either positive or acceptable/mixed learner involvement. However, 20% of the teachers involved learners poorly in the lesson observed.



Cooperative Learning (Pair and Group Work)

- **Item observed:** Students working with students in pairs or small groups in order to make meaning of the lesson
- **Observation criteria:**
 - + Activity supports learning. Learners need to talk with one another and problem solve together. All learners involved.
 - +/- Meaningful activity in which all learners may not be involved throughout.
 - Activity with only one right answer based on a recall question. Group size or materials make it impossible for all students to participate.
- **Data from observations:**

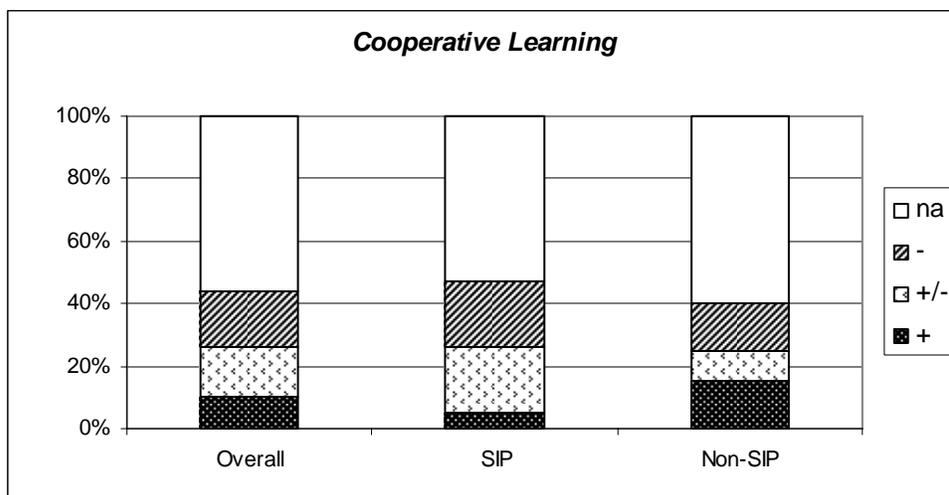
Rating	Overall	SIP	Non-SIP
+	4 out of 39 10%	1 out of 19 5%	3 out of 20 15%
+/-	6 out of 39 16%	4 out of 19 21%	2 out of 20 10%
-	7 out of 39 18%	4 out of 19 21%	3 out of 20 15%
na	22 out of 39 56%	10 out of 19 53%	12 out of 20 60%

Overall: While only 10% of the 39 core teachers were thought to use cooperative learning positively in the lesson observed (+ criteria above), an additional 16% used cooperative learning in

an acceptable or mixed manner (+/- criteria above). Therefore, 26% of the 39 core teachers used cooperative learning in a positive or acceptable/mixed manner. However, 18% used cooperative learning poorly in the lesson observed and a full 22% did not use any elements of cooperative learning when observed

SIP: While only 5% of SIP teachers used cooperative learning positively in the lesson observed, an additional 21% used it in an acceptable or mixed manner. Therefore, 26% of the SIP teachers used cooperative learning in a positive or acceptable/mixed manner. However, 21% used cooperative learning poorly in the lesson observed and a full 53% did not use it at all.

Non-SIP: While only 15% of non-SIP teachers used cooperative learning positively in the lesson observed, an additional 21% used it in an acceptable or mixed manner. Therefore, 25% of non-SIP teachers used cooperative learning in a positive or acceptable/mixed manner. However, 15% used it poorly and a full 60% did not use cooperative learning at all in the lesson observed.



Higher-order Thinking Skills

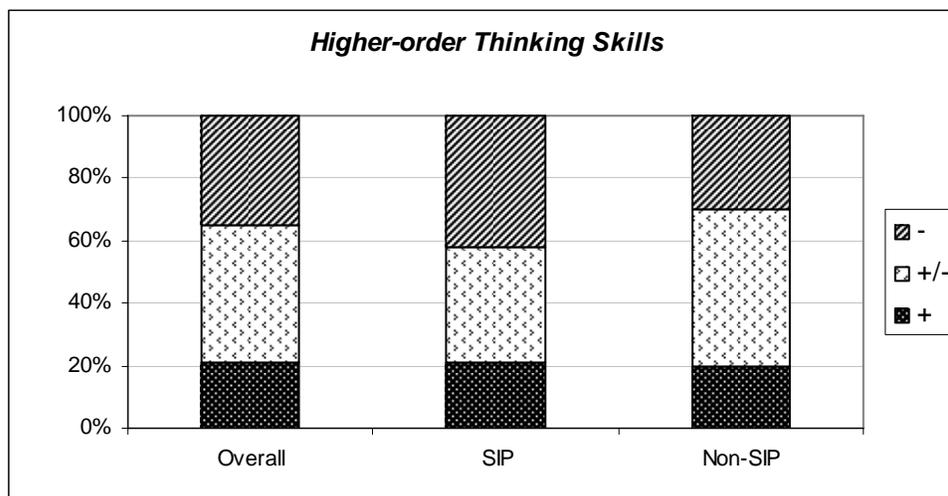
- **Item observed:** The teacher’s ability to design activities/ask questions that access higher-order thinking skills (this does not imply that the learners are always able to complete the activities or answer the questions successfully)
- **Observation criteria:**
 - + Teacher designs activities or asks questions that require higher-order thinking skills including application, analysis, synthesis or evaluation.
 - +/- Teacher designs activities or asks at least a few questions that require higher-order thinking skills such as comprehension or those listed above.
 - Activities and questions are based on recall and other lower-order thinking skills.
- **Data from observations:**

Rating	Overall	SIP	Non-SIP
+	8 out of 39 21%	4 out of 19 21%	4 out of 20 20%
+/-	17 out of 39 44%	7 out of 19 37%	10 out of 20 50%
-	14 out of 39 35%	8 out of 19 42%	6 out of 20 30%
na	0 out of 39 0%	0 out of 19 0%	0 out of 20 0%

Overall: While 21% of the 39 core teachers were thought to use higher-order thinking skills positively (+ criteria above) in the lesson observed, an additional 44% used them in an acceptable/mixed manner (+/- criteria above). Therefore, 65% of the 39 core teachers used higher-order thinking skills either positively or in an acceptable/mixed manner. However, 35% of the teachers used recall and other lower-order thinking skills in the lesson observed, with little or no use of higher-order thinking skills (- criteria above).

SIP: While 21% of the SIP teachers used higher-order thinking skills positively in the lesson observed, an additional 37% used them in an acceptable/mixed manner. Therefore, 58% of the SIP teachers used higher-order thinking skills either positively or in an acceptable/mixed manner. However, 42% of the teachers in the lesson observed depended on recall and memorization rather than higher-order thinking skills.

Non-SIP: While 20% of the non-SIP teachers used higher-order thinking skills positively in the lesson observed, an additional 50% used them in an acceptable or mixed manner. Therefore, 70% of the non-SIP teachers used higher-order thinking skills either positively or in an acceptable/mixed manner. However, 30% of the teachers in the lesson observed depended on recall and memorization rather than higher-order thinking skills.



Elicitation and Questioning

- **Item observed:** The teacher's skill in eliciting information, asking questions, and following up questions to support learning (closely related to the use of higher-order thinking skills)
- **Observation criteria:**
 - + Teacher asks a variety of questions, especially open-ended questions. Questions may be higher-order. Multiple answers are often appropriate and accepted. Teacher asks follow-up questions to support content. Teacher is able to rephrase questions when learners are not able to answer.
 - +/- Teacher may ask one or two effective questions but tends to rely on more simplistic questions. Teacher attempts to engage learners and rephrase questions, even though this may not always be effective.
 - Teacher only asks closed questions. Learners give one word answers. No follow up questions are asked. Teacher has students guess when they are not able to answer a

question rather than supporting attempts with meaningful questions, examples, or elicitation skills.

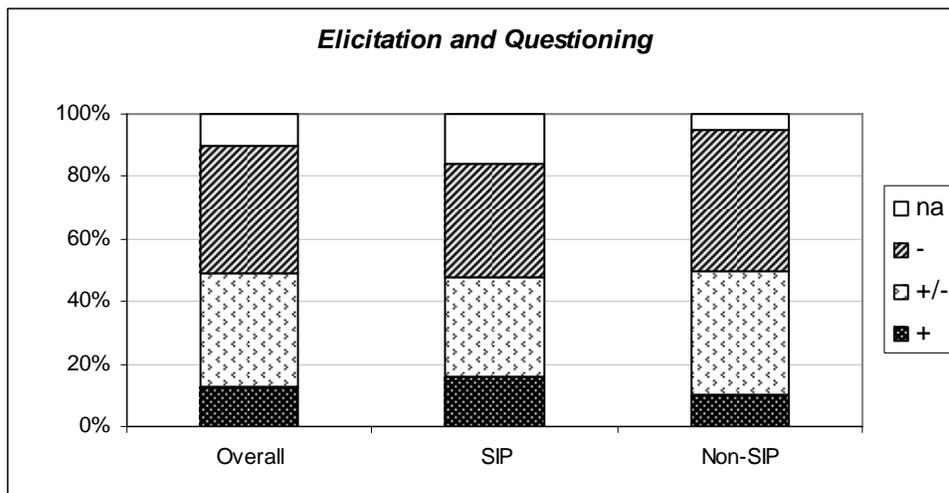
- **Data from observations:**

Rating	Overall		SIP		Non-SIP	
+	5 out of 39	13%	3 out of 19	16%	2 out of 20	10%
+/-	14 out of 39	36%	6 out of 19	32%	8 out of 20	40%
-	16 out of 39	41%	7 out of 19	36%	9 out of 20	45%
na	4 out of 39	10%	3 out of 19	16%	1 out of 20	5%

Overall: While only 13% of the 39 core teachers were thought to use elicitation and questioning in a positive manner (+ criteria above) in the lesson observed, an additional 36% used these strategies in an acceptable or mixed manner (+/- criteria above). Therefore, a combined 49% of the 39 core teachers used elicitation and questioning in either a positive or acceptable/mixed manner. However, 41% of the teachers used these strategies poorly in the lesson observed (- criteria above), and 10% did not use elicitation and questioning at all.

SIP: While only 16% of the SIP teachers used elicitation and questioning in a positive manner in the lesson observed, an additional 32% used these strategies in an acceptable or mixed manner. Therefore, a combined 48% of the SIP teachers used elicitation and questioning in either a positive or acceptable/mixed manner. However, 36% of the teachers used these strategies poorly and 16% did not use elicitation and questioning at all in the lesson observed.

Non-SIP: While only 10% of the non-SIP teachers used elicitation and questioning in a positive manner in the lesson observed, an additional 40% used these strategies in an acceptable or mixed manner. Therefore, a combined 50% of the non-SIP teachers used elicitation and questioning either in a positive or acceptable/mixed manner. However, a full 45% of the non-SIP teachers used these strategies poorly and 5% did not use them at all in the lesson observed.



Reinforcement and Feedback

- **Item observed:** The teacher uses multiple examples or practice work to reinforce the concept being taught and provides students with feedback on their answers
- **Observation criteria:**

+ Teacher gives a variety of meaningful examples and assignment(s) to reinforce concept. The teacher monitors the learners' understanding of the concept and gives concrete, timely feedback.

+/- Teacher gives limited examples/ assignments to reinforce the concept. Assignments may be on topic, but not particularly meaningful. Teacher monitors learners but may give little or no concrete feedback to individual students (e.g. teacher just calls on the next learner).

- There is no assignment given and few questions asked or the assignment does not reinforce the concept taught in the lesson. The teacher does not check for understanding through meaningful questions or monitoring of work. Teacher may ask question like, "Do you understand?"

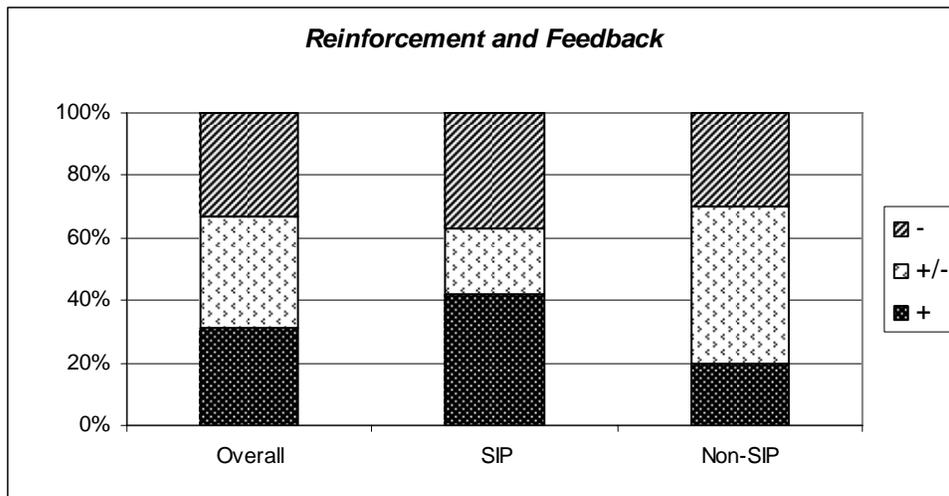
- **Data from observations:**

Rating	Overall		SIP		Non-SIP	
+	12 out of 39	31%	8 out of 19	42%	4 out of 20	20%
+/-	14 out of 39	36%	4 out of 19	21%	10 out of 20	50%
-	13 out of 39	33%	7 out of 19	37%	6 out of 20	30%
na	0 out of 39	0%	0 out of 19	0%	0 out of 20	0%

Overall: While 31% of the 39 core teachers were thought to use elicitation and questioning strategies positively in the lesson observed (+ criteria above), an additional 36% used these strategies in an acceptable or mixed manner (+/- criteria above). Therefore, a combined 67% of the 39 core teachers used elicitation and questioning strategies either positively or in an acceptable/mixed manner. However, 33% of the teachers used these strategies poorly in the lesson observed (- criteria above).

SIP: While 42% of the SIP teachers used elicitation and questioning positively in the lesson observed, an additional 21% used the strategies in an acceptable or mixed manner. Therefore, a combined 63% of the SIP teachers used elicitation and questioning in either a positive or acceptable/mixed manner. However, 37% of the teachers used the strategies poorly in the lesson observed.

Non-SIP: While 20% of the non-SIP teachers used elicitation and questioning positively in the lesson observed, an additional 50% used the strategies in an acceptable or mixed manner. Therefore, a combined 70% of the non-SIP teachers used elicitation and questioning in either a positive or acceptable/mixed manner. However, 30% of the non-SIP teachers used these strategies poorly in the lesson observed.



Contextualizing Knowledge

- **Item observed:** The teacher’s ability to make lesson relevant through accessing prior knowledge or connecting material to the real world
- **Observation criteria:**
 - + Teacher meaningfully/ consistently connects lesson to prior learning or the learners’ lives or the teacher meaningfully connects the content to the real world.
 - +/- Teacher connects lesson to students’ prior knowledge (perhaps as the hook) but does not extend/ continue to use this connection. Assignment is not contextualized to real world situations.
 - Teacher links lesson to prior knowledge or real world situations that are not relevant for this lesson.
- **Data from observations**

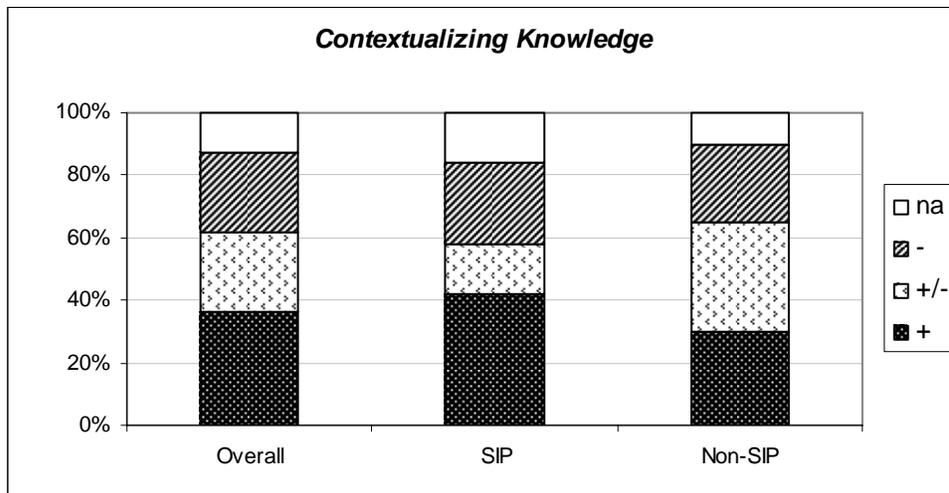
Rating	Overall	SIP	Non-SIP
+	14 out of 39 36%	8 out of 19 42%	6 out of 20 30%
+/-	10 out of 39 26%	3 out of 19 16%	7 out of 20 35%
-	10 out of 39 25%	5 out of 19 26%	5 out of 20 25%
na	5 out of 39 13%	3 out of 19 16%	2 out of 20 10%

Overall: While 36% of the 39 core teachers contextualized knowledge positively in the lesson observed (+ criteria above), an additional 26% used this strategy in an acceptable or mixed manner (+/- criteria above). Therefore, a combined 62% of the 39 core teachers contextualized knowledge positively during the lesson observed. However, 25% of the teachers used this strategy poorly or inaccurately (- criteria above) and 13% did not use it at all in the lesson observed.

SIP: While 42% of the SIP teachers contextualized knowledge positively in the lesson learned, an additional 16% used this strategy in an acceptable or mixed manner. Therefore a combined 58% of the SIP teachers used the strategy either in a positive or acceptable/mixed manner during the lesson observed. However, 26% of the SIP teachers contextualized knowledge poorly (inaccurately) and 16% did not use contextualized knowledge at all in the lesson observed.

Non-SIP: While 30% of the non-SIP teachers contextualized knowledge positively in the lesson learned, an additional 35% used this strategy in an acceptable or mixed manner. Therefore, a

combined 65% of the non-SIP teachers used this approach in a positive or acceptable/mixed manner during the lesson observed. However, 25% of the teachers used this approach poorly (inaccurately) and 10% did not contextualize knowledge in the lesson observed at all.



Written Work

- **Item observed:** Work produced by the learners both in this lesson and in the past (this does not take into account the teacher’s markings or the learners’ corrections)
- **Observation criteria:**
 - + Teacher includes multiple examples of free writing of some sort (multiple sentences).
 - +/- Teacher includes at least a few original sentences.
 - Teacher includes only fill in the blank, single word, copying, etc.
- **Data from observations:**

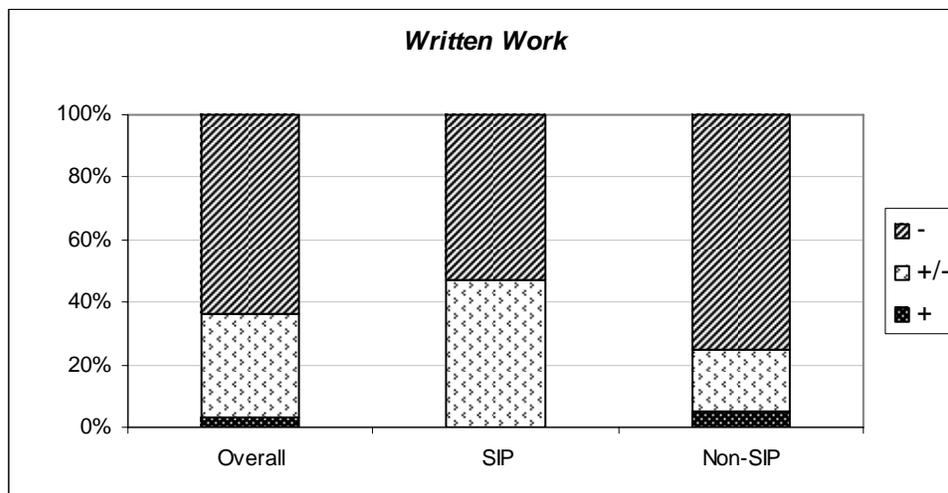
Rating	Overall	SIP	Non-SIP
+	1 out of 39 3%	0 out of 19 0%	1 out of 20 5%
+/-	13 out of 39 33%	9 out of 19 47%	4 out of 20 20%
-	25 out of 39 64%	10 out of 19 53%	15 out of 20 75%
na	0 out of 39 0%	0 out of 19 0%	0 out of 20 0%

Overall: While only 3% of the 39 core teachers appeared to use written work positively in the lesson observed and from evidence of past work (+ criteria above), an additional 33% used written work in an acceptable/mixed manner. Therefore, 36% of the 39 core teachers used written work in either a positive or acceptable/mixed manner. However, a full 64% of the 39 core teachers were thought to use written work poorly (- criteria above).

SIP: While none of the SIP teachers appeared to use written work positively, 47% of them used it in an acceptable or mixed manner. Therefore, 47% of the SIP teachers appeared to use written work in an appropriate/mixed manner. However, 53% of the SIP teachers appeared to use written work poorly.

Non-SIP: While only 5% (just one teacher) of the non-SIP teachers were thought to use written work positively, an additional 20% used written work in an appropriate or mixed manner.

Therefore, 25% of the non-SIP teachers appeared to use written work in either a positive or, mainly, appropriate/mixed manner. However, a full 75% of the non-SIP teachers appeared to use written work poorly.



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