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GRADUATE COLLEGE

AN EVALUATION OF THE BREASTFEEDING EDUCATOR PROGRAM™ A CONTINUING EDUCATION PROGRAM FOR HEALTH CARE PROVIDERS

A dissertation

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

Doctor of Philosophy

By

Deborah Leslie Bocar

Norman, Oklahoma

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AN EVALUATION OF THE BREASTFEEDING EDUCATOR PROGRAM™:

A REPEATED CONTINUING EDUCATION PROGRAM FOR

HEALTH CARE PROVIDERS

A Dissertation APPROVED FOR THE

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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ABSTRACT

This study evaluated a continuing education program for health care providers who promote and assist with breastfeeding. Formative and summative evaluation processes were completed to collect quantitative and qualitative data for analysis. The two primary purposes of the evaluation study were to determine the effectiveness of the program and to identify recommendations for improvement.

Two-hundred and forty-four participants participated in some aspects of the evaluation process. Participants were recruited from three continuing education program sites in the Midwest United States. Seventy-two participants completed pre-program, immediate post-program, and delayed post-program surveys that measured knowledge, attitudes, clinical behaviors, and perceptions of clinical practice related to breastfeeding promotion and assistance. A within-subjects analysis of variance indicated significant improvement was noted in all areas. A delayed post-program survey was returned by the participants one month after completing the program. A slight decline in correct scores was noted. However, the scores continued to be significantly higher than the pre-program scores.

Numerous recommendations to improve the program were made by program participants, program planning committee members, clinical supervisors, content experts, and education experts. Recommendations from several sources focused on reducing content and/or lengthening the program to moderate the pace of the program and to utilize more learner-centered instructional strategies.

The investigator assessed the evaluation process, procedures, and instruments using utility, feasibility, propriety, and accuracy standards as outlined by the Joint Committee on Standards for Educational Evaluation. The findings have implications for both practice and future research. A recurring recommendation was to modify the instructional strategies to include more active learning methods in the program. Future research should also test approaches to reduce the decline in instructional effect over time.

CHAPTER 1

INTRODUCTION

If the purpose of educational activities is to increase knowledge, influence attitudes and master psychomotor skills, then evaluation is critical to determine if the educational efforts are effective. Evaluations are performed in all spheres of life. When one wishes to know and understand the consequences of some action or event, informal evaluation helps one learn from one's experiences and improve one's performance (Dale, 1998). Informal evaluation depends more on casual observation, implicit goals, intuitive norms, and highly subjective perceptions of the alternative (Stake, 1967). Much of the evaluation in education is informal, impressionistic, private, and immediate (Worthen, Saunders, & Fitzpatrick, 1997). The focus of this study, however, was on the formal evaluation of an education program which was more structured and depended on systematic efforts to define criteria and obtain accurate information about alternatives (Worthen, Saunders, & Fitzpatrick, 1997).

The present study formally evaluated the Breastfeeding Educator Program™ which is a continuing education program for health care providers who assist childbearing families. The educational program was developed in 1987 when Mercy Health Center in Oklahoma City, Oklahoma, approached the author to develop a staff education program for its maternal-child nursing staff. The primary concern the facility wanted addressed in the education program related to feedback from new parents who had given birth in the hospital. New parents reported much frustration due to the inconsistent (and sometimes blatantly contradictory) recommendations from the nursing staff regarding breastfeeding

management. The hospital administration wanted the staff to learn up-to-date breastfeeding management recommendations to increase the consistency of information taught to families by the staff. See Appendix A for contextual descriptive information regarding the Breastfeeding Educator Program™.

Need for the Breastfeeding Educator Program™

The Breastfeeding Educator Program™ was developed because breastfeeding provides numerous benefits to babies, mothers, societies, and the global community (Bocar, 2000). Virtually all health care professional organizations involved with perinatal services have issued position/policy statements that highlight the benefits of breastfeeding and encourage their members to promote breastfeeding and provide effective breastfeeding assistance (American Academy of Family Physicians, 1989; American Academy of Pediatrics, 1997; American College of Nurse-Midwives Policy Statement on Breastfeeding, 1993; American Dietetic Association, 1997; American Hospital Association, 1992; American Medical Association, 1990; American Public Health Association Policy Statement, 1981; Lamaze, 1992; Association of Women's Health, Obstetrical, and Neonatal Nursing, 1999; British Pediatric Association, 1994; Canadian Pharmaceutical Association, 1994; International Childbirth Education Association, 1992; International Federation of Gynecology and Obstetrics, 1982; International Lactation Consultant Association, 1991; National Association of Pediatric Nurse Associates and Practitioners, 1988; National Association of WIC Directors, 1989; 1989; Nursing Mothers' Association of Australia, 1995; & Registered Nurses of British Columbia, 1996). In addition, several government agencies have recommended substantial support for breastfeeding assistance (US Department of Health and Human Services, 2000; & US

Surgeon General. 2000) as well as the World Health Organization (1989; 1992)) and the United Nations International Children's Emergency Fund (UNICEF) (1990).

Although breastfeeding is a natural process, it is a learned behavior and its success is not guaranteed. Countless mothers do not meet their breastfeeding goals. Only about 20% of mothers who initiate breastfeeding continue to breastfeed at six months (Ryan, 1997) even though the American Academy of Pediatrics (1997) recommends that all babies receive breastmilk for at least 12 months and then for as long as desired by mother and baby. Numerous studies indicate that health care providers lack knowledge of breastfeeding management principles and practice (Anderson & Geden, 1991; Bagwell, Kendrick, Stitt, & Leeper, 1993; Barnett, Sienkiewica, & Roholt, 1995; Bernaix, 2000; Crowder, 1981; Ellis, & Hewatt, 1983; Freed, Clark, & Sorenson, 1995; Hayes, 1981; Hellings & Howe, 2000; Lazzaro, Anderson, & Auld, 1995; Lewinski, 1992; Michelman, Faden, Geilen, & Buxton, 1990; Patton, Beaman, Csar, & Lewinski, 1996.)

Health care providers have also expressed frustration with their lack of educational preparation to assist breastfeeding families. The author has informally surveyed the educational preparation of the participants in the Breastfeeding Educator Program™ during the last 14 years with the following request, "Raise your hand if you had more than one hour of instruction regarding breastfeeding assistance during your basic educational preparation program." Consistently, less than five percent of the participants report more than one hour of instruction. Of course the participants who attend the Breastfeeding Educator Program™ self-select to participate because they or their clinical supervisors perceive a learning deficit related to breastfeeding assistance and

thus could not be considered a representative sample of all health care providers who work with childbearing families. However, the professional literature is replete with observations and studies that document a deplorable lack of knowledge, skills, and attitudes regarding breastfeeding assistance. (See related citations in above paragraph.)

Although many leaders recommend that lactation management topics receive more emphasis in the curricula of basic educational preparation programs of various health care providers, there are many competing topics within limited time frames. Even if the amount of information available in pre-service education were to double or triple, it would be inadequate preparation for those health care providers who choose to work with childbearing families. The author supports the philosophy that pre-service health care education prepares "generalists" who then develop specialized knowledge and skills through clinical experience, preceptorships, in-service education, self-directed education, and continuing education. Just as it would not be safe to expect a new graduate to accurately interpret a fetal heart monitor pattern without additional education and practice in consultation with expert practitioners, it is equally inappropriate to expect a new graduate to effectively assist breastfeeding families without additional educational opportunities to develop the necessary knowledge and skills.

Although breastfeeding is highly recommended, health care providers have deficits in knowledge, skills, and attitudes that impair their effectiveness in their assistance efforts. Therefore, the Breastfeeding Educator Program™ was developed to increase knowledge and skills as well as to optimize attitudes among health care providers, in order to improve the resources available for breastfeeding families.

Development of the Breastfeeding Educator Program™

In response to Mercy Health Center's request for a continuing education program providing a comprehensive overview of breastfeeding management recommendations, the investigator and her lactation consultant colleague (Linda Crotty Shrago, RN, IBCLC) developed and presented the first Breastfeeding Educator Program™ in 1987. The author assessed the professional literature related to breastfeeding promotion and assistance and determined the essential knowledge, skills, and attitudes that would facilitate optimal breastfeeding (Lawrence, 1985; Marmet & Shell, 1984; Meier & Anderson, 1987; Neifert & Seacat, 1986; Widstrom, 1987).

The initial program consisted of 10 hours of didactic instruction. Since 1991 the investigator has assumed primary responsibility for coordination of the program development and revisions. From 1987 to 1999, the program evolved into 15 sessions with 29.7 contact hours (50 minute contact hours). The program was trademarked and the Resource Manual for the Breastfeeding Educator Program™ (a print-based manual) was copyrighted in 2000 by the investigator.

During the intervening years, feedback from participants, clinical experience, and sponsoring agencies have provided additional input regarding the core curriculum for the program. Since the program is presented multiple times each year (see list of programs dates and locations in Appendix B), revisions occur approximately every four months. Additional information about the Breastfeeding Educator Program™ and its themes are included in Appendix A.

Applied Principles of Instructional Design

Principles of instructional design have been utilized during the development and revision of the Breastfeeding Educator Program™. Instructional design refers to "the systematic and reflective process of translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation" (Smith & Ragan, 1999, p. 2). Effective instructional design is critical for effective educational programs. Since principles of effective instructional design informed the development and revision of the Breastfeeding Educator Program™, the evaluation of the program addressed the effectiveness of the application of the principles. A discussion of the application of selected components of instructional design related to the Breastfeeding Educator Program ™ follows.

Instructional Analysis

An instructional design process is initiated with a thorough assessment of the learning needs and the learning environment. According to Smith and Ragan, a thorough needs assessment includes analyzing the overarching goals of the instructional system and determining how well the goals are currently being achieved (1999). Noting the discrepancies between "what is" and "what should be" helps identify the requisite areas to address in planned instruction. After a list is compiled, the topics can be prioritized using a variety of criteria such as importance of the goal, the consequences of not meeting the goal, the size of the gap between the current situation and the ideal situation, and the potential for reducing or eliminating the gap considering available resources (Smith & Ragan, 1999). A list of goals that "might be" was distributed to program planning

committees from agencies who sponsored the Breastfeeding Educator Program. (See Appendix C.) They were encouraged to prioritize the described goals embedded in the program.

Learning Needs Assessment

A learning needs assessment has been described as a process for identifying the knowledge and skills necessary for achieving goals. Gupta (1999) provides an overview and synthesis of needs assessment models. He recommends gathering preliminary data, planning for the types of data to be collected, determining sources of data, developing tools, collecting and analyzing data, and summarizing findings.

An organization's overarching educational goal may be to keep employees up-to-date with the latest knowledge and skills in the field. In this case, the needs assessment would require input from managers, employees and topic experts to determine the content for the instructional plan. Specific outcome goals for educational programs aid in developing specific content. Often leaders verbalize global goals such as, "We want to improve the quality of services provided." The instructional designer must continue the assessment process to determine the specific aspects of service that need improving in order to identify and prioritize content for instruction. Questionnaires, surveys, interviews, and focus groups provide assessment data that, through goal analysis, determines the goals for instruction. Defining, refining, and ranking goals creates a framework from which the instructional designer can create the educational program (Morrison, Ross, & Kemp, 2001).

The Planning Committee's Priorities Survey was developed in an attempt to identify the specific goals of a particular agency when they were seeking to have a

breastfeeding education program in their facility. See Appendix C for a description of the survey and the means from 21 planning committee members' responses.

Health care providers as self-directed learners often have strong preferences regarding the usefulness of specific topics. Assessing their interest in a variety of topics communicates that the instructor values their perceptions and promotes a more collegial relationship which implies that students will be active participants in the learning process rather than passive students. Assessing participants' specific prior learning and experience creates implications for instructional design including, pacing, context of examples, and amount and context of practice/application activities (Smith & Ragan, 1999). Surveying adults to identify their perceived learning needs and inviting the learners to prioritize content for educational programs provides valuable data and initiates a participatory approach to continuing education.

The Breastfeeding Educator Program™ has an identified core content, however, emphasis is varied according to the participants' learning needs and the sponsoring agency's priorities in a variety of locations. Since the program is repeated several times each year (see list of program dates and locations in Appendix B), there are multiple opportunities to customize the program based on needs assessment data and to improve the program using evaluation data. The Learning Needs Assessment Survey was distributed to potential participants in the Breastfeeding Educator Program™. See Appendix D for the survey tool and the means of the responses of 69 potential participants.

During the assessment phase of instructional planning, a careful analysis of student similarities and differences should be undertaken. Political-economic factors

such as health care reform, reduced third party reimbursement, and agency mission statements/goals should be considered. If instruction is provided in a variety of geographic sites and participants represent various regions and countries, an attempt should be made to address common concepts and examples should be drawn from diverse geographic contexts. The Program Planning Committee's Priorities Survey and the Learning Needs Assessment Survey given to potential participants provides information to the development staff of the Breastfeeding Educator Program™ so that those factors can be adequately addressed in the program.

Cadwell and Turner-Maffei used a survey to identify learning needs among 410 health care providers attending lactation management education programs throughout the United States (2000). They found that the providers of breastfeeding assistance compose an interdisciplinary field with nurses being the most common profession represented. Participants reported preferring an enlarged topic choice related to breastfeeding management issues, and desired opportunities to learn in a variety of modalities with a preference for non-traditional classroom learning.

An assessment of the learning environment includes, an analysis of existing curricula or previous educational offerings, and an appraisal of learning resources such as audio-visual equipment, computer and software access, and library inventory. The organization from which the instruction will be provided should be considered within the context of its larger structure or field. For example, if a hospital is providing an educational offering, the hospital should be considered within the context of its parent organization and within the field of health care. The Breastfeeding Educator Program™

provides a checklist for potential agency sponsors that identifies the audio-visual needs and optimal room set-up for the program presentation.

Analysis of Learners and Learning Context

Another important aspect of the learning environment is the analysis of the learners. Theories of motivation are critical to consider when appraising learners. Learners can be intrinsically motivated by needs such as described by Maslow (1987) and extrinsically motivated by incentives such as rules, requirements, and monetary rewards (Deci & Ryan, 1987). Ideally, health care providers will be primarily motivated by growth and increased knowledge needs associated with self-actualization. Sometimes, however, continuing education is mandated by superiors or professional licensing agencies. The instructional designer and instructional facilitator need to know if attendance and participation is mandatory or elective so that some common motivating factors can be taken into consideration. An item on the participant pre-program survey requested information regarding intrinsic and extrinsic interest in attending the Breastfeeding Educator Program™ and the results are reported in Chapter 4.

Malcolm Knowles identified characteristics of adult learners that should be considered when providing education to mature participants (1970, 1979). Although many of the issues he identified are suggested for quality instruction of all ages (e.g., respect for learners, assessment of special interests, provision of meaningful activities, etc.), there are some particular characteristics that deserve thoughtful consideration. Adults generally have a richer reservoir of accrued experience which serves as a resource for learning. Adults tend to desire an immediate application of knowledge so that education is more problem centered rather than subject centered. These characteristics

often apply to health care providers because they have accrued valuable experience which should be acknowledged by the instructional program.

Adults want to provide input into their curriculum and provide feedback regarding the program. They want their perceptions and talents to be utilized. Adults want their experiences to be vivid and meaningful. They want to improve themselves (Lindeman, 1961). Adult learners appreciate instruction which moves from the known to the unknown and provides numerous practical applications as examples of concepts which are discussed.

When planning and evaluating continuing educational programs, one needs to consider common factors regarding how adults learn which include:

- Adults learn more effectively when actively participating (Cross, 1981; Klatt, 1999; Long, 1998).
- Prior experience and knowledge are valuable resources for learning among adults (Long, 1998; Merriam & Caffarella, 1999; Sigelman, 1999).
- Appreciation of ethnic, racial, religious, gender, sexual orientation, social status, and numerous other distinctions helps adults feel valued and enhances learning (Caffarella & Clark, 1999; Klatt, 1999).
- Adult learners are quite heterogeneous and learn more effectively with individualized approaches (Houle, 1988; Long, 1998).
- Adults learn more effectively when they receive feedback (early and often) (Bennett & LeGrand, 1990; Lowman, 1995).

●Adults experience numerous developmental phases throughout their adult lives (Levinson, 1986). Adults are developmentally dynamic. Integrative theories of adult development inform the practice of adult education (Clark & Caffarella, 1999).

●Alternate viewpoints stimulate adults to use critical thinking skills (Brookfield, 1998; Klatt, 1999; Wlodkowski, 1999).

●Self-directed learning activities with application to "real world" enhances adult learners' interest (Caffarella, 1994; Knowles, 1979; Wlodkowski, 1999).

Numerous considerations from adult education are incorporated into the design of the Breastfeeding Educator Program™. The educational and clinical backgrounds of program participants vary from mother-to-mother support advocates with no health care training to health care providers who have masters and doctoral preparation. Attitudes and beliefs about breastfeeding and the importance of evidence-based practice vary among participants as well. The program includes specific activities to encourage participants to recognize how some of the socialization processes in the American culture can potentially influence their clinical practice. Participants are encouraged to consciously examine their beliefs and attitudes to reduce their impact on clinical practice. The evaluation process for the program was designed to determine how well the principles of adult education were operationalized in the program.

Instructional Strategies

After a thorough assessment of learning needs, learning environment, and learners was completed, analyzing the learning tasks for participants in the Breastfeeding Educator Program was undertaken. Gagne"s system of learning "domains" which include: verbal information (declarative knowledge), intellectual skills, cognitive strategies, attitudes, and

psychomotor skills provided a framework from which to develop learning objectives (Gagne', Briggs, & Wager, 1992). Mager (1962) described three components which should be included in statements of learning outcomes: (1) a description of the terminal behavior or performance; (2) a description of the conditions of demonstration of the behavior or performance; (3) a description of the criterion. For example, after completing an assessment, it is determined that learners "need to know" how to evaluate effective breast pumps. A performance objective could be written as, "Given a list of breast pumps with a description of the amount of suction created and cycles per minute, identify with at least 90% accuracy, which pumps more closely resemble the amount of suction and suction rhythm created by healthy, term infants."

Events of Instruction

Instruction can be organized in three phases: the introduction, the body, and the conclusion. Gagne', Briggs, Wager, (1992) suggested that lessons include nine specific "events of instruction." In the introductory phase, the instructor needs to gain the learner's attention, arouse interest and motivation, establish the purpose of the instruction (including making performance objectives available), and preview the lesson.

Throughout the body of instruction, learners' attention is focused on critical aspects of the information. Learning strategies such as direct explanation, discovery and guided discovery, observation, guided participation, dyadic instruction, and use of media and other educational resources help prepare learners for practice in which they apply the knowledge and skills and receive informative feedback and additional practice opportunities to correct any misinformation and improve skills.

Presenting instruction as it will probably be used, in this case chronologically, is very helpful. Since perinatal health care is a fairly consistent chronology, health care providers can easily focus on skills and information utilized in each phase of childbearing. Declarative knowledge forms the foundation for learning concepts, rules, problem-solving, psycho-motor skills, and affective knowledge. Moving from simple to complex and linking with existing knowledge are effective strategies for instructing declarative information. Elaborative techniques, including associational and organizational techniques (expository structures, narrative structures, graphic organizers, and concept mapping), must be meaningful to the learners in order to effectively encode the information. Mnemonic techniques, rehearsal (thinking aloud), and practice with feedback increase the depth of processing and thus retention of the declarative knowledge.

Similar learning strategies can be employed with instruction of concepts, rules, and problem-solving. Discovery and generative strategies are particularly meaningful with these domains of learning. Demonstration, observation, rehearsal, and practice are especially important when instructing psycho-motor skills in order to increase their automaticity (requiring less attentional resources) (Anderson, 1995). Scaffolding, selectively helping learners as they master segments of skills that they could not do on their own and then gradually reducing the support as the learners become more competent, is a strategy that can be utilized in a variety of instructional ventures.

The third phase of presenting instruction is the conclusion where information is summarized and reviewed. Transfer of knowledge is encouraged by giving learners opportunities to apply their learning to a variety of situations. Transfer is particularly

critical for learning concepts, rules, problem-solving, cognitive strategies, psychomotor skills and attitudes (Smith & Ragan, 1999). Encouraging learners to develop their own examples and applications, making analogies between new learning and prior knowledge, and paraphrasing verbal information are recommended to increase transfer. Being able to transfer information is critical in health care because humans are uniquely individualized. Health care providers must be able to see the commonalities of situations which are not identical and apply appropriate information to guide their individualized treatment. Transfer of theoretical knowledge obtained in the Breastfeeding Educator Program™ to clinical settings can be enhanced with case study presentations and discovery approaches to learning.

Learners can be remotivated during the conclusion of the instructional session by referring to the earlier discussion (during the introduction) of the importance of the information. The learners can also be encouraged to explore how this new learning can be used immediately and what future applications can be envisioned. Providing a specific closure can cue the learners that instruction is complete and gives the instructor an opportunity to end on a positive note with compliments regarding the learners' efforts and accomplishments. The evaluation of the Breastfeeding Educator Program™ sought input regarding the effectiveness of the events of instruction within the program.

Principles of instructional design, therefore, provided a framework for the creation of the Breastfeeding Educator Program™. The evaluation of the program drew on the principles of instructional design to determine its effectiveness. See Appendix H.

Professional Continuing Education

"Continuing education begins at the point when formal education ends and professional practice starts" (Bennett & LeGrand, 1990). Continuing education, sometimes referred to as "in-inservice" education, is contrasted with "pre-service" education, or the basic educational programs that prepare professionals. Once people begin their professional practice, they must keep up-to-date on new information, emerging techniques, and shifts resulting from new insights. While instructors and learners often come from diverse disciplines, a unifying purpose in continuing education is to improve the quality of services provided.

Carp, Peterson, and Roelfs identified numerous barriers to post-secondary education (1974). Many of the barriers that they identified apply to potential participants in the Breastfeeding Educator Program™. Situational barriers include cost of the program, home responsibilities, availability of child care, and job responsibilities. Institutional barriers that apply include not being informed about the educational program, attendance requirements, and the amount of time required to complete the program. The cost of the Breastfeeding Educator Program™, the program length, and availability of childcare are addressed in the program evaluation.

Evidence-based practice has become an important aspect of professional continuing education for health care providers (Greenhlagh, 1997; Grimes, 1986; Grimes, 1995; Hampton, 1997). The traditional, authoritarian model for medical education and ensuing practice was based on four assumptions as outlined by the Evidence-Based Medicine Working Group: 1) unsystematic observations from clinical experience are a valid way of bulding and maintaining one's knowledge base; 2) the study of

pathophysiologic principles are sufficient to guide clinical practice; 3) a combination of thorough traditional medical training and common sense is sufficient to allow one to evaluate new tests and treatments; and 4) content expertise and clinical experience are a sufficient base from which to generate valid guidelines for clinical practice (1992). The new paradigm for education and clinical management is based on the following assumptions: 1) clinical experience is necessary, but not sufficient, and at times can be misleading; 2) the study of the basic mechanism of disease is necessary, but not sufficient for clinical practice; 3) understanding certain rules of evidence is necessary to correctly interpret and evaluate professional literature (Evidence-Based Medicine Working Group, 1995).

Skills which are recommended to be emphasized in medical education include: 1)precisely defining the problem; 2) gathering information to solve the problem; 3) conducting an efficient search of the literature; 4) selecting the best of the relevant studies; 5) applying rules of evidence to determine their validity; 6) being able to present the content of an article to colleagues succinctly; 7) evaluating the strength and weaknesses of the study; and 8) extracting the clinical applicability (Guyatt, 1994).

Persuading health care providers to rely more on evidence-based recommendations than tradition and folklore continues to be challenging. There are numerous examples of the gap in research and clinical practice that are identified in the professional literature. As educators and researchers have analyzed the content of educational programs and clinical recommendations for new families, it has become clear that many of the recommendations are based on tradition, rather than research-based recommendations.

Freeman and Lowe (1992) analyzed surveys (regarding breastfeeding management and education) that were completed by 116 Ohio hospitals. Research-based recommendations regarding supplemental fluid, maternal-infant contact, distribution of formula packs, anticipatory guidance and follow-up care, and breastfeeding during hyperbilirubinemia (newborn jaundice) were not followed in up to 80% of the hospitals. Houston and Field (1988) who developed the tool used in the Ohio study found that up to 81% of the hospitals completing their survey in Alberta, Canada, were not following research-based recommendations. Forty-five Arizona hospitals with obstetrical services completed a survey gathering information about breastfeeding policies and practices (Strembel, Cole, Hartner, & Fischer, 1991). They found up to 96% of the hospitals did not follow research-based recommendations. Thirty-eight hospitals in southeastern Pennsylvania completed a survey assessing their breastfeeding management and education practices (Kovach, 1997). Up to 84% were not following recommendations established by research. The two areas that showed the largest gap between research and practice were routine supplementation and routine distribution of formula samples and promotional materials.

The Breastfeeding Educator Program™ emphasizes evidence-based practice as a guiding principle for breastfeeding management. The evaluation of the program incorporated participants' and clinical supervisors' assessment of the use of evidence-based recommendations in their clinical practice after completion of the program. The evaluation tools specifically addressed the recommendations that have identified in the literature as frequently not guided by research evidence (e.g., maternal-infant contact, routine supplementation, management of hyperbilirubinemia related to breastfeeding, follow-up care, and routine distribution of formula).

Statement of the Problem

In the past, evaluations of the Breastfeeding Educator Program™ have been conducted for the organizations that grant continuing education unit credits, however, no comprehensive, systematic evaluation has been completed. The program, which has been in existence for fourteen years, could benefit from a more thorough evaluation.

Purpose of the Study

The purpose of the study was to evaluate the Breastfeeding Educator Program ™ using a systematic process that would measure knowledge, attitudes, confidence in skills, clinical performance, and changes in health care settings related to breastfeeding promotion and assistance. Since this program is repeated several times a year throughout the Midwest United States, the evaluation process also examined the effectiveness of modifications for local venues and actively requested recommendations to improve the quality of the program.

Significance of the Study

Since formal evaluation processes have provided valuable information and insights for people who have invested in educational programs, the developer and presenter of the Breastfeeding Educator Program™ desired to formally evaluate the program to determine its effectiveness and to identify strategies for improvement. The findings from the evaluation process can impact future revisions and presentations of the program.

Limitations of the Study

Education and educational evaluation are processes which can not be wholly incised and dissected. This study attempted to closely examine an educational offering. An important limitation of the study is related to the researcher also being the program developer and presenter.

There exists a potential conflict of interest when the evaluation of a program is conducted by a primary evaluator who is also the program coordinator. The Program Evaluation Standards developed by the Joint Committee on Standards for Educational Evaluation (1994) state:

> Conflict of interest exists in an evaluation when the personal or financial interests of an evaluator might either influence the evaluation or be affected by the evaluation. A conflict of interest can also exist when a client or stakeholder has an inappropriate personal or financial interest in an evaluation or a program being evaluated. (p. 115).

The summary statement of the standard declares, "Conflict of interest should be dealt with openly and honestly, so that it does not compromise the evaluation processes and results" (Joint Committee on Standards for Educational Evaluation, 1994, p. 115). The primary evaluator was open and honest about her relationship to the program development, coordination, and evaluation. Since the primary goal of the evaluation was to determine the program's deficits and subsequently improve the program, it would be counterproductive for the evaluator/program coordinator to ignore weaknesses and only highlight strengths of the program. The evaluator had little financial incentive to create a positively biased evaluation report. She currently denies requests for additional program

presentations since she limits the presentations to one per month and has no desire to present the program more frequently.

The panel of experts who provided assessments in the evaluation process were colleagues (and in many cases friends) of the primary evaluator. It was emphasized that the evaluator was seeking a frank appraisal of the program and the evaluation process. The experts are impeccably principled and were thoroughly committed to improving the standards for lactation education and provided useful responses to requests for assessments. Likewise, the fact that the investigator facilitated the focus group discussions with participants and program planning committee members could reduce the usefulness of the data collected. However, the researcher again emphasized the purpose of the activities was to improve the program and the focus group participants shared many candid recommendations.

An advantage of an evaluation conducted by someone who is very familiar with the program is that the evaluation instruments can more closely capture the emphasis of the program and thus provide more useful information regarding the attainment of the goals of the program. Many continuing education programs are evaluated by the programs' developers/presenters/coordinators. The Program Evaluation Standards caution that a common error related to the stand regarding conflict of interest is "excluding persons who are uniquely qualified to be involved in the evaluation solely because of the fear of conflict-of-interest allegations" (Joint Committee on Standards for Educational Evaluation, 1994, p. 116). The Joint Committee recommends a meta-evaluation in cases where conflict of interest is of concern (1994).

Ultimately, however, the consumers of this report will make judgements as to the validity of the findings. The investigator was committed to disclosing potential conflicts of interest so that readers can make informed assessments.

Definition of Terms

In this study the following terms were used as defined:

Continuing education refers to all instructional activities in which practitioners might engage after completing a basic preparation program of education. Some continuing education programs are instrumental in expanding basic credentials (e.g., registered nurses can become certified in a specific clinical area by participating in continuing education programs.)

Evaluation is the process of systematically collecting information to describe and determine the effectiveness (merit, worth, value) of an educational program in order to assist in making decisions concerning the improvement of the program.

Formative evaluation is the evaluation process completed during the development or revision phase of a program with the purpose of improving the program.

Stakeholders are the various individuals and groups who have a direct interest in and may be affected by the program being evaluated or the evaluation's results.

Evaluation Standard refers to a principle mutually agreed to by people engaged in the professional practice of evaluation. If a standard is met, it will enhance the quality and fairness of an evaluation (Joint Committee on Standards for Educational Evaluation, 1994).

Summative evaluation is the evaluation process completed after the presentation of a program. The intention of the process is to improve future programs and or educational activities.

Organization of the Dissertation

The report of this study consists of five chapters. Chapter 1 contains the introduction, a description of the educational program that was evaluated, and the theoretical underpinnings of the program development. The statement of the problem, the purpose of the study, the significance of the study, limitations of the study, and definitions of terms conclude the first chapter. Chapter 2 reviews approaches and models for evaluations. The chapter includes a synthesis of selected evaluation approaches that informed this study. Chapter 3 discusses the methods and the investigative procedures for the study. Chapter 4 reports the results of the qualitative and quantitative evaluation data. The final chapter elucidates the significant findings of the study as related to the study questions, and delineates the limitations of the study. Implications for practice are outlined and recommendations for future research are presented.

CHAPTER TWO

REVIEW OF THE LITERATURE

This chapter reviews approaches and models used in evaluations. The chapter includes a synthesis of selected evaluation approaches that inform this study. Questions that direct the study are identified at the conclusion of this chapter.

History of Educational Evaluation Approaches

Evaluation is not a new concept. The history of formal evaluation can be traced back to 2000 B.C., when Chinese officials conducted civil service examinations to measure proficiency of public officials. In the fifth century, Socrates and other Greek teachers used verbally mediated evaluation as part of the learning process (Worthen, Saunders, & Fitzpatrick, 1997). Three periods in the development of formal evaluation of educational programs in the United States can be defined: (1) prior to 1900, (2) 1900 to 1964, and (3) 1965 to the present.

Prior to 1900

In 1845, the earliest attempt to evaluate school performance, known as the Boston Survey, was undertaken by Horace Mann and the Boston School Committee in Boston. This evaluation sought to assess the quality of the Boston school system by measuring student achievement. Thus began a tradition of using students' test scores as an cardinal data source to evaluate the effectiveness and quality of educational programs (Madaus, Scriven, & Stufflebeam, 1983). In the late 1800's efforts to accredit secondary schools and universities began. However, the movement was not particularly influential until several strong regional accreditation associations were established in the 1930's (Worthen, Saunders, & Fitzpatrick, 1997).

1900 to 1964

In the early twentieth century, the idea of scientific management became a powerful force in both education and industry. The utilization of measurement technology to determine human abilities became prevalent. If something could be measured, it immediately gained credibility. Edward Lee Thorndike popularized standardized testing for evaluating schools (Madaus, Scriven, & Stufflebeam, 1983). In 1910, Flexner (backed by the American Medical Association and the Carnegie Foundation) evaluated 155 medical schools resulting in scathing descriptions of deplorable conditions (Worthen, Saunders, & Fitzpatrick, 1997). The Flexner evaluative report became a critical catalyst in moving medical education from apprentice programs into universities.

The Eight-Year Study (1932-1940) of thirty high schools was directed by Ralph Tyler who, in the evaluation study, created criterion-referenced testing with the development of outcome objectives ((Madaus, Scriven, & Stufflebeam, 1983). Mager (1962) operationalized Tyler's theory with the development of specific behavioral objectives as predictors of performance. Tyler is often referred to as the father of educational evaluation (Madaus, Scriven, & Stufflebeam, 1983). Evaluation was conceptualized by Tyler as a comparison of intended outcome with actual outcomes.

Carol Weiss notes that early policies to improve social conditions did not include provisions for evaluation (1998). Reformers in the late 19th and early 20th centuries used social science research procedures primarily to conduct surveys in order to document the extent of problems and locate people in need. Weiss notes that they assumed that the remedies they provided would solve the problems and only limited investigation was

conducted to determine if purification of water, prohibition of child labor, and even social services provided at Jane Addam's Hull House were beneficial.

By the 1950's, the federal government was encouraging curriculum reform in public schools in response to fears regarding American scientific illiteracy in the wake of the Soviet's launching of the *Sputnik* satellite. Weiss notes that the evaluation of some of these curriculum improvement programs were some of the first funded evaluations (1998).

1965 to Present

Formal evaluation programs became more visible during the mid 1960's when the United States government instituted a variety of Great Society programs to improve social and economic conditions for less privileged Americans. Substantial public funding for these programs compelled the government to require periodic evaluations to determine if the programs were "working." Gredler notes that the curricular and social programs of the late 1960's and early 1970's were based on the assumptions that (1) social change can be brought about by social engineering, (2) social science theories can identify the causes of problems, (3) well-defined interventions will be implemented uniformly in different sites, and (4) evaluators can compare the various sites and provide clear recommendations to administrators (1996, p. 29). Subsequent reviews of curriculum and program evaluation during this time period revealed errors in the basic assumptions related to developing solutions to educational problems and highlighted challenges in the evaluation process which changed both the focus and breadth of evaluation.

The use of qualitative methods in addition to quantitative methods has strengthened the evaluation process. Bogdan and Biklen (1982), Fetterman, Kaftarian,

and Wandersman (1996). Guba and Lincoln (1985). Patton (1990). Stake (1986, 1995). and Strauss and Corbin (1998) emphasized the contributions that qualitative methods could bring to the evaluation process. A variety of evaluation theories and approaches burgeoned to meet the specific needs in a variety of areas.

Cost-benefit analysis in the Department of Defense under the direction of Robert MacNamara heralded important advances in methods of economic analysis. Public policy makers became accountable not only for outcomes of programs, but also the ratio of expense to benefits became noteworthy. Since the Government Performance and Results Act of 1993, federal agencies are required to establish annual quantitative performance targets and report annually on actual results (Wholey, Hatry, & Newcomer, 1994).

With the passage of the Elementary and Secondary Education Act of 1965, formal evaluations of educational programs were mandated with the receipt of federal funds (Weiss, 1998).The precedent persists and gathers more strength in the new millennium.

The American Evaluation Association was established in 1986 and professional evaluation organizations on several continents have been developed to provide a forum for evaluators to share their work and discuss issues that advance the state of the field. The Program Evaluation Standards, second edition, by the Joint Committee on Standards for Educational Evaluation provides the "gold standard" for assessing evaluations (1994). Representatives from sixteen education, counseling, and psychological organizations compose the Joint Committee.

The process of formally evaluating educational programs has its roots in the social reform programs of the twentieth century. Professional evaluation has become multi-disciplinary. "Evaluation moved from monolithic to pluralist conceptions, to multiple

methods, multiple measures, multiple criteria, multiple perspectives, multiple audiences, and even multiple interests" (House, 1983, p. 3). Although the discipline could be described as young, many advances and developments have been achieved in its short history. Contemporary leaders in the field urge continued investigation and development to meet the growing need for evaluation processes with high quality evaluation services.

Approaches and Models for Evaluations

Evaluation has been described as the "process of determining the merit, worth, or value of something, or the product of that process" (Scriven, 1991, p. 139). Numerous approaches, standards, and models have been used to guide the evaluation process. The following section provides an overview for a variety of approaches to evaluation.

Positivist and Constructivist Approaches

Several models and approaches can be organized aligning them with positivist and constructivist philosophies. Positivism is a doctrine in the philosophy of science that values observations and logic whereas constructivism is a doctrine in the philosophy of science that emphasizes how people construct knowledge (and reality). Internal processes and "seeing events from the inside" are highly valued (Scriven, 1991, p. 187).

Positivist Approaches

Systems analysis model (Input-output model). Early evaluation efforts focused on reviewing the input into the educational system and then measuring the output or achievement. Tyler's evaluation approach, introduced in the 1930s, emphasized a logical sequence of evaluation which included establishing goals or objectives, defining the objectives in behavioral terms, selecting measurement techniques, collecting data, and

comparing performance data with behaviorally stated objectives (Tyler, 1983). The approach is limited when documenting internal changes such as attitudes, confidence, persistence, etc.

The systems analysis model oversimplifies the complex social context in which education occurs. When multiple variables are considered during the planning phase of educational programs, the input can be customized for individual situations which improves the effectiveness of the offering. Thus, assessment of intervening variables has become an important aspect of educational evaluation (Cervero, 1986).

The Office of the Assistant Secretary for Program Evaluation often relied on a single indicator as an index of program effectiveness. Long range outcomes of early childhood programs (to improve the economic and occupational status of poor children) could not be measured in short term evaluations so proxy indicators such as IQ scores and achievement tests were used (Gredler, 1996). Using such a uni-dimensional outcome did not allow identification of the varied changes that occurred among the participants.

Goal-based or objectives-based evaluation. In order to design an evaluation for a specific program, evaluators have used clearly stated goals and objectives and then measure the degree to which such goals and objectives are achieved. Goal-based evaluation in its simplest form can be merely monitoring the program to determine if it has met its goals. However, Scriven (1991) asserts that an evaluation process should also critically investigate the merit of the goals. Are there inconsistencies or false assumptions? Have the goals changed over time? Are there additional benefits (side-effects) of the program that do not relate to the original goals? Scriven also warns that goal-based evaluations are often manager/educator based rather than consumer-oriented.

Posavac & Carey (1997) note that the evaluator may be so focused on the stated goals that they neglect to examine why programs succeed or fail and to consider additional positive and undesired side-effects of the programs. Although goal-based or objectives-based evaluations can provide initial feedback regarding identified criteria, the approach does not provide a comprehensive overview of program outcomes.

The "black box" model. "Black box" evaluation refers to processes that examine the output of a program without examining its internal operation (Scriven, 1991). This is similar to the industrial inspection model in which a product is inspected at the end of the production line. Since the evaluation information is not available until the product or program is completed, program improvement can only be considered for subsequent projects. "Fixing" less-than-optimal performance is inefficient and leads to higher costs because recommendations based on the evaluation process are not available until the product is created. When evaluation occurs only at the end of the production, and if the product needs improvement, one must start the process over from the beginning.

Social science research model. In an effort to make evaluations more rigorous, some evaluators have turned to experimental formats. To determine a program's success, in its ideal form, two random groups were formed, providing one with an intervention while using the other as a control group. If there were statistically significant differences between the two groups at the conclusion of the program, the program was deemed effective (Worthen, Sanders, & Fitzpatrick, 1997).

The strength of this model relates to the quasi-experimental format which helps to clearly differentiate the effectiveness of an intervention. However, there are several shortcomings with the social science research model when used to evaluate educational

programs. Using this approach programs may be considered ineffective due to the lack of sensitivity of the evaluation tool. If the evaluation process is faulty, there are few safeguards to protect the credibility of the program. It is difficult, if not impossible, to control for intervening variables. Furthermore, many employers who are planning educational programs do not wish to have only a portion of their employees participate in an educational program. Although the social science approach has the potential to introduce great rigor and objectivity into program evaluation, it is frequently not used in its pure form.

Fiscal evaluation and accountability models. In this approach, the program is evaluated in terms of financial investment and the return on the investment (Madaus, Scriven, & Stufflebeam, 1983). Although fiscal evaluations remind evaluators that costs can never be ignored, it is difficult to place a dollar value on providing optimal care for childbearing families or a child's improved geography skills. The accountability model was developed from legislation that required programs to be accountable to governmental agencies that would determine if effective services were being provided for groups identified when the services were created. Since accountability evaluations focus on compliance with regulations, the model is not universally applicable. However, the contractual nature of the model is frequently utilized when evaluating programs financed though grants and foundations.

Dale (1998) identifies four core variables when determining the cost-effectiveness of evaluation: (a) efficiency, (b) relevance, (c) effectiveness, and (d) sustainability. Efficiency addresses the "amount of outputs created and their quality in relation to the resources (capital and personnel) invested." Relevance refers to "to what extent the

program or project is addressing or has addressed problems of high priority, as viewed by stakeholders, particularly the program's or project's beneficiaries..." Effectiveness expresses "to what extent the planned outputs, expected effects and intended impacts are being or have been produced or achieved." Sustainability means "the maintenance or augmentation of positive changes induced by the program or project after the latter has been terminated" (p. 41-45).

The costs in relation to the accomplishments are critical to assess. The fiscal evaluation and accountability model expands cost-effectiveness issues by looking closely at the relevance of the accomplishments to the needs of the target population. The evaluator needs to consider if the resources that have been used might have been used with greater advantage in alternative programs. Investigating relevance also involves looking at concurrent programs and determining how well the program dovetails with others. For example, a program to improve parenting skills among incarcerated women would be more relevant if it used a "twelve step" format if the participants were also participating in a "twelve step" drug and alcohol abuse treatment program. Sustainability is a key factor and must be considered in all evaluations. Although short-term changes and accomplishments are laudable, performance sustained over time is preferable.

Constructivist Approaches

Goal-free evaluation. In the purist form of goal-free evaluation, the evaluator is not told the purpose of the program but does the evaluation with the purpose of finding out what the program actually accomplishes (Scriven, 1991). The evaluator spends a considerable amount of time observing the program, not unlike the way an anthropologist works while living in a particular culture for the first time. This is sometimes referred to

as a naturalistic model (Prosavac and Carey, 1997). Due to its time-intensive nature, it tends to be very expensive and the reports often become quite lengthy.

One of the advantages of this type of evaluation is that it improves the detection of side-effects of the intervention. Evaluators focus on what the program is actually doing rather than what it is supposed to be accomplishing. Evaluators often dislike the pure form of goal-free evaluation due to the lack of predetermined structure in completing the evaluation and fear that they may not discover the already-identified effects of the program and thus look less-than-competent. Educators may become anxious that the standards of success that were built into the contract for the program may not be addressed. Goal-free evaluation is more needs-based due to the emphasis on determining the needs of the population served as a prerequisite for identifying the evaluation criteria (Scriven, 1991).

In goal-free program evaluation, the evaluator does not know the purpose of the intervention. Of course, the evaluator often has some idea of the general goals of the program (e.g., teaching math to fourth-grade students). But the specific goals would not be previously identified (e.g., influence of gender-related approaches.) Scriven (1991), who cautions against goal-based evaluations, admits that a hybrid form of goal-based and goal-free evaluation approaches can produce an effective evaluation methodology. He notes value in using a goal-free *strand* in an evaluation so the benefits of the approach are realized while minimizing discomfort in evaluation team and the education team.

Countenance framework. Stake asserted the two "countenances" of evaluation were description and judgment (1967). To aid the evaluator in organizing data collection and interpretation, Stake recommended that the evaluator describe the antecedents

(background of program, the rationale for program's existence), the transactions (activities, processes) and outcomes. The described observations are then compared to standards (expectations, performance of comparable programs) to form a judgement for the evaluation. Stake highly values qualitative descriptions and in-depth examinations such as case study approaches (1995). With the emphasis on rich description, Scriven notes that the process of evaluation may receive more attention than the informational outcomes (1991).

Utilization-focused evaluation. Michael Quinn Patton (1997) emphasizes that the evaluation process should focus on how the results of the evaluation will be used. He states the purpose of program evaluation is "to inform decisions, clarify options, identify improvements, and provide information about programs and policies within contextual boundaries of time, place, values and politics" (p. 24). Utilization should inform each phase of the evaluation process.

The intended use of the findings will inform the choice of evaluation model. Patton notes that there are three primary uses of evaluation findings: a) rendering overall judgements; b) facilitating improvements; c) generating knowledge (1997, p. 65). The use of the evaluation findings, as well as the intended users, should be considered when planning an evaluation.

Stakeholder analysis. Evaluation stakeholders are people who have a vested interest in evaluation findings which may include program funders, staff, administrators, and program participants (Patton, 1997). Scriven (1991) defines a stakeholder as one who has substantial ego, credibility, power, or other resources invested in the program. He also notes that opponents to a program are also stakeholders because they have a

vested interest in the program's lack of success. Knox notes that early involvement by stakeholders in planning an evaluation contributes to "the responsiveness of the evaluation to issues important to stakeholders, useful viewpoints on program features and use of conclusions to implement recommendations" (1998, p. 17). Stakeholders are invested in the future direction of the program and deserve to play a role in determining that direction by (a) identifying concerns and issues to be addressed in evaluating the program, and (b) selecting the criteria and variables that will be used in judging its value (Worthen, Sanders, & Fitzpatrick, 1997, p. 56). Patton (1997) has pointed out that evaluators need to identify stakeholders and involve them early, actively, and continuously.

Patton (1997) recommends that the stakeholders be assessed to determine who is likely to use the evaluation information. He cautions that formal position and authority are only partial guidelines in identifying intended uses. He recommends that people who are enthusiastic, committed and interested should be included in the evaluation throughout the process.

Expert Opinion Model - Blue Ribbon Panels. In the expert opinion model, a knowledgeable person carefully examines a project and renders a judgement about its quality (Worthen, Sanders, & Fitzpatrick, 1997). Commonly used with art and literary criticism, objectivity can be challenging. If evaluators are knowledgeable in the field, they often have personal biases that they must consciously set aside during the evaluation process. Expert opinion can be utilized during the formative and summative phases of evaluation. This model is often used when the entity being evaluated is large, complex,

and unique. For example, university accreditation recommendations are made by a team of experts who examine numerous aspects of a complex institution. Having a team of experts reduces the influence of individual biases.

Blue-ribbon panels are formed with a group of experts from the field that is being evaluated. Specialists bring unique insights to evaluating content and special requirements in specific fields. Worthen, Sanders, and Fitzpatrick note that panels of experts provide more effective assessments if they are given structured guidelines to guide their evaluation focus (1997).

Empowerment evaluations. Empowerment evaluation involves the "use of evaluation concepts, techniques, and findings to foster improvement and self-determination" (Fetterman, Kaftarian, & Wandersman, 1996, p. 4). Empowerment evaluation is designed to help people (and organizations) help themselves and improve their programs using a form of self-evaluation and reflection. Program participants conduct their own evaluations; an outside evaluator often serves as a coach or facilitator. Participatory evaluations emphasize collaboration between professional educator and professional evaluators (Cousins & Earl, 1995).

Improvement-focused model. Prosavac and Carey (1997) have adopted a model in which program improvement is the focus of the evaluation rather than particular methodologies. They assert that improvements can be made in programs when discrepancies are noted between what is observed and what was planned, projected, or needed. They note:

> evaluators help program staff to discover discrepancies between program objectives and the needs of the target population, between program implementation and program plan, between expectations of the target population

and the services actually delivered, or between outcomes achieved and outcomes projected (Posavac and Carey, 1997, p. 27).

Discrepancies provide a valuable focus for improvement and Posavac and Carey state that the improvement-focused model best meets the criteria for effective evaluation - serving the needs of the stakeholders and providing valid information (1997). They note that this approach can be threatening to the staff, especially if only discrepancies are emphasized, without recognizing what is "working."

Formative and Summative Evaluation Approaches

If the purpose of the evaluation findings is to improve and enhance programs rather than rendering definitive judgment about their effectiveness, a formative evaluation approach is recommended. If the purpose of the evaluation findings is to determine merit or value of a program, a summative approach is recommended (Scriven, 1991). Summative evaluations judge the overall effectiveness of a program and are particularly important in making decisions about continuing or terminating an experimental program or demonstration project. Patton (1997) points out that the summative-formative distinction has not always been clearly noted with widespread use of the terms.

Michael Scriven states that a summative evaluation of a program is conducted *after* completion or stabilization of a program and *for* the benefit of some external audience or decision-maker (1991). He states that when a summative evaluation is done of a program that has stabilized but is still running, the aim is to report *on* the program, not report *to* it. In contrast, formative evaluation is typically conducted *during* the development or improvement of a program and it is conducted *for* the in-house staff of the program with the intent to improve. Thus, the chronology of the evaluation and the

intended audience for the evaluation are critical considerations when determining the focus of the evaluation process. He refers to Stake's analogy of the distinction between formative and summative evaluation: "When the cook tastes the soup, that's formative; when the guests taste the soup, that's summative" (quoted in Scriven, 1991, p. 169).

CIPP Evaluation Model.

This is a comprehensive model (Stufflebeam, 1983) that adds a contextual component to program evaluation and emphasizes formative and summative evaluation throughout the process. The CIPP model addresses four aspects of a program evaluation including the

(C) context of a program. (What are the goals of a program?)

(I) input for a program (What resources are available?)

(P) process in a program (How well is the plan being implemented?)

(P) product of a program (What are the results from the program?)

Scriven notes that the CIPP model was "probably the first sophisticated model for program evaluation and possibly still the most elaborate and carefully thought-out model extant" (1991, p. 81). The contextual aspect of this evaluation model encourages a rich description of variables related to the background and current circumstances associated with the development and presentation of the program. The emphasis on formative and summative evaluation helps bridge process and impact evaluation models.

Approaches Used in the Current Study

The investigator synthesized concepts from numerous approaches and models to develop an evaluation process for the Breastfeeding Educator Program™. Although facets of several strategies were utilized, the models and approaches that most closely

informed the evaluation process used in this study include: utilization-focused evaluation, stakeholder analysis, expert opinions, empowerment and self-assessment, improvement focused with formative and summative phases, and CIPP. Furthermore, this study assessed more than one level of evaluation as described by Kirkpatrick (1998). Kirkpatrick identifies four increasingly complex levels of evaluation: (1) Reaction Level: evaluates how participants reacted (satisfaction/dissatisfaction); (2) Learning Level: evaluates the learning of knowledge, skills, and attitudes; (3) Behavior Level: evaluates changes in behavior and performance; and (4) Results Level: evaluates the results in the organization (1998, p. 2).

This study adopted an improvement-focused approach and used panels of experts and self-assessment activities to develop recommendations that could be utilized by identified stakeholders. The context of the program, available resources, the implementation of the program plan, and the product of the program were addressed in this study. The product of the program was measured on several levels including reaction, learning , behavior, and results. Standards developed by professional education organizations and health care education organizations for developing and assessing the effectiveness of evaluation processes were also incorporated in this study.

Standards for Evaluation

The Program Evaluation Standards serve as a reference for assessing an evaluation process (Joint Committee on Standards for Education Evaluation, 1994). Criteria to support the program evaluation standards focused on standards for utility, feasibility, propriety, and accuracy (1994).

In 1991 the American Nurses Association created a credentialing commission on accreditation of continuing education programs. This commission developed Standards for Nursing Professional Development: Continuing Education and Staff Development (1994) which serve as a guideline for member agencies to accredit continuing education programs. When a program meets the criteria set forth in the standards, it receives approval to grant continuing education credits to participants. Many health care professionals are required to document continuing education activities for periodic relicensure and recertification. Professional organizations have developed minimum evaluation standards for continuing education programs in order for the participants to receive recognition for their participation.

Summary

A review of the relevant literature revealed numerous approaches and models that are used in evaluations. Since no models were available for the unique needs of the Breastfeeding Educator Program.™, the investigator synthesized several evaluation approaches. Priorities for the evaluation process used in this study were to identify strategies to improve the program, and to determine if behavioral and performance changes occurred and were sustained over time. Input from a variety of stakeholders was also sought.

Study Questions

The questions that were investigated in this study reflected the key principles of evaluation of educational programs as identified in the literature. This study addressed questions at two different levels of analysis. The first group of questions addressed the effectiveness of the Breastfeeding Educator Program™ (BEP).

1. Did the content of the BEP core curriculum meet high standards for scope and currency?

2. Did the BEP conform to relevant professional and ethical guidelines?

3. Did the BEP conform to standards for effective instructional design?

4. Did program participants show changes in knowledge, attitude, behavior, and confidence in skills following attendance at the BEP?

5. Did program participants perceive that they achieved the instructional objectives of the BEP?

6. Were program participants satisfied with their experience in the BEP?

The second group of questions addressed the effectiveness of the evaluation process.

7. Was the evaluation process conducted in a systematic manner?

8. Did the evaluation discuss the context of the program and identify the primary stakeholders?

9. Did the evaluation process follow practical and feasible means for collecting evaluative information?

10. Was the evaluation conducted in an ethical manner, with regard for the welfare of those involved and was the evaluation conducted in a fiscally responsible manner with the allocation and expenditure of resources being appropriate and accountable?

11. Did the evaluation determine the reactions of the participants to the program, changes in knowledge, skills, and attitudes, changes in behavior and performance, and changes within organizational systems? (Were multi-level responses addressed?)

12. Did the evaluation process convey technically adequate information about the features that determine the worth or merit of the program?

13. Were the findings summarized and reported to the stakeholders?

14. Did the evaluation process provide useful information and improvement recommendations for the program stakeholders?

15. Were the stakeholders satisfied with the evaluation process?

CHAPTER 3

METHOD

This study used a systematic approach to evaluate a continuing education program for health care providers. The study can be conceptually divided into the formative evaluation phase and the summative evaluation phase. The formative evaluation processes critiqued the core program. The summative evaluation processes were completed using data that were collected from participants, local program planners, and clinical supervisors after the program was presented. See Figures 1 through 3.

The methodology of this study focused on determining the effectiveness of the Breastfeeding Educator Program™, identifying strategies to improve the program, and assessing the effectiveness of the evaluation process. This chapter describes the methods employed to achieve the purposes of the study.

Participants

This study took place in the Spring and Summer of 2001 in three primary locations in the Midwest United States. Some data were collected from content experts and participants who live throughout the United States. However, the majority of the data were collected from people living in the Midwest United States.

The major stakeholders in the evaluation process included the Breastfeeding Educator Program™ development and presentation committee, local program planning committees (representing the sponsoring agencies in the various venues), program participants, the clinical supervisors and administrators of the program participants (because they often make financial decisions about funding continuing education programs for their staff) and professional organizations which approve continuing

education credit for health care providers. Since the evaluation of the program was conducted under the auspices of the Institutional Review Board at the University of Oklahoma and since the study was in partial fulfillment of the requirements for an advanced degree from the University of Oklahoma with faculty advisors assisting with the planning, implementation, analysis and interpretation of the data, and reporting the of the process, the University of Oklahoma and the faculty advisory committee became stakeholders in the process.

Two-hundred forty-four people participated in this evaluation in some capacity. Since the specific number of participants varied depending on the phase of the evaluation process and measurement instrument used, specific numbers for each of the evaluation processes are reported with the description of each instrument.

Instruments

A variety of data collection techniques were used in this study. Numerous surveys, questionnaires, and focus group discussion guides were developed by the researcher for this study. The surveys are described first, noting development procedures and intended audience for each. Then the focus group format is described. Content validity for the instruments was established by having experts review the tools, revising the tools, pilot testing the tools and revising the tools again. Experts reviewed the tools again and indicated that the content was valid for what the tools were attempting to measure. The formative evaluation instruments will be discussed first.

Formative Evaluation Measures

An effective formative evaluation can provide input for improving a program before it is presented. Experts in the field of lactation management education and

educators with expertise in continuing education programing for adults and instructional design evaluated the core program using evaluation tools developed by the investigator. The panels of experts had access to a program curriculum guide, descriptions of the program, standard contract letter with sponsoring agencies, and the Resource Manual for the Breastfeeding Educator Program™ (participant manual). Most of the content experts and one of the education experts attended the program presentation and shared their observations regarding the implementation of the program plan. Some of the data for the questionnaires were collected informally through discussions and by telephone conversations.

Content Review of the Core Program Questionnaire

This tool was developed to request specific assessments regarding the content of the core curriculum from content experts among lactation management educators. The questionnaire contained ten statements and the respondents were requested to circle the number on a Likert scale that reflected their level of agreement or disagreement with each statement. Responses could range from 1 (strongly agree) to 5 (strongly disagree). The midpoint was labeled "I'm not sure." The "I'm not sure" response was not treated as a "not applicable" response, because the investigator wanted to be aware if inadequate or confusing materials were shared with the panel of experts. Comments were requested regarding each statement. (See Appendix F.)

Ethical Considerations and Professional Guidelines Questionnaire for Continuing Education Programs in Breastfeeding Management

Specific ethical considerations that should be addressed in a breastfeeding management education program were identified in this questionnaire. This tool

incorporated guidelines and codes to guide conduct related to breastfeeding education issued by the World Health Organization (1981), the World Alliance for Breastfeeding Action (1995), the International Board of Lactation Consultant Examiners (1998), and the International Lactation Consultants Association (2001). Breastfeeding management educators used this tool to assess the compliance of the program with these standards that address potential conflict of interest from formula and pharmaceutical industry funding of educational programs, protection of breastfeeding mothers and babies during conferences, and recommended considerations for consumers of lactation management education. The questionnaire contained thirteen statements and the respondents were requested to circle the number on a Likert scale that reflected their level of agreement or disagreement with the statement. Responses could range from 1 (strongly agree) to 5 (strongly disagree). The midpoint was labeled "I'm not sure." Comments were requested regarding each statement. (See Appendix G.)

There were four experts in lactation management education who completed the Content Review of the Core Program Questionnaire and the Ethical Considerations and Professional Guidelines for Continuing Education Programs in Breastfeeding Management Questionnaire. Technically, these surveys were anonymous, however, with so few people completing them and with the discussion that ensued, the participants identities were known by the investigator.

Instructional Design of the Core Program Questionnaire

Principles of instructional design, adult education, and program planning were evaluated with this tool. Educators with expertise in instructional design and continuing education programing used this tool to guide their assessment of the program. The

questionnaire contained fourteen statements and the respondents were requested to circle the number on a Likert scale that reflected their level of agreement or disagreement with the statement. Responses could range from 1 (strongly agree) to 5 (strongly disagree). The midpoint was labeled "I'm not sure." Comments were requested regarding each statement. (See Appendix H.)

Code of Ethics for Educators of Adults

The same panel of education experts that completed the Instructional Design Review of the Core Curriculum questionnaire completed the Code of Ethics for Adult Educators Checklist. The checklist contained 36 statements that were participant focused, sponsor focused, or profession focused. The experts used a four point code to indicate their assessment of the extent that the criteria were addressed in the program. Comments were requested regarding the ethical considerations related to the program. (See Appendix I.)

There were three education experts who completed the Instructional Design Review of the Core Program Questionnaire and the Code of Ethics for Adult Educators Checklist. Although these surveys were technically anonymous, there were so few people completing them and since considerable discussion ensued, the participants identities were known by the investigator.

Figure 2 displays the formative evaluation processes. Table 1 summarizes the tools and data sources utilized in the formative evaluation phase.

Table 1

Summary of Evaluation Tools and Data Sources Utilized in the Formative Evaluation Phase

Name of Tool (Appendix Reference)	Data Source
Content Review of the Core Program Questionnaire (F)	Content Experts
Ethical Considerations - Professional Guidelines Questionnaire (G)	Content Experts
Instructional Design of the Core Program Questionnaire (H)	Education Experts
Code of Ethics for Adult Educators Checklist (I)	Education Experts

Summative Evaluation Measures

Summative evaluations, completed after the program has been presented, provide important information for improving future offerings. Since the Breastfeeding Educator Program™ is repeated many times each year, the evaluation included processes that could provide information for program improvement with future presentations.

Participants in continuing education programs for adults are important stakeholders in the evaluation process. Many times participants fund their educational activities and even if funding is provided by an employer, adults do not like to have their time wasted. They want well organized, meaningful education experiences that help improve their performance. Therefore, this study placed much emphasis on participant evaluation, especially in the summative evaluation phase.

In addition to the three evaluation processes completed by participants, local planning committee members and clinical supervisors of program participants were requested to provide summative evaluation data. The participant evaluation processes will be discussed first.

Pre-Program, Immediate Post-Program, and Delayed Post-Program Participant Surveys

A series of three surveys was developed that each contained 105 statements related to breastfeeding management knowledge and attitudes. Respondents were requested to circle the number on a Likert scale that reflected their level of agreement or disagreement with the statement. The scales were anchored with "strongly agree" and "strongly disagree." The midpoint was labeled "I'm not sure." The "I'm not sure" choice was not treated as a "not applicable" response because after participating in the program, respondents should "be sure" and either "strongly agree" or "strongly disagree" with the

statements related to knowledge and attitudes. The Pre-Program and Delayed Post-Program Surveys also contained 17 statements regarding the participant's perceptions of their clinical practice, and 11 statements describing the participant's clinical community practice during the prior month. Respondents were requested to circle the number on a labeled Likert scale that reflected their response. These surveys were pilot tested with 23 maternal-child staff nurses in a hospital in Oklahoma City, Oklahoma. Revisions for clarity and content were made using their recommendations.

The Pre-Program Participant Surveys were completed by 197 participants immediately prior to starting the Breastfeeding Educator Program™. The Immediate Post-Program Participant Surveys were completed by 207 participants immediately after completing the program. The Delayed Post-Program Participant Surveys were mailed to the study participants so that they would arrive one month after completing the program and 72 participants returned the delayed post-program surveys. (See Appendices J, K, and L.)

Program Evaluation Tool

This tool was modified from a tool developed for an application for continuing education credit approval from a member of the American Nurses Credentialing Center's Commission on Accreditation. In addition to requesting information regarding the participant's clinical/community practice setting, health care credentials, and degrees earned, 17 statements describing their experience in the program were listed with a request for respondents to circle the number on a Likert scale that reflected their level of agreement or disagreement with each statement. Responses could range from 1

(strongly agree) to 5 (strongly disagree). The midpoint was labeled "I'm not sure." Comments in response to the 17 statements were requested.

Three open-ended questions about the program were included. Specific session evaluations were also included in this tool. Three to five learning objectives were listed for each of the fifteen sessions in the program. Respondents were requested to circle a number that reflected their assessment of their achievement of the learning objective, the relevance of the objectives to the program purpose and goals (the goals and purpose were listed in the tool), the effectiveness of the teaching methods, and the teaching effectiveness of the presenter. An open-ended question concluded this tool. (See Appendix M.)

Clinical Supervisors' Post-Program Assessment Survey

The Clinical Supervisors' Post-Program Assessment Survey contains 14 statements related to each of the goals listed in the Program Planning Committee's Priorities Survey. The clinical supervisors for participants of the program were instructed to complete one survey that summarized improvements they may have observed in their staff since attending the program. Two statements that related to client satisfaction and staff satisfaction were also included. The respondents were requested to circle the number on a Likert scale that reflected their observations regarding improvement related to each of the statements. Responses could range from 1 (noticeable improvement) to 5 (no improvement). The midpoint was labeled "some improvement." A "not applicable or no opportunity to observe this potential outcome" was also an option. If the "not applicable" option was selected, it was entered as missing data with no numerical value. An open-ended request

for observations related to commitment, knowledge, attitudes, performance, confidence, and satisfaction was solicited at the conclusion of the survey. (See Appendix N.)

Program participants were asked to identify the person who completed their last performance evaluation with them in their clinical setting as their clinical supervisor. The participants were reassured that their supervisors's questionnaire would be anonymously returned and that supervisors would assess all staff who attended the Breastfeeding Educator Program™ as a composite group. These reassurances were an attempt to decrease anxiety that is often experienced when others are evaluating one's performance. The vast majority of the participants who completed the immediate post-program surveys included the name and mailing address for their clinical supervisors. Twenty-two surveys were returned.

Participant Focus Group Discussion Guide

A discussion guide for a focus group composed of program participants addressed program content, application of principles of adult education, and use of teaching strategies. (See Appendix O.) The focus groups were facilitated by the investigator immediately after completing the program because many of the participants were from distant facilities and would not return for a focus group after leaving the program site. Having the researcher who was also the presenter facilitate the focus groups was not an ideal choice. However, the investigator emphasized that the purpose of the focus group discussions was to improve future programs. Participants were very candid with their suggestions. A total of 14 people participated in two focus group discussions.

Program Planning Committee Members Focus Group Discussion Guide

A discussion guide for a focus group composed of local program planning

committee members addressed achievement of learning goals as previously prioritized by the committee members in The Program Planning Committee's Priorities Survey, application of principles of adult education, use of learning activities, comparison of program's cost-benefit ratio, strengths and weakness of the program.. (See Appendix P.) Most of the planning committee members attended the entire program presentation. Some attended only portions of the program. All members had access to the Resource Manual for the Breastfeeding Educator Program™. Field notes were taken during the focus group discussions. A total of 12 planning committee members participated in the focus group discussions in three locations. An important summary discussion point was whether planning committee members would consider sponsoring the program again.

Figure 3 displays the evaluation processes related to the summative evaluation phase. Table 2 summarizes the tools and data sources utilized in the summative evaluation process.

Table 2

Summary of Evaluation Tools and Data Sources Utilized in the Summative Evaluation Process

Name of Tool (Appendix Reference)	Data Sources
Pre-Program Participant Survey (J)	Program Participants
Immediate Post-Program Participant Survey (K)	Program Participants
Delayed Post-Program Survey (L)	Program Participants
Program Evaluation Tool (M)	Program Participants
Clinical Supervisors' Post-Program Assessment Survey (N)	Clinical Supervisors of Program Participants
Focus Group Discussion Guide (O)	Program Participants
Focus Group Discussion Guide (P)	Local Program Planning Committee Members

Procedures

The purpose and design of the study was orally explained to all study participants. They also received informed consent letters which they signed and returned or, in the cases of anonymous tools, they were informed that returning the tool indicated their consent to participate in the study. All participants kept a copy of the consent letter that described the confidentiality safeguards, the amount of time required, potential risk and benefits of participation, the procedure for terminating from the study, and information for contacting the Institutional Review Board of the University of Oklahoma.

Several surveys were returned to the investigator in person. The following instruments were returned by mail: Program Planning Committee's Priorities Survey, Learning Needs Assessment Survey, Delayed Post-Program Participant Survey, and Clinical Supervisors' Post-Program Assessment Survey. The return rate was significantly reduced for tools that were returned by mail. Although a self-addressed, stamped envelope was enclosed, the on-site data collection may have benefitted from the positive influence of convenience, completing tasks in a group, and the personal connection with the investigator.

Protection of Human Subjects

The study design was approved by the Institutional Review Board of the University of Oklahoma Office of Research Administration which insures that participants' rights are protected. An approval letter from the Institutional Review Board of the University of Oklahoma Office of Research Administration is included in Appendix R.

Data Analysis

The quantitative data was analyzed using descriptive statistics, within-subjects analysis of variance (ANOVA) and dependent t-tests. The qualitative data were coded, sorted, compared, contrasted, categorized. Emerging themes from the data were identified. The results of the quantitative and qualitative data are presented in Chapter 4. The findings from the data from the study methodology are discussed in Chapter 5.

Assessment of the Evaluation Process

The Program Evaluation Standards, 2nd edition (Joint Committee on Standards for Educational Evaluation,1994) are embedded in the study questions. In addition to answering the study questions, a checklist was developed to assist with self-assessment of the evaluation process used in this study.

Program Evaluation Standards Checklist

The Program Evaluation Standards Checklist contains 30 statements related to utility, feasibility, propriety, and accuracy standards which were derived from The Program Evaluation Standards, 2nd edition (Joint Committee on Standards for Educational Evaluation, 1994). Responses could range from 1 (the standard was met) to 3 (the standard was not met). No numeric value was calculated if 4 (not applicable) was selected. The not applicable selection was treated as missing data. (See Appendix Q.) The checklist was used by the researcher to conduct a self-assessment of the evaluation process. Means were calculated for the standards of utility, feasibility, propriety, and

accuracy to reflect the adequacy of the evaluation processes used in this study in meeting each standard. The results are reported in Chapter 4 and they are discussed in Chapter 5.

CHAPTER FOUR

RESULTS

This chapter is organized in the following manner. The first section includes results of the formative evaluation related to the core program of the Breastfeeding Educator Program™. The second section includes the data analysis related to the summative evaluation processes. A brief report regarding program evaluation standards concludes the chapter.

Formative Evaluation Results

The formative evaluation process included evaluation of the core curriculum and instructional strategies by content experts and education experts. The formative evaluation data were collected and analyzed before the program was presented. Some modifications were made prior to the presentation of the program.

Experts in breastfeeding management education and continuing education provided data for the formative evaluation of the core program. All but one expert who were contacted completed the formative evaluation process.

Content Review of the Core Program

Four lactation consultants who are experts in breastfeeding promotion and assistance reviewed the Breastfeeding Educator Program™ (BEP) curriculum and evaluated the presentation of the program using the Content Review of the Core Curriculum Questionnaire . (See Appendix F.) Responses ranged from 1 (strongly agree) to 2 (somewhat agree). The means and comments from the questionnaire are reported in

Table 3. The content experts perceived that the core curriculum is well organized with excellent references to the professional literature. Reducing the content scope was suggested.

Table 3

Means and Comments from the Content Review of the Core Program Questionnaire

Item	Mean
The goals of the program support optimal breastfeeding management. Comments: "The BEP certainly supports optimal breastfeeding management."	1.00
The goals of the program are appropriate for the target audience. Comments: "At times I think the goals may be a little ambitious for an overview program."	1.25
The learning objectives support the goals of the program. Comments: " Some of the learning objectives are more complex than what might be optimal in an overview program."	1.25
The presenters are academically, professionally, and clinically qualified to teach the Breastfeeding Educator Program™. Comments: "Clinical experience is imperative for the presenters and they are well qualified." "Presenters should be actively involved in professional organizations and that is well documented."	1.00
The *Resource Manual for the Breastfeeding Educator Program*™ supports the attainment of the program goals. Comments: "The resource manual is an excellent resource and a real asset to the program.."	1.00
References to the professional literature are appropriate, accurately cited, and up-to-date. Comments: "Very comprehensive citations."	1.00
Attitudes, as well as critical knowledge and skills related to optimal lactation management are addressed in the program. Comments: "Therapeutic communication skills are emphasized in the program to help convey appropriate attitudes."	1.00
The topics are logically organized and sequenced in a clinically relevant order. Comments: "The sections flow logically." I think the chronologic model is great for discussing breastfeeding management."	1.00
There are additional topics that should have been included in the program. Comments: "The scope is quite comprehensive." "Nothing should be added." "I liked how the change process was addressed."	1.00

Table 3 (continued)

There are topics that should have been omitted from the program..	1.50
Comments: "The information on working with critically ill infants is probably too in-depth. Some of that could be omitted."	

Note. n=4

Ethical Considerations and Professional Guidelines Questionnaire for Continuing Education Programs in Breastfeeding Management

Thirteen items were synthesized from ethical and professional guidelines from three lactation professional organizations to create the Ethical Considerations and Professional Guidelines Questionnaire for Continuing Education Programs in Breastfeeding Management. (See Appendix G.) Three lactation consultants were given supporting documents related to the Breastfeeding Educator Program™ and responded to the questionnaire. The responses ranged from 1 (strongly agree) to 2 (Somewhat agree). The means and comments from this questionnaire is presented in Table 4. Generally, the respondents were impressed with the documentation available regarding ethical and professional considerations related to the Breastfeeding Educator Program™.

Table 4

Means and Comments from the Ethical Considerations and Professional Guidelines Questionnaire for Continuing Education Programs in Breastfeeding Management

Item	Mean
No funds from manufacturers and distributors of breastmilk substitutes and related products are accepted to organize or sponsor events.	1.00
Comments: "No formula companies are involved in sponsoring this program.." "The NABA symbol is included on the title page of the resource manual to indicate no formula industry funding of the program." "The program includes information regarding the potential conflict of interest that can occur with funding from the formula industry."	
No advertisements, displays or other forms of promotion for breastmilk substitutes and related products are permitted in program site or in program materials.	1.00
Comments: "The contract letter with sponsoring agencies expressly prohibits advertisements or promotion of breastmilk substitutes in the program." "Formula companies are specifically excluded from exhibiting their products at the program."	
No hospitality for organizers or program participants is accepted from manufacturers or distributors of the above products.	1.00
Lists of conference participants are not sold to or otherwise made available to manufacturers of the above products.	1.00
All financial support for the program is fully acknowledged & disclosed to participants.	1.00
Speakers disclose to the participants any real or apparent affiliations that may have a bearing on the subject matter of their presentation.	1.00
Mothers and infants are welcome to breastfeed anywhere in the conference site.	1.33
Comments: "A written policy is made available to sponsoring agencies that specifies that mothers and babies are welcome and that a quiet room/breastpump room must be available for program participants." "WABA recommends that on-site child care be available at breastfeeding conferences. This is not currently provided at the Breastfeeding Educator Program venues. I would recommend providing on-site child care."	
A convenient private space is available for women to breastfeed or to express breastmilk.	1.00
Comments: "Participants are informed of the quiet room/breastpump room in the program brochures and confirmation letters."	

Table 4 (continued)

The program director is currently certified by the International Board of Lactation Consultant Examiners or a licensed, registered or certified health care professional with referenced experience or training in lactation management.	1.00
Comments: "The program director has impeccable credentials."	
The program is compliant with the World Health Organization's *International Code of Marketing of Breastmilk Substitutes*.	1.00
Comments: "The contract letter specifically states that only companies who are compliant with the WHO Code [World Health Organization's *International Code of Marketing of Breastmilk Substitutes*) can participate in the program.."	
Continuing education units (CEUs) and/or continuing education recognition points (CERPs) are granted from a health profession agency and/or college credits are earned by participants in the program.	1.33
Comments: "CEUs and CERPs have been approved for the program. Copies of the approval forms are forwarded to sponsoring agencies for their files." "Currently, no college credits are earned by participants in the program - I recommend pursuing college credit for this course."	
A detailed description of the program including topical outlines is available to potential program participants.	1.00
Comments: "The 800+ page resource manual includes topical outlines, learning objectives, and lecture outlines and is available to potential program participants." "The program flier includes a very specific agenda."	
The program is offered on an ongoing basis.	1.00
Comments: "The program has been offered continuously since 1987. It is offered 6 to 10 times per year and has program scheduled into 2003."	

Note. n=3

NABA is an acronym for National Alliance for Breastfeeding Advocacy.

WABA is an acronym for World Alliance for Breastfeeding Action.

Instructional Design Review of the Core Program

Three education experts reviewed the core curriculum and supporting documents and commented on fourteen specific items identified in the Instructional Design Review of the Core Curriculum Questionnaire. (See Appendix H.) One of the education experts was also a content expert and attended the program presentation. Responses ranged from 1 (strongly agree) to 4 (somewhat disagree). The means and comments are included in Table 5. The education experts shared many positive comments and expressed concerns regarding the amount of instruction by lecture and the amount of information discussed in a three-day program format. They recommended lengthening the program or reducing the instructional content.

Table 5

Means and Comments from the Instructional Design of the Core Curriculum Questionnaire

Item	Mean
There is evidence that an instructional analysis of the learning context, learning tasks, and prospective learners informed the developers when they designed the Breastfeeding Educator Program™.	1.00
Comments: "The developers appear informed regarding the learning tasks, learning context, and potential learners."	
The learning goals of the program are clearly stated.	1.00
Comments: "The learning goals of the program are listed on the program brochure and in the resource manual."	
The performance learning objectives describe the expected learner outcome of the program.	1.00
Comments: "The learning objectives are well written and expectations clearly defined."	
Learning objectives address knowledge related to breastfeeding.	1.00
Comments: "The resource manual summarizes an extensive amount of knowledge with impressive citations to the professional literature."	
Learning objectives address attitudes related to breastfeeding.	1.00
Comments: "Attitudes are stressed in the presentation. I especially liked the consciousness raising exercise in the first session."	
Learning objectives address psychomotor skills.	1.00
Comments: "Using skills kits with specific instructions for role play practice helps participants acquire psychomotor skills.	
The topics are sequenced from known to unknown, simple to complex, and follow a logical order (such as chronologic order.)	1.00
Comments: "Program has an excellent flow: from simple to complex within the chronology of the childbearing year."	
Numerous instructional strategies which are appropriate for the specific learning tasks are used in the program.	1.66
Comments: "Several instructional strategies are employed. However, didactic lecture is relied on quite heavily." " More exploratory and discovery approaches could replace the suppiantive approach."	

Table 5 (continued)

The program includes the following "events of instruction." (Events of Instruction: gaining attention of learners, informing learners of the goals and objectives, stimulating learners to recall prerequisite learning/reviewing prerequisite learning, presenting the learning stimulation, providing guidance for the learners, eliciting performance by the learners, assessing performance, enhancing retention and transfer of learning experience)	1.00
Comments: "Excellent application of 'events of instruction. I especially enjoyed numerous 'attention getting' slides including humorous and poignant clinical scenarios." "Using models and equipment in role play practice incorporates the 'events of instruction." "Using case studies and clinical examples enhanced motivation to 'attend to' instruction and also improves retention and transfer of the learning experience."	
The program utilizes numerous types of media which are appropriate for the specific learning tasks.	1.00
Comments: "Good use of slides, videos, and equipment." "The skills kits provide 'hands-on' opportunities for practice and mastery."	
The program incorporates principles of adult education.	1.00
Comments: "The presenter refers to principles of adult education specifically in the presentation. A section on the topic is included in the resource manual. Most importantly, the program models many principles of adult education."	
Active participation by program enrollees is encouraged.	1.33
Comments: "Although participants are encouraged to role play among themselves, and they have opportunities to ask questions and discuss their perceptions, active participation is limited when more 80 to 100 enrollees attend a program.."	
Sufficient time is allotted to accomplish the learning objectives.	3.33
Comments: "This should be a five-day program instead of a three-day program that leaves learners feeling 'rushed.'" "This program should be extended to at least 4 days." "There is not sufficient time to comfortably accomplish the learning objectives."	
Participants complete a structured evaluation of the program that includes open-ended questions and solicits their suggestions for improving the program.	1.00
Comments: "Participants have several opportunities to complete an evaluation of the program.." "I like how the presenter sincerely requests feedback from the participants in order to improve the program." "For a multi-day program, the quality of evaluation data is improved when participants are encouraged to complete each session evaluation promptly so that their perceptions are fresh and accurate."	

Note. n=3

Ethical Considerations for Educators of Adults

A checklist was developed from principles identified in The Guidelines for Developing and Implementing a Code of Ethics for Adult Educators (Coalition of Lifelong Learning Organizations, 1993). Two adult educators completed the checklist in a discussion format with the primary developer and presenter of the Breastfeeding Educator Program™. All code criteria were marked as addressed or not applicable. (See Appendix I for the checklist.) The evaluators were impressed with the thoroughness of the checklist and shared that more adult educators should use a formal checklist periodically to self-evaluate their educational practices related to ethical considerations.

Summative Evaluation Results

The results of the summative evaluation will be presented in this section. The primary data were collected with a pre-program, an immediate post-program, and a delayed post-program participant survey. (See Appendices J, K, and L.) The Program Evaluation Tool (Appendix M) was also completed participants. Surveys were distributed to clinical supervisors of program participants one month after the program. Their evaluations of changes in clinical practice are summarized. Focus groups were held with program participants and program planners. The qualitative data from the focus group discussions and the responses to open-ended questions in the participant surveys are also reported.

Participant Surveys:

Pre-Program, Immediate Post-Program, and Delayed Post-Program

One-hundred ninety-seven participants completed the Pre-Program Participant Survey and the mean interest in attending the program was 1.20 (responses ranged from 1

[I was very interested in attending] to 4 [I was not very interested in attending]. No participant selected 5 (I had no interest in attending. I was required to attend.) Two represented "I was mildly interested in attending."

Two-hundred and seven participants returned the Immediate Post-Program Participant Survey. Seventy-two participants completed the Delayed Post-Program Participant Survey. The surveys were divided into two sections. The first part of the survey was composed of one-hundred and five statements which evaluated knowledge related to breastfeeding promotion and assistance. The second part of the pre-program and the delayed post-program surveys included statements regarding clinical practice. Responses ranged from 1 (strongly agree) to 5 (strongly disagree) in each section of the surveys. The mid-point was labeled "I'm not sure."

Ninety-two of the items that reflected knowledge related to breastfeeding were combined to create six scales that could be compared in the three surveys. The items composing the scales are listed in Table 6. Cronbach's alpha is also reported for each scale. Cronbach's alpha coefficients ranged from .76 to .53. Thirteen items did not fit with any scale and were not analyzed. The scales are listed in a chronological clinical management order beginning with informed decision making regarding infant feeding choice and ending with supporting continued breastfeeding. The mean and standard deviation for each of the scales are reported in Table 7.

Table 6

Items from Pre-Program, Immediate Post-Program, and Delayed Post-Program Survey Comprising Six Scales

Scale	Cronbach's alpha
	.65

Informed Decisions

3. Children who have been breastfed as babies tend to be more intelligent.

6. The new and improved infant formulas essentially contain the same ingredients as breastmilk.

15. Mothers living in the U.S. who are HIV positive are encouraged to breastfeed in order to reduce the chance of their babies becoming HIV positive.

21. If a mother continues to smoke during pregnancy and after her baby is born, breastfeeding should be discouraged.

32. Health care providers should avoid telling mothers why breastfeeding is better for babies, mothers, and society because mothers may feel guilty if they choose not to breastfeed.

34. The World Health Organization encourages health care providers to distribute educational materials produced by infant formula companies for breastfeeding families.

38. Children who have been breastfed as babies tend to have less cancer.

42. The World Health Organization recommends that all pregnant women be informed about the benefits and management of breastfeeding.

47. Breastfed babies tend to have fewer ear infections than formula fed babies.

55. Breastfeeding should be discouraged among adolescent mothers because their bodies are not physically mature.

58. Breastfed babies die less often from sudden infant death syndrome than formula-fed babies.

66. Children who were formula-fed as babies tend to be more overweight when they enter elementary school compared to children who were breastfed as babies.

Table 6 (continued)

74. The U.S. government has established this health goal for the nation: 75% of mothers will breastfeed their babies at the time of discharge from the birth setting.

76. During prenatal care, health care providers should be neutral when discussing infant feeding choices.

77. Breastfeeding is beneficial only if it is exclusive and continues at least six months.

79. The majority of perinatal professional organizations have published statements that promote breastfeeding as the preferred infant feeding choice.

	Cronbach's alpha
Getting Breastfeeding Off to a Good Start	.65

7. Placing healthy, term babies to breast within 30 to 60 minutes after birth is an important factor in getting breastfeeding off to a good start.

9. Frequent, effective removal of milk stimulates continued breastmilk production.

11. Babies who are given bottles during the first two weeks after birth may have more problems with breastfeeding than babies who are not given bottles during the first two weeks.

13. According to research studies, babies who use pacifiers stop breastfeeding earlier than babies who do not use pacifiers.

17. The way babies suck at breast is different than the way they suck on a bottle.

23. If breastfeeding is not possible during the first week after birth (due to baby's or mother's condition), it is better to wait until after engorgement and the appearance of mother's full milk supply before teaching the mother how to express breastmilk.

29. Mothers who do not take a prenatal breastfeeding class can still meet their breastfeeding goals if they have access to knowledgeable and supportive health care providers in the birth setting and during follow-up care.

31. Mothers can establish and maintain a good milk supply for several months by using a hospital-grade, electric breast pump.

39. Mothers' breast secretions immediately after birth (colostrum) are not especially beneficial. Babies don't need to go to the breast very often until mother's milk "comes in" several days later.

Table 6 (continued)

45. A baby should be positioned so that her/his head and shoulders face the breast directly when latching-on to the breast.

51. Except in special circumstances, a healthy, term infant should remain with her/his mother throughout the recovery/transition period immediately after birth.

52. If a breastfed baby needs supplementation during the first two weeks, cup feeding may be less physiologically stressful than bottle-feeding.

54. Newborns who make smacking and clicking sounds while breastfeeding reassure health care providers that breastfeeding is getting off to a good start.

59. During the first 24 hours after birth, breastfed babies need at least 1 oz of milk or water at every feeding to avoid developing jaundice.

61. Mothers who receive discharge packs containing infant formula discontinue breastfeeding more quickly than mothers who receive discharge packs that do not contain formula.

64. Routine glucose water supplementation during the first few days after birth causes no problems related to the establishment of breastfeeding.

68. Rooming-in while in the birth setting has little influence in establishing successful breastfeeding.

81. The World Health Organization recommends routine screening for hypoglycemia in low-risk, asymptomatic newborns.

95. Nipples that were marginally everted (protruding or "sticking out" from the breast) during the last trimester of pregnancy may become flatter during engorgement.

	Cronbach's alpha
Assessment	.55

5. Additional assessment is necessary if a breastfed baby has not regained his/her birth weight at two weeks after birth.

20. During the first 48 hours after birth, health care providers can rely on first-time mothers' self-reports about how breastfeeding is going. (No other assessment is necessary if mother thinks breastfeeding is going well.)

Table 6 (continued)

25. From five days to one month after birth, breastfed babies who are well nourished have at least three to four bowel movements per day.

27. The effectiveness of different breast pumps is about the same since all pumps must meet FDA (Food and Drug Administration) standards before being marketed to the public.

63. Having parents record their baby's breastfeedings and bowel movements during the first week after birth provides valuable information for assessing the effectiveness of breastfeeding.

71. One of the characteristics of an effective suck is that the baby's tongue extends over her/his lower gumline.

80. If a mother is continuing to experience sore nipples after two weeks, an assessment of the infant at breast should be performed.

91. Recommendations related to breastfeeding management should be individualized for each family based on accurate assessments of anatomical, physiological, psycho-social, and spiritual factors.

99. Accurate assessments rather than assumptions provide a basis for more effective plans of care for breastfeeding families.

105. Breastfeeding success occurs when a mother meets her breastfeeding goals.

	Cronbach's alpha
Enhancing Parental Confidence	.61

14. It is recommended to teach new parents to wait until their baby starts crying loudly before offering the breast so that the parents know the baby is adequately awake.

53. The quiet alert state of consciousness is an ideal state in which to interact with a baby or to teach new skills to a baby.

67. During the first six months after birth, breastfed babies should be offered the breast when they show *early* signs of hunger or at least every three hours during the day.

87. When a baby is in a *deep* sleep state, latch-on is fairly easily accomplished because the baby is so relaxed.

Table 6 (continued)

90. There are several objective, reassuring signs that can be taught to parents so that they feel more confident that their baby is getting enough breastmilk.

96. When working with mothers who are experiencing breastfeeding challenges, it is important that health care providers communicate in ways which help mothers avoid feeling like they are being criticized or blamed for their experiences.

	Cronbach's alpha
Problem Solving	.76

1. If a mother has a breast infection, she should immediately wean from the breast.

8. If a mother has had reduction mammoplasty, any breastfeeding should be discouraged.

18. Latch-on may be more difficult during engorgement because the areola is firm.

19. Applying continuous heat packs to an engorged breast is recommended because heat reduces swelling.

22. Breastfeeding mothers with previous surgery involving peri-areolar incisions are more likely to have infants who have difficulty gaining weight appropriately.

24. If a baby has lost about 10% of his/her birth weight, a health care provider should seriously consider recommending supplementation.

35. Most breastfeeding challenges have specific solutions that work for most mothers so once a recommendation is given to a mother, no additional follow-up care or assessments are needed.

36. Premature babies should *prove* their ability to coordinate sucking, swallowing, and breathing by bottle-feeding successfully before they attempt to breastfeed directly.

37. Many mothers consider infant formula as an attractive and acceptable alternative if they experience a breastfeeding challenge.

40. A mother's childhood experiences can influence her breastfeeding success.

43. Most mothers can continue breastfeeding when employed outside their homes if they have appropriate information and support.

44. It is considered safe for a woman to defer a breast biopsy until after she weans her baby from breast.

Table 6 (continued)

48. Mothers who express breastmilk while separated from their babies (e.g., due to employment) find it easier to maintain their milk supply than mothers who do not express breastmilk during separations.

49. Many mothers of multiples can exclusively breastfeed if they have appropriate information and support.

60. Bilirubin is excreted primarily in urine.

65. If a breastfeeding mother or baby requires hospitalization, the American Academy of Pediatrics recommends discontinuation of breastfeeding upon hospital admission.

72. High-need breastfed babies usually cry less when they are weaned from the breast and given soy formula.

73. If a mother has large breasts, she does not need to support her breasts while breastfeeding a newborn because there is plenty of tissue for the baby to grasp.

78. Mothers can more successfully combine employment and continued breastfeeding if they delay returning to the employment setting for as long as possible.

82. Most breastfeeding difficulties experienced in the birth setting improve once mothers relax at home, so contact with a health care provider during the first two to four weeks after birth is usually not needed.

83. Nipple shields may be helpful in overcoming some breastfeeding challenges.

84. If a baby requires supplementation, supplementing at the breast encourages continued breastfeeding.

86. Chin and cheek support increases suction and suck efficiency for premature and neurologically impaired infants.

89. Breastfeeding mothers who require an incisional breast biopsy should wean their babies immediately prior to the biopsy.

93. There are several known risk factors ("red flags") which increase a mother's likelihood of experiencing a breastfeeding challenge.

98. Supplementation during an appetite/growth spurt can reduce mothers' milk supply.

102. When making breastfeeding management recommendations, one should always consider the risk-benefit ratio.

Table 6 (continued)

Continued Breastfeeding	Cronbach's alpha .53

2. The American Academy of Pediatrics considers most drugs compatible with breastfeeding.

4. There are many foods that *all* breastfeeding mothers must avoid.

10. The American Academy of Pediatrics recommends that mothers breastfeed for at least twelve months and then for as long as mother and baby want to continue.

16. In order to make appropriate quality and quantity of breastmilk, mothers need to eat a near-perfect diet.

26. Screening for breast cancer (self breast exams and mammograms) is not necessary while mothers are lactating.

30. Microwaving is a safe way to warm breastmilk.

41. Mothers with small breasts (e.g., mothers who wear bras with size A cups) usually have more difficulty making enough milk for their babies than mothers with large breasts.

46. The health care system should consider the extra time often needed to help breastfeeding mothers and babies as an *investment* in the health and development of babies and mothers.

69. Most breastfed infants require iron supplementation during the first six months.

85. Babies tend to suck more vigorously on the first breast if they breastfeed at both breasts during a feeding.

92. Removing more milk more frequently is an effective way to increase breastmilk supply.

97. Appetite/growth spurts occur at fairly predictable times during lactation.

100. In some cultures, the majority of babies/children are breastfed until their immune system is fully functioning (occurring several years after birth.)

103. It is important for health care providers to have *personal* experience breastfeeding in order to effectively assist breastfeeding families.

Table 7

Report of Means of Scales within the Pre-Program, Immediate Post-Program, and Delayed Post-Program Participant Surveys

Scale Name	Mean	Standard Deviation
Informed Decisions		
Pre-Program	1.96	.49
Immediate Post-Program	1.36	.34
Delayed Post-Program	1.35	.37
Getting Off to a Good Start		
Pre-Program	1.78	.45
Immediate Post-Program	1.21	.25
Delayed Post-Program	1.29	.42
Assessment		
Pre-Program	1.63	.43
Immediate Post-Program	1.21	.30
Delayed Post-Program	1.25	.33
Enhancing Parental Confidence		
Pre-Program	1.45	.43
Immediate Post-Program	1.09	.26
Delayed Post-Program	1.19	.35
Problem Solving		
Pre-Program	2.00	.36
Immediate Post-Program	1.28	.28
Delayed Post-Program	1.53	.36
Continued Breastfeeding		
Pre-Program	1.82	.42
Immediate Post-Program	1.18	.22
Delayed Post-Program	1.26	.34

Note. A reduction in the mean represents improvement in scores.

A within-subjects analysis of variance was conducted to evaluate the effect of the educational program over time. Three levels of time were evaluated (pre-program, immediate post-program, and delayed post program surveys). An alpha level of .05 was used for tests of within-subjects effects. There were statistically significant changes across time in all dependent variables. (See Table 8.)

Follow-up paired t-tests were computed comparing the pre-program and immediate post- program scores for each of the scales to determine direction and magnitude of change. Paired t-tests were computed comparing the immediate post-program and the delayed post-program scores for each of the scales to determine direction and magnitude of change. Paired t-tests were also computed comparing the pre-program and the delayed post-program scores for each of the scales to determine direction and magnitude of change. The results of the paired t-tests are reported in Table 9. Each scale demonstrated significantly improved scores between the pre-program survey and the immediate post-program survey. Most scales showed slight decay (in most cases not statistically significant) from immediate post-program to the delayed post-program survey. The problem solving scale incurred the greatest decay, however, the delayed post-program scores continued to be significantly improved compared to the pre-program survey scores. See Table 9.

Table 8

Report of Analysis of Variance (ANOVA) on Scales within the Pre-Program, Immediate Post-Program, and Delayed Post-Program Participant Surveys

Scale Name	F	df	Significance Level
Informed Decision Making	91.13	2, 71	$p<.001$
Getting Off to a Good Start	88.49	2, 71	$p<.001$
Assessment	45.85	2, 71	$p<.001$
Enhancing Parental Confidence	12.43	2, 71	$p<.001$
Problem Solving	101.70	2, 71	$p<.001$
Continued Breastfeeding	97.74	2, 71	$p<.001$

Table 9

Follow-up T-Tests Results

Scale Name	Difference in Means	t value	df	Significance
Informed Decision Making Pre-Program Survey Immediate Post-Program Survey	.60	25.83	1, 193	p<.001
Informed Decision Making Immediate Post-Program Survey Delayed Post-Program Survey	.02	-3.95	1, 72	NS
Informed Decision Making Pre-Program Survey Delayed Post-Program Survey	.61	12.55	1, 72	p<.001
Getting Off to a Good Start Pre-Program Survey Immediate Post-Program Survey	.58	19.30	1, 193	p<.001
Getting Off to a Good Start Immediate Post-Program Survey Delayed Post-Program Survey	-.06	-1.62	1, 72	NS
Getting Off to a Good Start Pre-Program Survey Delayed Post-Program Survey	.49	10.94	1, 72	p<.001
Assessment Pre-Program Survey Immediate Post-Program Survey	.41	13.88	1, 193	p<.001
Assessment Immediate Post-Program Survey Delayed Post-Program Survey	.04	.68	1, 72	NS
Assessment Pre-Program Survey Delayed Post-Program Survey	.38	8.28	1, 72	p<.001

Table 9 (continued)

Enhancing Parental Confidence Pre-Program Survey Immediate Post-Program Survey	.34	10.26	1, 193	p<.001
Enhancing Parental Confidence Immediate Post-Program Survey Delayed Post-Program Survey	-.04	-.61	1, 72	NS
Enhancing Parental Confidence Pre-Program Survey Delayed Post-Program Survey	.26	3.83	1, 72	p<.001
Problem Solving Pre-Program Survey Immediate Post-Program Survey	.71	25.83	1, 93	p<.001
Problem Solving Immediate Post-Program Survey Delayed Post-Program Survey	-.18	-3.95	1, 72	p<.001
Problem Solving Pre-Program Survey Delayed Post-Program Survey	.26	11.03	1, 72	p<.001
Continued Breastfeeding Pre-Program Survey Immediate Post-Program Survey	.63	23.55	1, 193	p< .001
Continued Breastfeeding Immediate Post-Program Survey Delayed Post-Program Survey	-.07	-1.57	1, 72	p<.05
Continued Breastfeeding Pre-Program Survey Delayed Post-Program Survey	.56	10.26	1, 72	p<.001

Note. NS means non-significant.

The Pre-Program Participant Survey and the Delayed Post-Program Participant Survey included eleven statements requesting participants to report their clinical practice during the previous month related to breastfeeding promotion and assistance activities. Responses ranged from 1 (several times a week, or made great effort) to 4 (once a week month or made little effort). A "does not apply" choice was also available. If the not-applicable choice was selected, the response was treated as missing data and no numeric score was recorded for the response. Seventeen statements requested that participants describe their perceptions of their clinical practice in a general sense (not related to a specific time frame). Responses ranged from 1 (strongly agree) to 5 (strongly disagree) in each section of the surveys. The mid-point was labeled "I'm not sure." The means of the pre-program and delayed post-program assessment as well as the difference in mean scores are presented in descending order of change in means in Table 10.

The greatest improvements were noted in the participants' perceptions of their clinical practice in general. They reported more changes in their approaches to problem solving and perseverance in assisting families to overcome challenges. Changes in reports of clinical practice activities in the last month were less dramatic. This difference may reflect an overestimation of the quality of clinical practice as self-reported by health care providers. An interesting paradox was noted related to referring families to services and resources to help meet their breastfeeding goals. The change in perception of clinical practice was greatest with this item. However, the change in report of clinical practice in the last month was the lowest with this related item. (See highest and lowest difference in mean scores in Table 10.)

Table 10

Differences Between Means of Pre-Program and Delayed Post-Program Survey of Perceptions of Clinical Practice and Reports of Clinical Practice

Descriptor of Item	Means		
	Pre-Program	Delayed Post-Program	Difference
Perceptions of Clinical Practice in Last Month			
Refer to services to help families meet their breastfeeding goals	2.65	1.26	1.39
Encourage parents to use problem solving skills to overcome challenges	2.69	1.34	1.31
Posses an understanding of the phases of lactation	2.63	1.32	1.31
Avoid practices which undermine breastfeeding	2.38	1.14	1.24
Continue assisting families in overcoming challenges	2.61	1.37	1.24
Consider factors that may influence postpartum adjustment	2.26	1.21	1.05
Can explain anatomic and physiologic rationales for basic breastfeeding recommendations	1.99	1.16	0.83
Confident in knowledge and skills related to breastfeeding management	2.08	1.30	0.78
Can prioritize learning needs of families in each phase of lactation	2.09	1.35	0.74
Individualize recommendations based on appropriate assessments	2.18	1.46	0.72
Provide evidence-based recommendations when available	2.10	1.38	0.72

Table 10 (continued)

Families pleased with breastfeeding assistance provided	1.93	1.26	0.67
Enjoy providing assistance with breastfeeding	1.76	1.13	0.63
Can help prevent or decrease severity of breastfeeding challenges	1.99	1.43	0.56
Provide information for informed decisions	1.65	1.22	0.43
Assist families develop confidence in their baby care skills	2.05	1.81	0.24
Provide more consistent recommendations with colleagues	1.39	1.18	0.21
<u>Report of Clinical Practice in Last Month</u>			
Distributed educational materials produced by formula companies	3.85	2.93	0.92
Gave glucose water to treat or prevent jaundice	3.28	2.38	0.90
Gave glucose water to prevent or treat hypoglycemia	3.37	2.63	0.74
Gave or recommended a pacifier between feedings	3.27	2.59	0.68
Assisted families to interpret their baby's behavior	1.80	1.21	0.59
Distributed discharge pack that contained formula	3.70	3.13	0.57
Assisted families to make informed decisions about infant feeding	1.77	1.29	0.48

Table 10 (continued)

Made effort to get baby to breast within 30 to 60 minutes after birth	1.78	1.31	0.47
Explained how to know if baby is getting enough milk to parents	2.05	1.81	0.24
Systematically assessed infants at breast	1.60	1.38	0.22
Referred mothers to resources to meet their breastfeeding goals	2.02	1.87	0.15

Program Evaluation Tool for the Breastfeeding Educator Program™

Participants complete a very specific evaluation tool in order to receive certificates of attendance that indicate a continuing education program has been approved by an agency which is accredited as an approver of continuing education in nursing by the American Nurses Credentialing Center's Committee on Accreditation. The Breastfeeding Educator Program™ has been approved by the Missouri Nurses Association which has been accredited as an approver of continuing education by the American Nurses Credentialing Center's Committee on Accreditation. The Program Evaluation Tool was completed by all participants attending the Breastfeeding Educator Program™. (See Appendix M.) Information about participants' clinical practice settings, education and credentials is summarized in Table 11.

The anonymous evaluation tool is divided into two sections. The first section was added by the investigator and includes clinical practice settings, credentials in health care, educational background, and seventeen statements to which participants indicate their degree of agreement or disagreement. The means of the responses are presented in Table 12. There are also three open-ended questions requesting what participants liked the most and the least about the program and ways to improve the program. The qualitative data were coded, sorted, compared, contrasted, categorized. A list of selected responses in a variety of categories is included in Table 13.

The second section of the evaluation tool is specifically required by the continuing education unit approval process and requests participants to rate how well the listed learning objectives were met in each of the fifteen sessions, how well the learning

objectives related to the program purpose or goal. the effectiveness of teaching methods. and the teaching effectiveness of the presenter. The means of the results are presented in Table 14.

Table 11

Characteristics of Participants in the Breastfeeding Educator Program™

Credentials

RN/RNC	163
Registered Dietician	15
Lactation Consultant	14
Childbirth Educator	12
LPN	11
Doula	4
Medical Doctor	1

Note: Some participants checked more than one category (e.g., a nurse who is also a lactation consultant).

Education

Associate Degree	63
Bachelors Degree	44
Masters Degree	12
M.D.	1

Clinical Practice Setting

Hospital Based Practice		
	Postpartum	97
	Newborn Nursery	93
	Labor and Delivery	83
	Mother-Baby Care	82
	N.I.C.U.	32
Community Based Practice		
	WIC/Nutrition	49
	Childbirth Educator	26
	Clinic	13
	Mother-to-Mother Support	11
	Dr. Office	8

Note. RN refers to registered nurse. RNC refers to registered nurse certified. LPN refers to licenced practice nurse. M.D. refers to a doctor of medicine degree. N.I.C.U. refers to Neonatal Intensive Care Unit. W.I.C. refers to the Women, Infant, and Children Supplemental Nutritional Program

Table 12

Means of Results Program Evaluation Tool for the Breastfeeding Educator Program™

Item	Mean
The presenter was knowledgeable and well prepared.	1.10
The presenter was enthusiastic	1.16
I will be able to use what I learned in the program in my clinical/community setting.	1.18
I would recommend that my colleague(s) attend the Breastfeeding Educator Program.	1.26
I learned what I expected to learn from participating in this program.	1.29
The slides clarified and reinforced the information that was presented.	1.29
The benefits I received from participating in the Breastfeeding Educator Program justified the expense of attending the program. (It was a good value)	1.30
The books, models, and exhibits were beneficial to have on display.	1.31
The program was well organized and effectively conducted.	1.31
The presenter showed respect to different views.	1.35
The videos were helpful in learning the concepts they discussed.	1.37
The program was presented in interesting ways.	1.50
Using the equipment in the skills kits helped me learn how to use that equipment	1.53
I enjoyed the activity bags.	1.60
This facility was conducive to learning	1.93
The program moved at an appropriate rate (not too fast, not too slow).	2.01

Note. n=244

Table 13

Comments and Responses to Open-Ended Questions in the Program Evaluation Tool

General Impressions

"This was a great program!"
"This was the best program I have ever attended and I have been a nurse for 26 years."
"I will be recommending this program to several of my colleagues."
"My co-worker who had attended a previous program said that it was long and boring. It wasn't that bad."

Audio-Visual Support

"I liked using the dolls, breast models, and equipment in the skills kits."
"It was hard to see some of the slides."
"There were too many slides."
"I love all the slides and videos."
"I liked the slides and videos of African-American mothers and babies - you need more."
"I liked the video of the baby going to breast right after birth the best."
"I loved the displays - having books and samples of stuff was great."

Resource Manual

"Thanks for all the references."
"The notebook will be great to refer back to."
"I liked the highlighters."

Usefulness - Clinical Application

"It all seemed so practical - I can make a difference!"
"I liked the clinical examples the best."
"I'll be able to use this in my setting."

Specific Content Topics

"Thanks for the practical information about working mothers."
"I liked the information about NICU the least - I don't work in NICU."
"I did not like the stuff about change."
"I liked the information about positioning and latch-on the best."

Pace and Scope of Program

"There was too much stuff to talk about."
"I couldn't imagine what we would discuss about breastfeeding for three days, but it was all important - don't leave anything out."
"There was too much to try to cover in three days - but it was all important."
"The days were way too long!"
"The program needs to be four or five days instead of three really long days."
"The days need to be shorter - I'd like an hour and a half for lunch."

Table 13 (continued)

Facilities. Refreshments. Food

"The chairs were very uncomfortable."
"I hated having to sit all day long."
"I liked the candies at the tables."
"The room was too hot."
"The room was too cold."
"The coffee was not hot enough."
"There was not enough fruit available."
"I hated the lunches."
"I liked having nutritious snacks - not donuts and potato chips."
"The pasta at lunch made me sleepy in the afternoon."

Program Format - Instructional Strategies

"I would like to have more discussion time - less lecture."
"Some people tried to talk too much - I came to hear the speaker, not the other participants."
"The semi-darkened room made me sleepy."
"I liked the activity bags - I looked forward to finding new toys each day."
"Needed more and longer breaks."
"The baby made too much noise. This is a professional conference - No babies please!"

Table 14

Means of Results of Specific Session Evaluations

	Mean
Session One: Breastfeeding: Is It Still the Best?	
Evaluation of How Well Learning Objectives Were Met	
Discuss at least two cultural and historical perspectives related to infant feeding trends.	2.67
Discuss at least two advantages of breastfeeding and two risks of artificial feeding	2.70
Discuss at least two contraindications for breastfeeding.	2.72
Describe health care providers' role in *informed* infant-feeding decision-making.	2.70
Differentiate between the role of a certified breastfeeding educator and a certified lactation consultant..	2.61
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.70
Effectiveness of teaching methods	2.76
Teaching effectiveness of presenter	2.70
Session Two: Prenatal Care for Breastfeeding Families	
Evaluation of How Well Learning Objectives Were Met	
Give an example of the three phases of the social marketing approach to breastfeeding promotion including: seeking to understand client's perceptions: acknowledging client's statements: and educating.	2.74
Discuss how previous breast surgery may impact continued milk production.	2.65
Identify at least three "flags" which indicate additional assistance and follow-up care.	2.64
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.72
Effectiveness of teaching methods	2.76
Teaching effectiveness of presenter	2.74
Session Three: Optimizing First Feedings	
Evaluation of How Well Learning Objectives Were Met	
Describe typical behavior of newborns during the first hours after birth.	2.71
Discuss the importance of breastfeeding within 30 minutes of birth.	2.64
Discuss the importance of avoiding "routine" interventions in the perinatal period.	2.69
Describe optimal states of consciousness of infants for breastfeeding as well as the importance of touch (especially skin-to-skin contact) for enhancing parental-infant attachment.	2.68

Table 14 (continued)

Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.72
Effectiveness of teaching methods	2.76
Teaching effectiveness of presenter	2.73
Session Four: Assisting with and Assessing Positioning and Latch-On	
Evaluation of How Well Learning Objectives Were Met	
Describe effective positioning of mother and baby in the cradle, transitional, football (clutch), and side-lying positions.	2.67
Describe techniques for effective cuing and latch-on.	2.66
List four components for assessing the infant at breast.	2.68
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.67
Effectiveness of teaching methods	2.69
Teaching effectiveness of presenter	2.67
Session Five: Demystifying Milk Supply	
Evaluation of How Well Learning Objectives Were Met	
Discuss the implications of frequency and duration of breastfeeding sessions and suck effectiveness on continued milk production.	2.66
Discuss the importance of teaching families to respond to infants' hunger and satiety cues.	2.65
Identify at least three hazzards of routine supplementation.	
Discuss potential problems associated with artificial nipples and pacifiers during the first two weeks postpartum.	2.69
Describe at least three hospital practices that can influence breastfeeding success.	2.67
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.65
Effectiveness of teaching methods	2.66
Teaching effectiveness of presenter	2.63
Session Six: Maternal Learning Needs	
Evaluation of How Well Learning Objectives Were Met	
Describe at least two criteria that can be used to assess the appropriateness of educational activities and materials for breastfeeding families.	2.67
Describe learning needs related to breastfeeding including assessing adequacy of milk supply, normal infant weight gain, appetite spurts, and resources for breastfeeding support and assistance.	2.65

Table 14 (continued)

Discuss the recent reduced emphasis on dietary and lifestyle restrictions related to breastfeeding.	2.67
Describe strategies to assist family members incorporate the newborn into the family system and optimize the growth and development of each family member (including fathers, siblings, grandparents.)	2.74
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.70
Effectiveness of teaching methods	2.73
Teaching effectiveness of presenter	2.71

Session Seven: Later Breastfeeding and Special Infant Situations

Evaluation of How Well Learning Objectives Were Met	
Discuss how new baby / new parent adjustment issues can be attributed to breastfeeding and describe at least two strategies to assist parents cope with postpartum challenges.	2.70
Identify the American Academy of Pediatrics' recommendations for breastfeeding and vitamin and mineral supplementation (including iron and fluoride) for breastfed infants.	2.66
Describe at least two strategies of mother-led weaning.	2.67
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.65
Effectiveness of teaching methods	2.67
Teaching effectiveness of presenter	2.66

Session Eight: Assisting with Difficult Latch-On

Evaluation of How Well Learning Objectives Were Met	
Describe at least two general strategies for difficult latch-on.	2.60
Describe at least two strategies to enhance latch-on when an infant is drowsy or frantically crying.	2.59
Discuss at least two strategies to enhance latch-on in challenging situations including flat, inverted,or large maternal nipples, unsustained latch-on, and preference for one breast.	2.62
Discuss the appropriate use of nipple shields.	
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.64
Effectiveness of teaching methods	2.66
Teaching effectiveness of presenter	2.62

Table 14 (continued)

Session Nine: When Supplementation is Indicated

Evaluation of How Well Learning Objectives Were Met	
Discuss at least two situations when supplementation should be considered and explain the importance of adequate infant nourishment on subsequent infant growth and development.	2.64
Describe how to instruct families regarding cup feeding, finger-feeding, supplementing at breast, and bottle-feeding.	2.63
Discuss the importance of close follow-up care of families whose infant require supplementation.	2.69
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.64
Effectiveness of teaching methods	2.66
Teaching effectiveness of presenter	2.64

Session Ten: Management of Nipple Soreness

Evaluation of How Well Learning Objectives Were Met	
Describe the usual frequency, severity & duration of nipple soreness in the course of normal lactation.	2.63
Describe treatment recommendations for nipple soreness related to unrelieved negative pressure, inappropriate areolar grasp, traumatic removal from the breast, and fungal (yeast) overgrowth.	2.59
Discuss the principles of demonstrating desired behavior and positively reinforcing desired behavior related to "suck training."	2.64
Critique at least three comfort strategies to relieve nipple soreness after the underlying cause has been identified and corrected.	2.63
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.62
Effectiveness of teaching methods	2.62
Teaching effectiveness of presenter	2.61

Session Eleven: Assisting with Additional Early Challenges

Evaluation of How Well Learning Objectives Were Met	
Discuss the importance of early frequent breastfeeding for prevention and treatment of hypoglycemia.	2.64
Describe the role of breastfeeding management related to physiologic jaundice, pathologic jaundice, and breastmilk jaundice.	2.62
Discuss the importance of effective milk removal and cold compresses for treatment of engorgement.	2.63

Table 14 (continued)

Discuss the importance of keeping breastfeeding recommendations as simple as possible.	2.60
Evaluation of Relev ance of Objectives. Teaching Methods. & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.61
Effectiveness of teaching methods	2.64
Teaching effectiveness of presenter	2.63
Session Twelve: Assisting Employed Breastfeeding Mothers	
Evaluation of How Well Learning Objectives Were Met	
Describe how health care providers can assist mothers to combine employment and breastfeeding.	2.68
Explain the importance of the following factors in selecting an expression method or breast pump: 1) How frequently will mother express breastmilk? 2) How much time will she have to express breastmilk?	2.66
Describe how to hand-express breastmilk and how to use a breast pump.	
Discuss how to encourage employed breastfeeding mothers to perceive that their efforts to provide breastmilk are worthwhile.	2.67
Evaluation of Relevance of Objectives. Teaching Methods. & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.64
Effectiveness of teaching methods	2.67
Teaching effectiveness of presenter	2.63
Session Thirteen: Assisting in Special Maternal Situations	
Evaluation of How Well Learning Objectives Were Met	
Describe at least three strategies to increase milk supply and enhance infant weight gain.	2.59
Discuss strategies to enhance breastfeeding and mothering in the following situations: adolescents. cesarean births. mothers of multiples. acute or chronic illness. physically or cognitively challenged mothers. cultural or language diversity. less-than-optimal childhood experiences.	2.57
Describe at least two management strategies for treatment of obstructed ducts and mastitis.	2.63
Discuss at least two appropriate resources for information regarding safety of drugs during lactation and describe how timing the administration of drugs can reduce the levels of medications in breastmilk.	2.60
Describe the importance of follow-up care when mothers have experienced early feeding challenges.	2.59

Table 14 (continued)

Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.60
Effectiveness of teaching methods	2.61
Teaching effectiveness of presenter	2.60
Session Fourteen: Breastfeeding Critically Ill Infants	
Evaluation of How Well Learning Objectives Were Met	
Describe at least two strategies to support mothers' decision to provide breastmilk.	2.57
Describe at least two ways health care providers can assist mothers maintain their milk supply when breastmilk for an extended period before direct breastfeedings.	2.57
Discuss how the following factors enhance successful breastfeeding of a critically ill infant	
Early direct feedings	
Positioning of mother and baby (with skilled assistance during early feedings)	
Accurate determination of intake from the breast.	2.63
Describe strategies to improve transition from hospital to home, rooming-in before discharge and follow-up services.	2.62
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.58
Effectiveness of teaching methods	2.62
Teaching effectiveness of presenter	2.61
Session Fifteen: Breastfeeding Advocacy: Creating an Effective Team	
Evaluation of How Well Learning Objectives Were Met	
Discuss how characteristics of effective athletic teams can be applied to breastfeeding promotion and assistance teams.	2.67
Describe at least two principles of planned change.	2.64
Discuss the "Baby Friendly" Initiative.	2.64
Discuss health care providers' influence on breastfeeding success.	2.65
Evaluation of Relevance of Objectives, Teaching Methods, & Teaching Effectiveness	
Relevance of objectives to program purpose/goals	2.70
Effectiveness of teaching methods	2.71
Teaching effectiveness of presenter	2.69

Note. n=244

Clinical Supervisors' Post-Program Assessment Survey

Sixty-four clinical supervisors of participants of the Breastfeeding Educator Program™ were mailed surveys which asked them to anonymously assess changes in their participating staff's clinical practice related to fourteen goals of the education program. (See Appendix N.) Twenty-two surveys were returned. In many cases, several people from a clinical area participated in the program and their supervisor was asked to complete one form reflecting a composite evaluation.

The mean scores of the responses are shown in Table 15 in descending order of improvement noted. Responses ranged from 1 (noticeable improvement) to 5 (no improvement) on the five point scale. Some improvement was indicated by 3. A "not-applicable" selection was also available. When the "not applicable" or "no opportunity to observe" choice was selected, the response was treated as missing data and no numeric score was calculated.

Some-to-noticeable improvement was reported in all categories. The top two categories that reflected more noticeable improvement involved facilitating early frequent feedings which has been shown to be critical in getting breastfeeding off to a good start. The category that showed the least relative improvement was using evidence-based recommendations that are consistent among staff. This continues to be a challenge in breastfeeding assistance programs. It is worthy of notation that the clinical supervisors reported some improvement in this challenging aspect of health care.

The assessments from the clinical supervisors represents important summative evaluation data because the assessments reflect changes in clinical practice, not just change in knowledge of participants. Since the assessments were completed

approximately one month after the program, participants had time to make and sustain improvements in their clinical practice. The assessments were made by qualified health care providers who frequently assess clinical performance related to breastfeeding promotion and assistance.

Table 15

Mean Scores of Clinical Supervisors' Post-Program Assessment Survey

Topic	Mean
Teach parents how to interpret and respond to their babies' cues	1.60
Facilitate early, frequent, effective breastfeedings	1.61
Assist families to make informed decisions regarding infant feeding	1.63
Assist families to locate resources to help meet their breastfeeding goals	1.67
Staff satisfaction related to breastfeeding services provided	1.70
Assist with latch-on, assess latch-on and milk transfer	1.71
Increase commitment to investing time and resources for breastfeeding	1.72
Increase confidence in staff's breastfeeding management skills	1.75
Prioritize teaching topics for families in each phase of lactation	1.82
Individualize recommendations using assessment data	1.83
Recognize and avoid practices that undermine continued breastfeeding	1.95
Assist families develop problem solving skills to overcome challenges	2.00
Client/patient satisfaction	2.00
Provide/refer to follow-up services	2.00
Increase confidence in parents' baby care skills	2.05
Use evidence-based recommendations that are consistent among staff	2.11

Note. n=22

Focus Group Discussion with Program Participants

Two groups (eight members and six members) participated in focus group discussions after completing the Breastfeeding Educator Program™ using the Focus Group Discussion Guide for Program Participants. (See Appendix O.) The participants shared many positive perceptions of the program and made several recommendations for future programs. The qualitative data were coded, sorted, compared, contrasted, categorized.

There were mixed assessments of the degree of emphasis on assisting families of critically ill infants. Some participants perceived that too much emphasis and detail was given to the topic and others thought the topic received about the right amount of emphasis and detail. The participants recognized that their clinical interests influenced their perceptions (e.g., health care providers who did not frequently assist families with critically ill infants thought the program placed too much emphasis on the topic.) Both focus groups, however, reached a consensus that if the Breastfeeding Educator Program™ is to be considered an overview program for breastfeeding promotion and assistance, some content could be deleted regarding assisting families with critically ill infants. They recommended that a specific brief program (one-half day or one day) be developed to meet the continuing education needs of the staff of neonatal intensive care units. The participants in the focus groups were unable to recommend other specific content that could receive less emphasis in the program.

Several participants suggested using a greater variety of instructional strategies including games, more case studies, and small group discussions of management strategies for common clinical challenges. Several participants reported that it was

difficult to stay focused with so much lecture format in the program. Several participants suggested that the program be lengthened so that alternative learning strategies (which often require more time than lecture) could be included. Issues related to amount of information discussed in the program, and desire for more variety in instructional strategies was consistent with the recommendations by the panels of experts in instructional design and breastfeeding management, as well as comments made by participants in response to the open-ended questions about how to improve the program in the program evaluation tool.

Focus Group Discussion with Program Planning Committee Members

Three groups (consisting of four members, three members, and five members) of program planning committees from the three agencies which participated in this study participated in focus group discussions after the Breastfeeding Educator Program™ was presented in their facility. The Focus Group Discussion Guide for Program Planning Committee Members provided structure for the discussions. (See Appendix P.) The planning committee members shared many positive perceptions of the program and made several recommendations for future programs. The qualitative data were coded, sorted, compared, contrasted, categorized.

The planning committee members perceived that the learning goals for the program had been prioritized as they had requested in the formative evaluation process. Since an overarching goal of the program is to modify the emphasis according to unique local learning needs, this achievement was important for the planning committee and the investigator to note.

The planning committee members also had concerns about limited active participation by enrollees and the amount of information that is addressed in the program. They, however, did not recommend lengthening the program because they noted that it is very difficult for staff to be released from their clinical responsibilities for a three-day program. They felt it would be close to impossible to convince administrators that "breastfeeding is important enough" to support a longer educational program. The program planning committees were also concerned that they would have difficulty "selling" the additional expenses incurred with a longer program to administrators and potential program participants. The committee members reluctantly agreed that some of the content in the program should be deleted. However, even with intensive questioning, they were unable to agree on what content should be omitted.

They recognized that the cost of the resource manual and the shipping costs for the extensive displays of resources and kits with models and equipment requires that participant registration fees be substantial. However, they did not want to reduce the quality of the program by reducing expenses related to those educational aids. They noted that the program appears to be perceived as a good value to participants as evidenced by achieving maximum or near maximum enrollment for the programs.

Since the program had been previously presented at all three facilities, the focus group discussion did not identify as many suggestions for helping the program run more smoothly because many difficulties had been anticipated and resolved based on previous experience. They recalled previous experiences when they needed more administrative assistants during registration and at the end of the conference. Previous experiences also allowed them to anticipate challenges with audio-visual equipment, and adequate (hot)

coffee and snacks. Reviewing these experiences provided information that can be shared with program planners who are sponsoring the program for the first time so that some of the logistical challenges can be avoided. The positive discussion regarding whether the committees would sponsor the program again was undoubtedly influenced by the selection of the sites for study which had previously made a decision for a return presentation. One of the sites has sponsored the program annually for the last six years.

The program planning committee members shared that they appreciated the opportunity to provide feedback during the focus group discussions regarding the program and the presentation in their facilities. Since the program planning committees are the "customers" who sponsor the program, it is important to note that requesting feedback and encouraging them to clarify what they liked about the program and what they would like to do differently may increase their satisfaction with the program.

Program Evaluation Standards Checklist

The Program Evaluation Standards Checklist was used in the self-assessment of the evaluation process used in this study. (See Appendix Q.) The investigator responded to each of the 30 statements to determine if the evaluation standards had been met in the evaluation process. The responses ranged from 1 (the standard was met) to 2 (the standard was partially met). All standards were met or partially met. The standards that were partially met related to the resources required to complete such a comprehensive evaluation and if the information produced was of sufficient value to justify the expenditure of resources. The standard regarding disseminating the research report to intended users was partially met because it took several months to calculate the

evaluation data from three program sites. The report was not available to the stakeholders in the first program site in a timely fashion. Means were calculated for the standards of utility, feasibility, propriety, and accuracy and reported in descending order in Table 16.

Table 16

Mean Scores of Program Evaluation Standards Checklist

Standard	Mean
Accuracy Standards (10 items)	1.00
Propriety Standard (8 items)	1.12
Utility Standards (7 items)	1.13
Feasibility Standards (3 items)	1.33

CHAPTER FIVE

DISCUSSION

This chapter contains three major sections. A discussion and interpretation of the results which were presented in Chapter 4 related to the effectiveness of the Breastfeeding Educator Program™ is included in the first section. The second section discusses the effectiveness of the evaluation process. Finally, a brief discussion of the implications of the study's findings and recommendations for future research are presented.

Discussion and Interpretation of the Results

The results are discussed in relation to the study questions which addressed the effectiveness of the program and the effectiveness of the evaluation process. Since a major focus of this study was to identify strategies to improve the program, the discussion of the findings will emphasize recommendations and suggestions for improvement acquired from the results of the evaluation process.

Effectiveness of the Breastfeeding Educator Program™

Standards for Scope and Currency

The core program was evaluated by panels of experts in lactation management education, and educators with expertise in instructional design and continuing education. The panel of breastfeeding management educators described the core program content as comprehensive, up-to-date, logically organized in a clinically relevant order, and including content that addresses knowledge, attitudes, and clinical skills. Reducing the scope of the content of the program or lengthening the program was recommended by the

content experts. This recommendation is consistent with recommendations from participants which will be discussed later.

The planning committee members perceived that the learning goals for the program had been prioritized as they had requested in the formative evaluation process. Since an overarching goal of the program is to modify the emphasis according to unique local learning needs, this achievement was important for the planning committee and the investigator to note.

Professional and Ethical Guidelines

Ethical considerations related to adult education in general and specific issues related to breastfeeding management education were evaluated by the panels of experts. Although no significant recommendations were made from these processes, the experts stated that it is important for continuing education programs to consciously evaluate these concepts at least annually. They recommended developing a self-assessment tool to evaluate these criteria.

Instructional Design

The experts in instructional design and continuing education noted that there was evidence of an instructional analysis during the development phase of the program, and the goals and learning objectives that address knowledge, attitudes, and psychomotor skills were clearly written. The experts determined that the program topics were sequenced from known to unknown, simple to complex, and followed a chronologic order. They observed the utilization of numerous instructional strategies and applauded the effective use of the events of instruction. The continuing education experts remarked

that the program modeled many of principles of effective adult education. The primary concern identified by the education experts was the high proportion of lecture and supplantive instructional approaches in the program. They recommended more exploratory, discovery, and interactive approaches and a greater variety of instructional strategies. The consensus among the experts in education was that the program suffers from information overload.

Participants shared concerns about the amount of information discussed in the program, as well as the length of the days of the program. Some participants thought there was too much lecture and overuse of slides. Others reported that the slides were what they liked best about the program.

Program participants reported that they appreciated being asked for input regarding the emphasis of topics for the program. This was accomplished by distributing the Learning Needs Assessment Survey (Appendix D) during the planning phase of the program. Participants reported that the current learning needs unique to their agency had been appropriately addressed in the program. There was animated discussion regarding topical content for the core program.

Several participants suggested using a greater variety of instructional strategies including games, more case studies, and small group discussions of management strategies for common clinical challenges. Several participants reported that it was difficult to stay focused with so much lecture format in the program. Several participants suggested that the program be lengthened so that alternative learning strategies (which often require more time than lecture) could be included. Issues related to amount of information discussed in the program, and desire for more variety in instructional

strategies triangulated with the recommendations by the panels of experts in instructional design and breastfeeding management, as well as comments made by participants in response to the open-ended questions about how to improve the program in the program evaluation tool.

Changes in Knowledge, Attitude, Behavior and Confidence in Skills

The Pre-Program, Immediate Post-Program, and Delayed Post-Program Participant Surveys documented changes after participating in the program. The first section of the survey included statements regarding knowledge and attitude regarding breastfeeding promotion and assistance. The statements were collapsed into six scales for comparison across time. Responses were improved in all scales immediately after completing the program. The scores declined slightly during the month following completion of the program. The decline in scores from the immediate post-program survey to the delayed post-program survey was not statistically significant except for the problem solving and continued breastfeeding scales. Both scales demonstrated statistically significant improvement from the pre-program to the delayed post-program scores in the scales. Some decay in improvement is often noted over time after educational experiences.

The second part of the pre-program and delayed post-program participant surveys requested reports of participants' clinical practice in the previous month as well as descriptions of their clinical practice in general. The surveys also requested a self-assessment of confidence in skills related to breastfeeding management.

The greatest improvements were noted in the participants' perceptions of their clinical practice in general. They reported increased confidence in their clinical skills

related to breastfeeding management and greater perseverance in assisting families to overcome challenges. Changes in reports of clinical practice activities in the previous month were less dramatic. This difference may reflect an overestimation of the quality of clinical practice as self-reported by health care providers. An interesting paradox was noted related to referring families to services and resources to help meet their breastfeeding goals. The change in perception of clinical practice was greatest with this item. However, the change in report of clinical practice in the last month was the lowest with this related item. (See highest and lowest difference in mean scores in Table 10 in Chapter 4.)

Clinical supervisors of staff who participated in the program completed anonymous assessment surveys one month after the program. Some-to-noticeable improvement was reported in all categories. The top two categories that reflected more noticeable improvement involved facilitating early frequent feedings which has been shown to be critical in getting breastfeeding off to a good start. The category that showed the least relative improvement was using evidence-based recommendations and consistency among staff. This continues to be a challenge in breastfeeding assistance programs. The mean score for this observation was 2.11 with 1 representing significant improvement, 3 representing some improvement, and 5 representing no improvement. Although the improvement for this goal was the least when compared to the other goals, it is worthy to note that the clinical supervisors observed more than "some improvement" in this recurring challenge in health care delivery.

The assessments from the clinical supervisors represent important evaluation data because the assessments reflect changes in clinical practice, not just change in knowledge

of participants. Since the assessments were completed approximately one month after the program, participants had time to make and sustain improvements in their clinical practice. The assessments were made by qualified health care providers who frequently assess clinical performance related to breastfeeding promotion and assistance.

Instructional Objectives

The Program Evaluation Tool provided data regarding how well the specific learning objectives were met, the relevance of objectives to the program purpose goals, and the effectiveness of the teaching methods and the presenter. The responses all averaged from excellent to good, indicating a positive perception of the program by the participants. Participants reported that they learned what they expected to learn in the program.

Participant Satisfaction

The means of the program evaluation tool for the statements describing participants' experiences in the program revealed that participants perceived that their learning would be useful in their clincal/community setting. The participants also indicated that they believed that the program was a good value for the expenses incurred while participating in the program and that they would recommend that their colleagues attend the program. These responses represent important endorsements of the program.

Effectiveness of the Evaluation Process

In assessing the effectiveness of the evaluation process of the Breastfeeding Educator Program™, the investigator completed the Program Evaluation Standards

Checklist found in Appendix Q. The specific responses and additional insights gained while completing the checklist provided assessment data to answer the study questions regarding the effectiveness of the evaluation process.

Systematic Approach

The evaluation process was organized within a formative and summative framework. Evaluation data were collected from a variety of persons including education experts, experts in breastfeeding management education, program participants, program planning committees, and clinical supervisors of staff who participated in the program.

Context of Program and Stakeholder Identification

The context of the program was described as well as the priorities of program planning committees and potential participants. (See Chapter 1 and Appendices A and C.) Current challenges in breastfeeding education were also discussed. The stakeholders in the evaluation process were clearly identified. (See Chapter 3.)

Practical and Feasible Data Collection

The evaluation process that was completed in this study was too elaborate to be feasible for most continuing education programs that address breastfeeding management. The process required too much time for the participants to provide the data and too many resources for the data to be appropriately computed and analyzed. Although the pre-program and post-program surveys provided useful information, they required excessive time to complete to justify the resources expended. Some parts of the process provided valuable information and related benefits (e.g., appreciation of being asked to provide specific feedback regarding their experiences.)

Ethical Evaluation Process and Fiscally Responsible Expenditure of Resources

The evaluation process utilized the informed consent process embedded in the standards established by the Institutional Review Board of the University of Oklahoma. The standards insured research subjects that the study would not comprise their safety, confidentiality, or the respect for the dignity of each individual. Potential risks and benefits associated with the study were defined and options to not participate or to discontinue participation at any time without penalties were clarified. The participants received copies of written consent letters explaining the above standards and procedures.

The potential conflict of interest of the investigator being heavily invested in the program being evaluated was disclosed openly. Since the focus of the evaluation was to improve the program and the investigator emphasized this goal to the study participants and to the stakeholders in the evaluation process, the potential for conflict of interest was decreased. However, the stakeholders and others reviewing this report will ultimately determine to what degree of credence the potential conflict of interest should be given.

Since the investigator funded the evaluation process, accountability to external funding sources was limited. The investigator would not recommend allocating the resources required for this depth of evaluation or for replicating this study as it was conducted.

Multi-Level Responses

The responses of the program participants to the Breastfeeding Educator Program™ were obtained in the Program Evaluation Tool. Changes in knowledge and attitudes related to breastfeeding promotion and assistance activities were documented by

statistical analysis of the Pre-Program, Immediate Post-Program, and Delayed Post-Program Participant Surveys. Changes in clinical behaviors and improved confidence in clinical skills, as well as changes in the health care system, were noted with statistical analysis of the participant surveys and the Clinical Supervisors' Assessment Surveys.

Technical Adequacy Regarding Features of Merit

Although the primary purpose of this evaluation process was to identify areas that could be improved, a related benefit of the process was to determine that the program influenced clinical practice in a positive manner. Statistical analysis of the quantitative data revealed that knowledge, attitudes, psychomotor skills, confidence, persistence with assistance, effectiveness of problem solving, and professional satisfaction increased and was sustained (with slight decay) for at least one month after participating in the educational program. Analysis of the qualitative data revealed similar themes.

Statistical analysis of the quantitative data as well as analysis of the qualitative data provided technically adequate information about the program so that the worth and merit of the program were identified The procedures and rationale used to interpret the findings were carefully described so that the basis for value judgements was clear. The data from the evaluation process was available with limited interpretations. (See Chapter 4.)

The development of the evaluation process, the accuracy of the findings, and validity of the interpretations benefitted enormously from the expertise of faculty advisors involved in this study. However, the investigator accepts full responsibility for any oversights, errors, or misinterpretations that may be identified.

Evaluation Summary

The findings of the evaluation of the Breastfeeding Educator Program™ were reported in Chapter 4 and discussed above. The Summary of Evaluation Findings and Recommendations is presented in Appendix S.

Recommendations

The improvement recommendations available to the stakeholders were some of the most important outcomes of the evaluation process. The primary recommendation was to lengthen the program and/or reduce content. The pace of the program was reported to be too fast. Participants, as well as experts, stated that less lecture and more learner-centered strategies would improve the program. Program planning committee members reported that it would be very difficult for participants to be released from their clinical responsibilities if the program were lengthened. Few recommendations were forthcoming for reducing specific content areas in the program.

Stakeholder Satisfaction

The stakeholders have communicated that they have found the information obtained in the evaluation process to be helpful in their decision making processes. The stakeholders have reported that the evaluation process addressed their needs and that they were satisfaction with the evaluation process.

Implications for Practice

Evaluation of educational experiences is a critical activity for determining if the experiences are effective and for improving the quality of educational programs.

Although the investigator determined that the evaluation process used in this study was too detailed for routine use in most settings, there were several aspects of the process that the investigator will use again and would recommend that others consider modifying for their own use.

Although not strictly considered evaluation instruments, the Program Planning Committee's Priorities Survey and the Learning Needs Assessment Survey for potential participants are important tools for conducting learning needs analysis in local settings. The Breastfeeding Educator Program™ strives to modify its emphasis related to the needs of sponsoring agencies. The simple, one-page anonymous surveys provided valuable information regarding their distinctive clinical goals, learning needs, and clinical interests in local venues. The data are easy to gather, simple to tabulate and analyze, and helpful in modifying the emphasis of the program for specific sponsoring agencies. The embedded goals of the program that program planners are asked to prioritize in the Program Planning Committee's Priorities Survey previews the criteria used in the Clinical Supervisors' Post-Program Assessment Survey. An additional benefit of using the learning needs surveys relates to reports from the planning committee members and potential participants stating that they appreciated being asked to provide input for their educational programs.

The panel of experts provided valuable insights regarding the core program. However, the investigator perceives that the information could be collected less formally through a discussion format. However, developing the questionnaires was helpful in highlighting the professional literature's key concepts in evaluating educational programs.

The investigator concurs with the panels of experts that the ethical considerations checklists and questionnaires could be modified to create a self-assessment tool.

As discussed earlier, the Pre-Program, Immediate Post-Program, and Delayed Post-Program Participant Surveys are not practical for common use. The items that encouraged participants to assess changes in their clinical behavior and performance could be reduced in number to create a tool that would be more practical and emphasize the importance of change in behavior and performance.

The majority of the Program Evaluation Tool was mandated by the application criteria for continuing education unit approval through organizations that are accredited by the American Nurses Credentialing Center's Committee on Accreditation. It provided specific data regarding how well the learning objectives were met, how well the objectives related to the program goals, and the effectiveness of the presenter in each session.

The Clinical Supervisors' Post-Program Assessment Survey provided valuable data and may have influenced the participants' sense of accountability in their clinical setting. However, its current format (three pages in length), is probably too long for most busy supervisors to complete. The response rate (34%) may have been higher with a more concise survey. The survey could be shortened to reflect the priorities identified by the planning committee in each setting.

The focus group discussions with program participants and program planning committee members provided valuable evaluation information and suggestions for improving the program. These group discussions were very cost effective in terms of resources expended considering the value of the information obtained.

The investigator would like to use the fourteen goals embedded in the program and identified in the Program Planning Committee's Priorities Survey and the Clinical Supervisors' Post-Program Assessment Survey to create a concise Post-Program Participant Survey. (See Appendices C and N.)

Evaluation activities can demonstrate the merit of educational programs and impressively improve the quality of educational offerings. Requesting feedback from a variety of stakeholders regarding specific identified goals of the program could encourage program participants, planners, and health care administrators to be more actively involved in improving the educational programs available to them.

Future Research

This study points out the need to develop feasible evaluation processes for continuing education program. Educators who repeat continuing education programs may be especially motivated to systematically gather and analyze evaluation data to improve their on-going programs. The investigator suggests that future research focus on creating a cost-effective evaluation process that measures and succinctly reports participants' response and perception of programs, changes in knowledge, skills, attitudes, clinical behavior and performance, as well as changes in the health delivery system.

Since the presenter was consistent in each site of this study, confounding variables were reduced. However, future research may seek to examine the influence of different presenters related to the program's effectiveness.

The findings of this study indicate that content should be reduced in the program. Participants in the study did not provide adequate recommendations regarding topics that

could be reduced in scope or omitted. Future research could provide specific recommendations. Future research could also measure the effectiveness of providing some of the basic program information in web-based and multi-media formats for participants to review prior to the conference. If participants had access to the basic concepts before attending the conference, then the program could increase its emphasis on the application of knowledge to clinical challenges. This modification should be evaluated systematically.

No research is available regarding the amount of decline in initial changes over time after completing a breastfeeding management educational program. Evaluating sustained changes for a longer period of time (e.g., six to twelve months) would contribute valuable information to the field. Identifying instructional designs that support sustained change after participating in an educational program in this specialized area of health care management would benefit breastfeeding management educators, health care providers, and ultimately breastfeeding families.

Conclusion

Systematic evaluations of educational programs can document the effectiveness of programs, as well as provide recommendations for improvement. This study documented improvement in knowledge, attitudes, confidence in skills, clinical performance, and health care services provided related to breastfeeding families among participants of the Breastfeeding Educator Program™. Numerous recommendations to improve the program were identified and topics for future research were suggested.

Bibliography

American Nurses Credentialing Center's Commission on Accreditation. (1996). Manual for accreditation as a provider of continuing education in nursing. Washington, DC: American Nurses Credentialing Center.

Anderson, J. R. (1995). Cognitive psychology and its implications (4th ed.). New York: W. H. Freeman and Company.

Barbour, R.S., Kitzinger, J. (Eds.). (1999). Developing focus group research. Thousand Oaks, CA: Sage Publications, Inc.

Bennett, N. L., & LeGrand, B. F. (1990). Developing continuing professional education programs. Urbana-Champaign, IL: University of Illinois.

Berk, R.A., & Rossi, P.H. (1999). Thinking about program evaluation (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Bernaix, L. W. (2000). Nurses' attitudes, subjective norms, and behavioral intentions toward support of breastfeeding mothers. Journal of Human Lactation, 16, 201-209.

Bocar, D. L. (2000). Resource manual for the breastfeeding educator program. Oklahoma City, OK: Lactation Consultant Services.

Bogdan, R. C., & Biklen, S. K. (1982). Qualitative research for education: An introduction to theory and methods. Boston: Allyn & Bacon.

Boulmetis, J., & Outwin, P. (2000). The ABCs of evaluation: Timeless techniques for program and project mangers. San Francisco: Jossey-Bass.

Brookfield, S. D. (1998). Critical thinking techniques. In M. W. Galbraith (Ed.), Adult learning methods (2nd ed.) (pp. 317-336). Malabar, FL: Krieger Publishing Company.

Bruce, N., & Griffioen, A. (1992). Usefulness of a non-experimental study design in the evaluation of service developments for infant feeding in a general hospital. Social Science Medicine, 40, 1109-1116.

Cadwell, K., Turner-Maffei, C. (2000). Developing and implementing a training strategy for increasing interdisciplinary breastfeeding and human lactation knowledge and skills in the United States: An application of the training needs assessment model proposed by Gupta. (99-MCHB-75A) Washington, DC: U.S. Department of Health and Human Services.

Caffarella, R. S. (1994). Planning programs for adult learners: A practical guide for educators and trainers and staff developers. San Francisco: Jossey-Bass Publishers.

Caffarella, R. S., & Clark, M. C. (1999). Development and learning: Themes and conclusions. New Directions for Adult and Continuing Education, 84, 97-100.

Campbell, D. T. (2000). Social measurement. Thousand Oaks, CA: Sage Publications, Inc.

Carp, A., Peterson, R., & Roelfs, P. (1974). Adult learning interests and experiences. In K. P. Cross & J.R. Valley (Eds.), Planning non-traditional program: An analysis of the issues for postsecondary education (pg. 46). San Francisco: Josey-Bass.

Cervero, R. M. (1986). Analyzing the effectiveness of continuing professional education in the workplace. Adult Education Quarterly, 36, 78-85.

Chelimsky, E., & Shadish, W.R. (Eds.). (1997). Evaluation for the 21st century: A handbook. Thousand Oaks, CA: Sage Publications, Inc.

Chen, H.T. (1990). Theory-driven evaluations. Thousand Oaks, CA: Sage Publications, Inc.

Clarke, A. Evaluation research: An introduction to principles, methods and practice. (1999). Thousand Oaks, CA: Sage Publications, Inc.

Clark, M. C., & Caffarella, R. S. (1999). An upadate on adult development theory: New ways of thinking about the life course. San Francisco: Jossey-Bass Publishers.

Coalition of Lifelong Learning Organizations. Guidelines for developing and implementing a code of ethics for adult educators. (1997). In Beyond instruction: comprehensive program planning for business and education. Rothwee, W. J., & Cookson, P. S. San Francisco: Josey-Bass Publishers.

Cross, K. P. (1981). Adults as learners: Increasing participation and facilitating learning. San Francisco: Jossey-Bass Publishers

Cousins J. B., & Earl. L. M. (Eds.) (1995). Participatory evaluation in education: Studies in evaluation use and organizational learning. Washington. D.C.: Falmer Press

Curran. V. R. (2000). An eclectic model for evaluating web-based continuing medical education courseware systems. Evaluation & The Health Professions. 23. 319-348.

Dale. R. (1998). Evaluation frameworks for development programmes and projects. Thousand Oaks. CA: Sage Publications. Inc.

Dean. D. L. (1994). How to use focus groups. In J. S. Wholey. H. P. Hatry. & K. E. Newcomer (Eds.) Handbook of practical program evaluation (pp. 338-349). San Francisco. CA: Jossey-Bass. Inc.

Deci. E. L.. & Rayan. R. M. (1987). The support of autonomy and the control of behavior. Journal of Personality and Social Psychology. 53. 1024-1037.

Dennis. C. L. (1999). Theoretical underpinning of breastfeeding confidence: A self-efficacy framework. Journal of Human Lactation. 15. 195-201.

Eisner. E. W. (1985). The art of educational evaluation. Philadelphia: The Falmer Press of Taylor & Francis. Inc.

Ellis. D. J.. & Hewat. R. J. (1983). Do nurses help or hinder mothers who breastfeed? Journal of Advanced Nursing 8. 281-288.

Evidence-Based Medicine Working Group. American Medical Association. (1992). Evidence-based medicine: A new approach to teaching the practice of medicine. Journal of the American Medical Association 268. 2420-2425.

Fetterman. D. M.. Kaftarian. S. J.. & Wandersman. A. (Eds.) 1996). Empowerment evaluation: knowledge and tools for self-assessment and accountability. Thousand Oaks. CA: Sage Publications. Inc.

Fink. A. (1995). Evaluation for education and psychology. Thousand Oaks. CA: Sage Publications. Inc.

Fink. A. (1993). Evaluation fundamentals: Guiding helath programs. research. and policy. Thousand Oaks. CA: Sage Publications. Inc.

Fitz-Gibbon. C. T.. & Morris. L. L. (1987). How to design a program evaluation. Thousand Oaks. CA: Sage Publications. Inc.

Forsyth, I., Jolliffe, A., & Stevens, D. (1995). Evaluating a course: practical strategies for teahers, lecturers, and trainers. London: Kogan Page Limited.

Fowler, F. J. (1995). Improving survey questions: Design and evaluation. Thousand Oaks, CA: Sage Publications, Inc.

Freeman, C. K., & Lowe, N. K. (1993). Breastfeeding care in Ohio hospitals: a gap between research and practice. Journal of Obstetrics, Gynecologic, and Neonatal Nursing, 22, 447-454.

Freire, P. (1998). Pedagogy of freedom: Ethics, democracy, and civic courage. New York: Rowman & Littlefield Publishers, Inc.

Gagne, R. M., Briggs, L. J., & Wager, W.W. (1992). Principles of instructional design (4th ed.). Belmont, CA: Wadswoth/Thomson Learning.

Galvin, J. G. (1983). What can trainers learn from educators about evaluating management training? Training and Development Journal, 37, 52, 54-57.

Gredler, M. E. (1996). Program evaluation. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Guba, E. G., & Lincoln, Y. S. (1985). Effective evaluation. San Francisco: Jossey-Bass.

Guba, E. G. & Lincoln, Y. S. (1986). The countenances of fourth generation evaluation: Description, judgement, and negotiation. In Evaluation Studies Review Annual (Eds. D Cordray & M. Lipsey), 11, 70-88.

Gupta, K. (1999). A practical guide to needs assessment. San Francisco: Jossey-Bass.

Guyatt, G. for the Evidence-Based Medicine Working Group of the American Medical Association. (1994). Evidence-based health care: A new approach to teaching the practice of health. Journal of Dental Education, 58, 648-653.

Hellings, P., & Howe, C. (2000). Assessment of breastfeeding knowledge of nurse practitioners and nurse-midwives. Journal of Midwifery & Women's Health, 45, 264-270.

Houle, C. O. (1988). The inquiring mind (3rd ed.). Norman, OK: Oklahoma Research Center for Continuing Professional and Higher Education.

House, E. R. (1983). Assumptions underlying evaluation models. In G. F. Madaus, M. Scriven, & D. L. Stufflebeam (Eds.), Evaluation models: Viewpoints on educational and human services evaluation (pp. 45-64). Norwell, MA: Kluwer Academic Publishers.

Houston, M.J., & Field, P.A. (1988). Practices and policies in the initiation of breastfeeding. Journal of Obstetrics, Gynecologic, and Neonatal Nursing, 17, 418-424.

Isaac, S., & Michael, W. B. (1995). Handbook in research and evaluation: For education and the behavioral sciences (3rd ed.). San Diego, CA: Educational and Industrial Testing Services.

International Board of Lactation Consultant Examiners. (1998). Speaker disclosure/conflict of interest declaration policy. Falls Church, VA: International Board of Lactation Consultant Examiners.

International Lactation Consultant Association's Professional Education Council. (2001). Guide to Selecting a Lactation Management Course. (Eds. J. Lauwers & L. J. Smith). Raleigh, NC: International Lactation Consultant Association.

Jeska, S. B. (1994). Evaluation: An important aspect of staff development service. Journal of Nursing Care Quality, 8, (4) 55-65.

Joint Committee on Standard for Educational Evalution (2nd ed.) (1994). The program evaluation standards. Thousand Oaks, CA: Sage Publications, Inc.

Kirkpatrick, D. L. (1998). Evaluating training programs: The four levels (2nd ed.). San Francisco: Berrett-Koehler Publishers, Inc.

Klatt, B. (1999). The ultimate training workshop handbook. NY: McGraw-Hill Companies, Inc.

Knowles, M. S. (1970). The modern practice of adult education: Andragogy versus pedagogy. NY: Association Press.

Knowles, M. S. (1979). Andragogy revisted part II. Adult Education, 30 (1), 52-53.

Knox, A. B. (1998). Evaluating adult and continuing education. Unpublished doctoral dissertation, Ohio State University, Columbus.

Kovach, A.C. (1997). Hospital breastfeeding policies in the Philadelphia area: A comparison with the ten steps to successful breastfeeding. Birth, 24, 41-48.

Krannich, C. R. (1998). 101 secrets of highly effective speakers. New York: Impact Publishers.

Krueger, R. A., & Casey, M. A. (2000). Focus groups: A practical guide for applied research (3rd ed.). Thousand Oaks, CA: Sage Publications.

Kushner, S. (2000). Personalizing evaluation. Thousand Oaks, CA: Sage Publications, Inc.

Lawrence, R. (1985). Breastfeeding: A guide for the medical profession (2nd ed.). St. Louis: C.V. Mosby Co.

Levin, H. M., & McEwan, P. C. (2000). Cost-effectiveness analysis: Methods and applications. Thousand Oaks, CA: Sage Publications, Inc.

Levinson, D. J. (1986). A conception of adult development. American Psychologist, 41(1), 3-13.

Lindeman, E. C. (1979). The meaning of adult education. Norman, OK: Oklahoma Research Center for Continuing Professional and Higher Education.

Long, H. B. (1998). Understanding adult learners. In M. W. Galbraith (Ed.), Adult learning methods (2nd ed.) (pp.21-35). Malabar, FL: Krieger Publishing Company.

Lowman, J. (1995). Mastering the techniques of teaching (2nd ed.). San Francisco: Jossey-Bass Publishers.

Lunn, S. (1983). Evaluation a critical but neglected step in education design. American Operating Room Nurses Journal, 37, (1) 94-98.

Madaus, G. F., Scriven, M., Stufflebeam, D.L. (1983). Evaluation models: Viewpoints on educational and human services evaluation. Norwell, MA: Kluwer Academic Publishers..

Mager, R. M. (1962). Preparing instructional objectives. Palo Alto, CA: Fearon.

Manceor, S. A. (1998). An analysis of the effect of continuing professional education on employee performance and productivity. Unpublished doctoral dissertation, University of Michigan.

Marmet, C., & Shell, E. (1984). Training neonates to suck correctly. Maternal Child Nursing, 9, 401-407.

Maslow, A. H. (1987). Motivation and personality (3rd ed.). New York: Harper & Row.

Merriam, S. B., & Caffarella, R. S. (1999). Learning in adulthood (2nd ed.). San Francisco: Jossey-Bass.

Meier, P., & Anderson, G. C. (1987). Responses of small preterm infants to bottle- and breast-feeding. Maternal Child Nursing, 12, 97-105.

Mohr, L. B. (1995). Impact analysis for program evaluation (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Morris, L. L., Fitz-Gibbon, C. T., & Freeman. (1987). How to communicate evaluation findings. Thousand Oaks, CA: Sage Publications, Inc.

Morrison, G. R., Ross, S.T. & Kemp, J. E. (2001). Designing effective instruction (3rd ed.). NY: John Wiley & Sons.

Neifert, M. A., & Seacat, J. (1986). A guide to successful breastfeeding. Contemporary Pediatrics, 3, 26-45.

Owen, J. (1999). Program evaluation: Forms and approaches. Thousand Oaks, CA: Sage Publications, Inc.

Padaki, V. (1995). Development intervention and programme evaluation: Concepts & cases. Thousand Oaks, CA: Sage Publications, Inc.

Patton, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.). Newbury Park, CA : Sage Publications.

Patton, M. Q. (1997). Utilization-focused evaluation (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Posner, G. J. (1995). Analyzing the curriculum (2nd ed.). NY McGraw-Hill, Inc.

Pawson, R., & Tilley, N. (1997). Realistic evaluation. Thousand Oaks, CA: Sage Publications, Inc.

Pelgrum, W. J. (1989). Educational assessment: Monitoring, evaluation and the curriculum. DeLier: Academisch Boken Centrum.

Posavac, E. J., & Carey, R. G. (1997). Program evaluation: Methods and case studies (5th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.

Reigeluth, C. M. (1999). Instructional design - theories and models: A new paradigm of instructional theory (Vol. 2). Mahwash, NJ:

Robson, C. (2000). Small-scale evaluation. Thousand Oaks, CA: Sage Publications.

Rossi, P. H., Freeman, H. E., & Lipsey, M. W. (1999). Evaluation: A systematic approach (6th ed.). Thousand Oaks, CA: Sage Publications.

Ryan, A. S. (1997). The resurgence of breastfeeding in the United States. Pediatrics, 99, E12.

Schram, B. (1997). Creating small scale social programs: Planning, implementation, and evaluation. Thousand Oaks, CA: Sage Publications.

Schwandt, T. A. (1997). Qualitative inquiry. Thousand Oaks, CA: Sage Publications.

Scriven, M. S. (1969). An introduction to meta-evaluation. Educational Product Report, 2(5), 36-38.

Scriven, M. (1991). Evaluation thesaurus (4th ed.). Newbury Park, CA: SAGE Publications, Inc.

Shadish, W. R., Cook, T. D., & Leviton, L.C. (1991). Foundations of program evaluation: Theories of practice. Newbury Park: CA: Sage Publications.

Sigelman, C. K. (1999). Life span human development. Pacific Grove, CA: Brooks/Cole Publishers.

Smith, P. L., & Ragan, T. J. (1999). Instructional design (2nd ed.). Upper Saddle River, NJ: Prentice Hall, Inc.

Stake, R. E. (1967). The countenance of educational evaluation. Teachers College Record, 68, 523-540.

Stake, R. E. (1986). Quieting reform: Social science and social action in an urban youth program. Urbana, IL: University of Illinois Press.

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

Strauss, A., & Corbin, J. Basics of qualitative research (2nd ed.). Thousand Oaks, CA: Sage Publications.

Strembel, S., Sass, S., Cole, G., Hartner, J., & Fischer, C. (1991). Breast-feeding policies and routines among Arizona hospitals and nursery staff: Results and implications of a descriptive study. Journal of the American Dietetic Association, 91, 923-925.

Stufflebeam, D. L. (1981). Meta-evaluation: Concepts, standards, and uses. In R. Berk (Ed.), Educational evaluation methodology: The state of the art (pp. 146-163). Baltimore: Johns Hopkins University Press.

Stufflebeam, D. L. (1983). The CIPP model for program evaluation. In G. F. Madaus, M. Scriven, & D. L. Stufflebeam (Eds.), Evaluation models: Viewpoints on educational and human services evaluation (pp. 117-141). Norwell, MA: Kluwer Academic Publishers.

Torres, R. T., Preskill, H. S., Piontek, M.E. (1996). Evaluation strategies for communicating and reporting: Enhancing learning in organizations. Thousand Oaks, CA: Sage Publications, Inc.

Tyler, R. W. (1983). A rationale for program evaluation. In G. F. Madaus, M. Scriven, & D. L. Stufflebeam (Eds.), Evaluation models: Viewpoints on educational and human services evaluation (pp. 67-78). Norwell, MA: Kluwer Academic Publishers.

Van Adelsberg, D.(1999). Running a training like a business. San Francisco: Berrett-Koehler Publisher, Inc.

Weiss, C. H. (1998). Evaluation (2nd ed.). Upper Saddle River, NJ: Prentice Hall, Inc.

Westphal, M. F., Taddei, J.A.C., Venancio, S. I., & Bogus, C. M. (1995). Breast-feeding training for health professionals and resultant institutional changes. Bulletin WHO, 73, 461-468.

Widstrom, A. M. (1987). Gastric suction in healthy newborn infants: Effects on circulation and feeding behavior. Acta Paediatrica Scandinavia, 76, 566-572.

Wholey, J. S., Hatry, H. P., & Newcomer, K. E. (1994). Handbook of practical program evaluation. San Francisco, CA: Jossey-Bass, Inc.

Winikoff, B., Myers, D., Laukaran, V. H., & Stone, R. (1987). Overcoming obstacles to breast-feeding in a large municipal hospital: Applications of lessons learned. Pediatrics, 80, 423-433.

Wlodkowski, R. J. (1999). Enhancing adult motivation to learn: A comprehensive guide for teaching all adults (rev. ed.). San Francisco: Jossey-Bass Inc.

World Alliance for Breastfeeding Action. (1997). WABA code of conduct for conferences and events. Penang, Malaysia: World Alliance for Breastfeeding Action.

World Health Organization. (1981). The international code of the marketing of breast milk substitutes. Geneva, Switzerland: World Health Organization.

World Health Organization/United Nations Infant and Children's Emergency Fund. (1992). Baby-friendly hospital initiative: 1. Global criteria for the WHO/UNICEF baby-friendly hospital initiative. Geneva, Switzerland: WHO/UNICEF.

Worthen, B. R., Sanders, J. R., & Fitzpatrick, J. L. (1997). Program evaluation: Alternative approaches and practical outcomes (2nd ed.). White Plains, NY: Longman Publishers, USA.

Figures

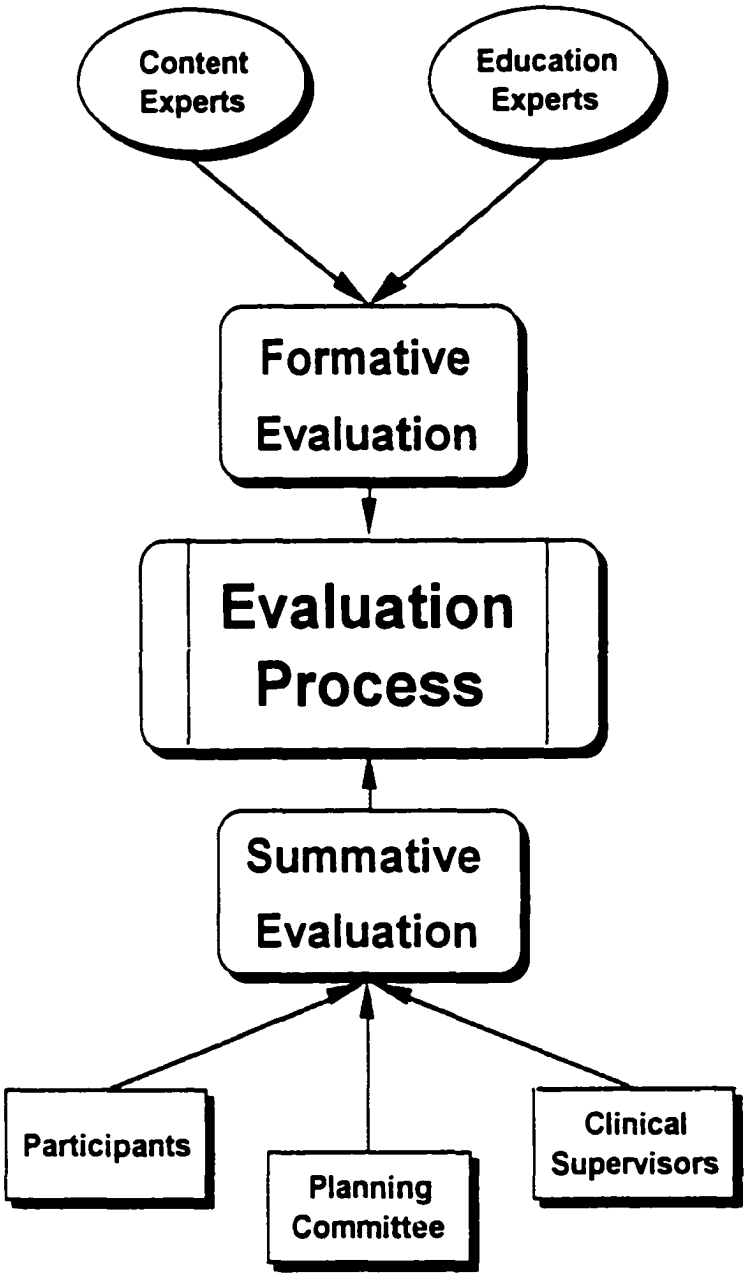

Figure 1

Overview of the Evaluation Process
for the
Breastfeeding Educator Program

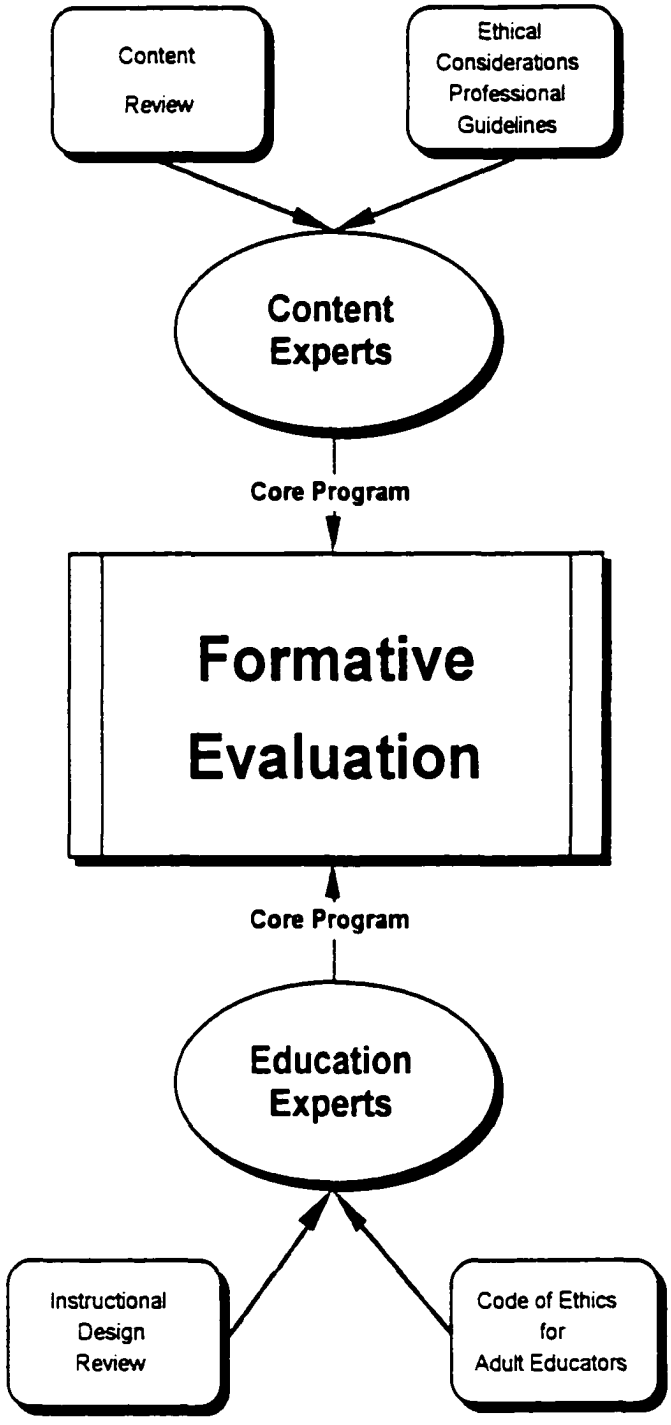

Figure 2.

Formative Evaluation Phase

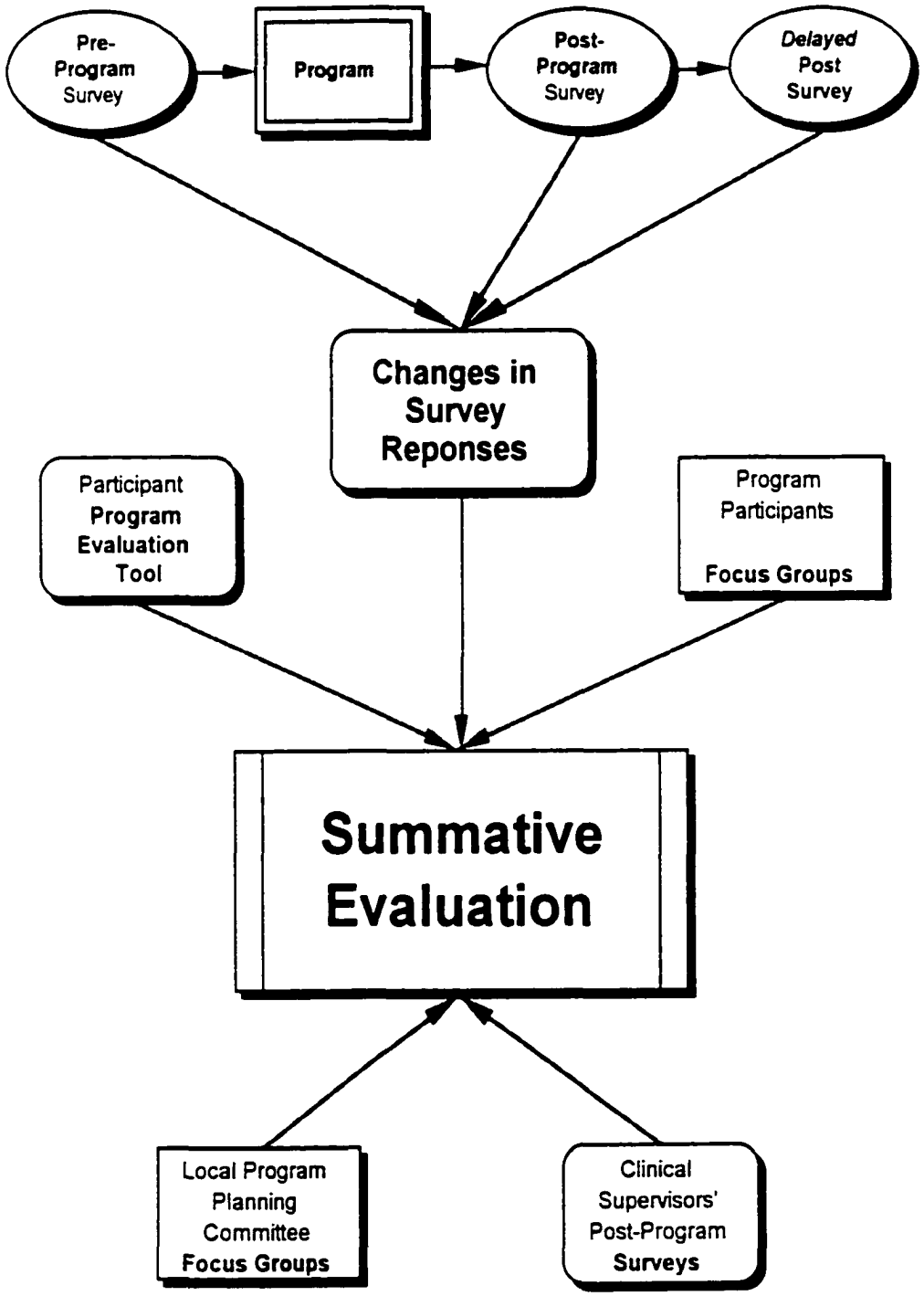

Figure 3

Summative Evaluation Phase

Appendices

Appendix A

Context of the

Breastfeeding Educator Program™

Context of the Breastfeeding Educator Program™

The Breastfeeding Educator Program™ is a continuing education program offered to breastfeeding advocates. It provides a comprehensive overview of the phases of lactation with emphasis on informed decision making, getting off to a good start, and overcoming common breastfeeding challenges.

Since most educational preparation (pre-service) programs for health care providers do not emphasize lactation promotion and assistance in their basic curricula, the Breastfeeding Educator Program™ was created to assist health care providers and other breastfeeding advocates to develop basic knowledge, skills, and attitudes for optimizing breastfeeding. The program was initially developed for hospital-based nurses and has been modified to address issues encountered in home health follow-up services, health department clinics, child abuse prevention programs, and physician offices.

The program is organized in fifteen sessions that is usually presented in a three-day format. The sessions address normal circumstance breastfeeding and challenges commonly experienced in a chronologic format beginning in the prenatal period until weaning. Assisting employed breastfeeding mothers and mothers with critically ill infants is also included. Promoting breastfeeding among socioeconomically disadvantaged and facilitating change in clinical settings are also addressed. Evidence-based, practical, clinical management strategies and discussion of the professional literature as rationale for practice are emphasized throughout the program.

High risk "flags" are identified in various phases of lactation to assist health care providers prioritize their care of families who may need additional assistance and support. The global "Baby Friendly" Initiative criteria created by the World Health Organization are incorporated in the sessions. The American Academy of Pediatrics' recommendations for breastfeeding management are also emphasized.

The program was primarily developed by and is presented by Debi Bocar, RN, MS, MEd, International Board Certified Lactation Consultant. It has been presented more than 60 times since 1987 in the Midwestern United States. Approximately 4,500 health care providers from a variety of backgrounds (e.g., nurses, dieticians, childbirth educators, doulas, physical therapists, occupational therapists, feeding specialists, medical doctors) as well as other breastfeeding advocates have participated in the program.

The program utilizes a variety of instructional strategies. More than 3000 clinical and narrative slides, as well as video tape segments illustrate the key concepts in the program. Participants divide into pairs and use a skills equipment

kit (includes a Lactessa doll. breast model. breast shells. supplemental nursing devices. manual breast pumps. etc.) to practice procedures throughout the workshop related to positioning. latch-on. supplementation. breastmilk expression. and other assistance techniques. Each participant receives an eight-hundred – page resource manual that contains learning objectives. extensive lecture notes. bibliographies. and study questions for each session as well a numerous listings for resources that are available to breastfeeding families.

The program has been approved through the Missouri Nurses Association (MONA) for up to 29.7 CEUs (Continuing Education Units). MONA is an approved provider by the American Nurses Credentialing Center's Committee on Accreditation. The program has also been approved for up to 29.7 L-CERPs (Lactation-Continuing Education Recognition Points) by the International Board of Lactation Consultant Examiners.

The program can be customized in its emphasis to the learning needs of a specific organization or institution.. A priorities survey and a learning needs assessment is completed by the sponsoring agency. Arrangements for sponsoring the program can be made through Lactation Consultant Services™ (405)722-2163. Lactation Consultant Services ™ provides continuing education certificates. an original manuscript for printing the resource manuals. and use of audio-visuals and skills equipment kits.

There are three similar programs in the United States. The University of California at Los Angeles provides a Lactation Educator Program that is five days in length. A five-day Lactation Counselor Program is offered by The Center for Breastfeeding in Massachuset. and the Foundations of Breastfeeding Support Program is a three-day program offered by Lactation Education Resources in Virginia. The other programs were developed after the Breastfeeding Educator Program ™ was established.

The Breastfeeding Educator Program™ is presented in a variety of midwestern locations (See listing of previous locations in Appendix B.) Other locations may be identified in the future. The registration fee (2001) usually varies from $275 to $350 for the three day conference.

Previous conference participants have reported that the program is well organized and that it emphasizes clinical applicability. The goals of the program are to increase consistency among staff regarding breastfeeding management and client education by providing accurate. up-to-date information from the professional literature. and to enhance participants' confidence in breastfeeding assistance skills. A summary of recurring themes that are emphasized in the Breastfeeding Educator Program™ follows.

Themes in the Breastfeeding Educator Program

People do the best they can with the resources available to them at the time

- **Parents have Rights to**:

  Complete, accurate information to make INFORMED DECISIONS

  Skilled assistance (prenatal, intrapartum, follow-up care) in "BABY FRIENDLY" facilities

  Referral for specialized services in unusually challenging situations

  Resources for breastfeeding support in the health care system & the community

- **Health Care Providers have Professional Responsibilities to**:

  - **ACTIVELY PROMOTE breastfeeding**

    Recognize its significant benefits (for infants, mothers, country, & the global community)

    Enthusiastically support *any* interest in breastfeeding

    Recognize that *all* breastfeeding provides benefits

  - **Empower families to meet their personal breastfeeding goals**

    Teach effective problem solving skills: Identify available resources

    - **Teach** families the importance of

      Early, frequent feedings

      Especially putting **baby to breast immediately after birth**

      Trust in **infant's abilities** (to feed, communicate, etc)

      Response to infant (Especially to **hunger, satiety**, and **distress cues**)

      Frequent removal of breastmilk to ensure continued milk production

      How to know **"Is baby getting enough?"**

  - ***Individualize*** **assessments** and **interventions - Correct underlying problem(s)**

    Avoid unnecessary or routine interventions

    Consider **risk / benefit** (cost / benefit) **ratio** for all recommendations

    Ensure infant nourishment - **Feed the baby!**

  - **Keep breastfeeding simple - Communicate ease of breastfeeding**

    Avoid rigid rules and regulations, unnecessary restrictions

    Avoid penalizing mothers with unattractive recommendations or restrictions

    Provide anticipatory guidance for *common* experiences - Avoid overwhelming families

    Teach who and when to call for assistance

- **Enhance parental confidence**

  Help create **positive experiences**

  Express **positive predictions** regarding their capabilities

- **Enhance parent-infant attachment**

  Facilitate interaction when infant is in a quite, alert state

  Encourage touching and skin-to-skin contact

  Model **humane treatment** of infants (beginning with a gentle welcoming at birth)

- **Facilitate the incorporation of the newborn into the family**

  Emphasize the importance of **empathetically *nurturing* infants**

- **Encourage optimal growth & development of *each* family member**

Appendix B

Dates and Locations

of the

Breastfeeding Educator Program™

Dates and Locations of the Breastfeeding Educator Program™

Dates	Locations
4-87 - 7-88	Mercy Health Center, Oklahoma City, OK (Pricillia Westbrook, agency coordinator)
3-88 - 5-88	Oklahoma Memorial Hospital, Oklahoma City, OK (Sharon White, agency coordinator)
10-13 & 14-88	Baptist Medical Center of Oklahoma, Oklahoma City, OK (Pauline Lisle, agency coordinator)
12-7 & 8-89	Presbyterian Hospital (HCA), Oklahoma City, OK (Lynda Kruse, agency coordinator)
4-5 & 6-90	Norman Regional Hospital, Norman, OK (Linda Miller, agency coordinator)
5-17 & 18-90	Comanche County Memorial Hospital, Lawton, OK (Leanne Legako, agency coordinator)
11-27 & 28-90	Hilcrest Hospital, Tulsa, OK (Angie Summers, agency coordinator)
10-2 & 3-91	Cherokee Nation WIC Program, Shangri La Afton, OK (Eufama John, agency coordinator)
2-6 & 7-92	Oklahoma State Department of Health, Edmond, OK (Teresa Aberle, agency coordinator)
4-2 & 3-92	Mercy Health Center, Oklahoma City, OK (Lola Hall, agency Coordinator)
8-6 & 7-92	Oklahoma State Department of Health, Edmond, OK (Teresa Aberle, agency coordinator)
9-21 & 22-92	St Mary's Hospital, Enid, OK (Gail Kish, agency coordinator)
11-4 & 5-92	McAlester Regional Hospital, McAlester, OK (Debbie Vermillion, agency coordinator)

2-25 & 26-93	Mercy Health Center, Oklahoma City, OK (Lola Hall, agency coordinator)
4-22 & 23-93	Mercy Health Center, Oklahoma City, OK (Lola Hall, agency coordinator)
5-6 & 7-93	Oklahoma State Health Department, Oklahoma City, OK (Teresa Aberle, agency coordinator)
2-2,3 & 4-94	Harris-Methodist, Forth Worth, Texas (Melissa Sherrod and Ida Nicholson, agency coordinators)
3-2, 3, & 4-94	Missouri Department of Health WIC Program, Jefferson City, MO (Debbie McClurg-Hitt, agency coordinator)
4-21, 22, & 23-94	Mercy Health Center, Oklahoma City, OK (Lola Hall, agency coordinator)
11-8, 9, & 10-94	Missouri Public Health Association, Columbia MO (Debbie McClurg- Hitt, agency coordinator)
3-2, 3, & 4-95	Mercy Health Center, Oklahoma City, OK (Karen Palumbo, agency coordinator)
6-12, 13, & 14-95	Oklahoma State Department of Health, Oklahoma City, OK (Hithesh Bakshi, agency coordinator)
9-7, 8, & 9-95	St. Elizabeth Hospital, Appleton, WI (Carole Bescheidle and Ruth Hall, agency coordinators)
10-12--14-95	Hillcrest Hospital, Tulsa, OK (Sharon Bauer, and Cheryl Coleman, agency coordinators)
1-31, 2-1 & 2-96	Choctaw Nation WIC, Eufala, OK (Debi Tipton, agency coordinator)
4-2, 3, & 4-96	Mercy Health Center, Oklahoma City, OK (Sheri VanOosten, agency coordinator)
5-8, 9, & 10-96	Oklahoma State Department of Health, Oklahoma City, OK (Hithesh Bakshi, agency coordinator)
9-9, 10, & 11-96	Iowa Methodist Medical Center, Des Moines, IA (Judy Losh, coordinator)

3-5, 6, & 7-97	Mercy Health Center, Oklahoma City, OK (Sheri VanOosten, agency Coordinator)
5-14, 15, & 16-97	Missouri Department of Health WIC Program, Columbia MO (Debbie McClurg-Hitt and Ken Steiner, agency coordinators)
6-11, 12, & 13-97	Oklahoma State Department of Health WIC Program (Hitesh Bakshi, agency coordinator)
7-21, 22, 23, & 24-97	Brooks AFB, San Antonio, TX (Martha Salas and Mary Jane Dobson, agency coordinators)
9-10, 11, & 12-97	Iowa Methodist Medical Center, Des Moines, IA (Judy Losh, agency coordinator)
10-1, 2, & 3-97	Mercy Health Center, Oklahoma City, OK (Sheri VanOosten, agency coordinator)
11-10, 11, & 12-97	Presbyterian Hospital of Dallas, Dallas, TX (Jeannette Crenshaw, agency occordinator)
12-9, 10, & 11-97	St. Francis Hospital and Medical Center and Stormont-Vail Health Care, Topeka, KS (Patty Brown and Libby Rosen agency coordinators)
1-29, 30, & 31-98	Presbyterian Health Care System of Plano, Plano, TX (Jeanette Crenshaw, agency coordinator)
2-11, 12, & 13-98	Children First, Oklahoma State Health Department, Tulsa, OK (Betty Ales, and Nancy Nelson, agency coordinators)
3-4, 5, & 6-98	Mercy Health Center, Oklahoma City, OK (Sheri VanOosten, agency coordinator)
5-12, 13, & 14-98	Provena Covenant Medical Center, Urbana, IL (Cindy Leyhe and Andrea Grzyb, agency coordinators)
6-30, 31, & 7-1-98	Cherokee Nation WIC, Tahlequah, OK (Eufama John, agency coordinator)
8-6, 7, & 8-98	Presbyterian Hospital of Dallas, Dallas, TX (Jeanette Crenshaw, agency coordinator)
9-9, 10, & 11-98	Iowa Methodist Medical Center, Des Moines, IA (Judy Losh, agency coordinator)

10-7, 8, & 9-98	Center for Women and Families, Affinity Health System, Appleton, WI, Oshkosh, WI (Ruth Hall and Carole Gescheidle, agency coordinators)
11-16, 17, & 18-98	Mercy Health Center, Oklahoma City, OK (Shelly Wise, agency coordinator)
12-2, 3, & 4-98	Provena Covenant Medical Center, Urbana, IL (Cindy Leyhe and Andrea Grzyb, agency coordinators)
1-21, 22, & 23-99	Presbyterian Hospital of Plano, Plano, TX (Jeannette Crenshaw, agency coordinator)
3-3, 4, & 5-99	Jones Center for Families, Community Health and Wellness, Springdale, AR (Deborah Henderson, agency coordinator)
4-7, 8, & 9-99	Mercy Health Center, Oklahoma City, OK (Shelly Wise, agency coordinator)
5-25, 26, & 27-99	University of Wisconsin-Eau Claire Continuing Education in Nursing and WIC & MCH Programs- Department of Human and Family Services, Eau Claire, WI (Rita Sparks and Barb Severson, agency coordinators)
6-24, 25, & 26-99	Cox Medical Center South, Springfield, MO (Meredith Martin and Becky Cave, agency coordinators)
9-9, 10, & 11-99	Iowa Methodist Medical Center, Des Moines, IA (Judy Losh, agency coordinator)
10-7, 8 & 9-99	Breastfeeding Educator Program, Presbyterian Hospital of Dallas, Dallas, TX (Jeannette Crenshaw, agency coordinator)
1-17, 18, & 19-00	University Hospitals, Oklahoma City, OK (Becky Mannel, agency coordinator)
3-7, 8, & 9-00	Breastfeeding Educator Program, University of Kansas Hospital, Kansas City, KS (Susan Nielson and Janet Borge, coordinators)
4-17, 18, & 19-00	Breastfeeding Educator Program, Jones Center for Families, Community Health and Wellness, Springdale, AR (Deborah Henderson, Coordinator)

6-12, 13, & 14-00	Breastfeeding Educator Program, Stormont-Vail Health Care, Topeka, KS (Libby Rosen, coordinator)
9-20, 21, & 22-00	Iowa Methodist Medical Center, Des Moines, IA (Judy Losh, agency coordinator)
10-4, 5, & 6-00	Center for Women and Families, St. Elizabeth Hospital, Appleton, WI (Kristy Begun, agency coordinator)
11-29, 30, & 12-1-00	Mercy Health Center, Oklahoma City, OK (Shelly Wise, agency coordinator)
5- 2, 3, & 4- 01	Hillcrest Medical Center, Tulsa, OK (Sharon Bauer & Karen Stockwell, agency coordinators)
7-24, 25, & 26, 2001	Mercy Health Center, Oklahoma City, OK (Shelly Wise, Agency coordinator)
9-18, 19, & 20, 2001	Iowa Methodist Medical Center, Des Moines, IA (Judy Losh, agency coordinator)
11- 6, 7, & 8, 2001	St Mary's Health Center, St. Louis, MO (Mary Schurk, agency coordinator)

Appendix C

Responsiveness of the

Breastfeeding Educator Program™

to Local Venues'

Unique Learning Needs

Responsiveness of the Breastfeeding Educator Program™ to Local Venues' Unique Learning Needs

Although, the Breastfeeding Educator Program™ has a basic curriculum that provides consistency to the program, one of the unique features of the program is the ability to customize emphasis for different sponsoring agencies. Clinical specialists and administrators have often identified specific areas of concern related to breastfeeding promotion and assistance before they contact Lactation Consultant Services™ to inquire about their facility sponsoring a breastfeeding education program. Administrators are also interested in their staff's perceptions of their continuing education needs.

Program Planning Committee's Priorities Survey

Agencies who sponsor the Breastfeeding Educator Program™ often develop planning committees to provide continuity for the presentation of the program. The planning committees are usually composed of health care providers who give direct patient care, administrators, and in some cases, family advocates. The planning committees can provide valuable evaluation data regarding the educational needs in their facility.

Fourteen goals for the Breastfeeding Educator Program™ were included in the Program Planning Committee's Priorities Survey which was distributed to 34 potential planning committee member in the Midwest United States. (See following sample.) Twenty-one members anonymously completed the survey. The mean scores of the responses are shown in the following table in descending order of importance to the planning committee members. Five of the first six priority goals address specific clinical assistance and management skills. Assisting families locate resources and follow-up services were lower priorities.

Program Planning Committee's Priorities Survey

Each of the following goals is embedded in the Breastfeeding Educator Program™ After consulting with your local leaders who provide breastfeeding services, please rate the level of importance for each of the following goals for your staff. Please use this priority code

1 - Highly needed in my setting: Highly emphasize in the program

2 - Needs reinforcement in my setting: Moderately emphasize in the program

3 - Mostly or nearly accomplished in my setting: Minimally emphasize

(Priority Code)

_____ a. Increase commitment to *investing* clinical time and resources in breastfeeding promotion and assistance.

_____ b. Use therapeutic communication skills to provide appropriate information so families can make *informed decisions* regarding how they will feed their baby.

_____ c. Improve confidence in breastfeeding management skills that reflects understanding the normal course of lactation from pre-conception through weaning

_____ d. Provide breastfeeding management recommendations that are evidence-based and consistent with recommendations given by colleagues.

_____ e. Individualize breastfeeding management recommendations for each family using accurate assessment data regarding physical, psycho-social, and spiritual factors.

_____ f. Prioritize teaching topics that reflect the family's learning needs during each phase of the childbearing cycle.

_____ g. Assist families to locate resources to help meet their breastfeeding goals.

_____ h. Facilitate early, frequent, effective feedings.

_____ i. Teach parents how to accurately interpret and appropriately respond to their babies behavioral cues.

_____ j. Assist mothers and babies to accomplish effective latch-on, accurately assess latch-on and milk transfer, and generate strategies to optimize breastfeeding.

_____ k. Assist families to develop problem-solving skills to overcome breastfeeding challenges.

_____ l. Recognize and avoid practices that undermine continued breastfeeding. (e.g., test feeds, unnecessary supplementation, pacifier use, prolonged feeding intervals, etc.)

_____ m. Provide and/or refer to effective follow-up services for breastfeeding families.

_____ n. Assist parents to develop confidence in baby care skills and optimize postpartum adjustment with their new baby.

Please list additional desired outcomes on the back of this page.

Mean Scores of Program Planning Committee's Priorities Survey

Topic	Mean
Assist with latch-on, assess latch-on milk transfer	1.38
Use evidence-based recommendations that are consistent among staff	1.52
Assist families develop problem solving skills to overcome challenges	1.52
Teach parents how to interpret and respond to their babies' cues	1.55
Facilitate early, frequent, effective breastfeedings	1.62
Recognize and avoid practices that undermine continued breastfeeding	1.62
Individualize recommendations using assessment data	1.71
Assist families to make informed decisions regarding infant feeding	1.74
Increase confidence in staff's breastfeeding management skills	1.80
Prioritize teaching topics for families in each phase of lactation	1.81
Increase commitment to investing time and resources for breastfeeding	1.81
Increase confidence in parents' baby care skills	1.90
Assist families to locate resources to help meet their breastfeeding goals	2.38
Provide/refer to follow-up services	2.48

n=21

Appendix D

Learning Needs Assessment of Potential Participants in Local Venues

Learning Needs Assessment of Potential Participants in Local Venues

A learning needs assessment survey listed twenty-one topics related to breastfeeding promotion and assistance. Respondents were asked to indicate whether they thought the topic was important (ranked as 1), somewhat important (ranked as 2), or not very important (ranked as 3) in their specific clinical practice. In addition to responding to the listed goals, potential participants were encouraged to list additional topics of interest. (See following sample.) The survey was distributed to potential participants by local program planning committees.

Sixty-nine potential participants of the Breastfeeding Educator Program™ anonymously completed the survey. The mean scores of the responses are shown in the following table in descending order of importance to the potential participants.

Learning Needs Assessment Survey

A breastfeeding education program is being planned for the staff. Please complete this survey to identify what topics are important to you in your clinical practice.

Please use this key to indicate the importance of each topic

1 - Very Important, discuss thoroughly
2 - Somewhat Important, discuss moderately
3 - Not Very Important, discuss minimally

(Priority Code)

____ *Informed* decisions related to infant feeding methods

____ Prenatal assessment for breastfeeding

____ Techniques to assist with positioning and latch-on

____ Management of difficult or reluctant latch-on

____ Nipple trauma and engorgement (prevention and management)

____ Getting breastfeeding off to a good start in the birth setting

____ Special maternal situations including cesarean births, multiple births

____ Promoting breastfeeding among teens, single mothers, and minorities

____ Cultural/psycho-social issues related to breastfeeding

____ Premature/critically ill infants

____ Jaundice and hypoglycemia related to breastfeeding

____ Nutrition, medications, smoking, substance abuse related to lactation

____ Sexuality, family planning, and breastfeeding

____ Learning needs with shortened birth setting stays, family concerns

____ Follow-up care after discharge from birth setting (Including home health services)

____ Employed mothers, expression and storage of human milk

____ Criteria to determine if baby is receiving enough milk

____ Supplementation, nipple confusion, pacifier use, finger feeding, suck training

____ Weaning (decisions & techniques); Challenges related to extended breastfeeding

____ Creating change in clinical practice: Increasing consistency among colleagues

____ "Baby Friendly" Initiative

Please list additional topics of interest on the back of this page

Mean scores of Learning Needs Assessment Survey

Topic	Mean
Management of difficult or reluctant latch-on	1.10
Assisting with positioning and latch-on	1.17
Criteria to determine if baby is getting enough milk	1.23
Management of nipple trauma and engorgement	1.26
Informed decision making related to infant feeding methods	1.31
Supplementation, nipple confusion, pacifier use, finger feeding	1.32
Getting breastfeeding off to a good start	1.33
Nutrition, medications, smoking related to breastfeeding	1.36
Jaundice and hypoglycemia related to breastfeeding	1.36
Promoting breastfeeding among teens, single mothers, minorities	1.39
Premature and critically ill infants who are breastfed	1.41
Special maternal situations (including cesarean births, multiples)	1.42
Prenatal assessment for breastfeeding	1.43
Families' learning needs with shortened stays	1.49
Employed mothers, expression and storage of human milk	1.51
Follow-up care related to breastfeeding (including home health care)	1.51
Creating change in practice, increasing consistency among colleagues	1.52
Baby Friendly Hospital Initiative	1.55
Cultural and psycho-social issues related to breastfeeding	1.62
Weaning, challenges related to extended breastfeeding	1.72
Sexuality and family planning related to breastfeeding	1.75

Note. n=69

Appendix E

Overview of Evaluation Process

of the

Breastfeeding Educator Program™

Overview of the Evaluation Process
of the
Breastfeeding Educator Program™

Formative Evaluation Process

Name of Tool (Appendix Reference)	Data Source
Content Review of the Core Curriculum Questionnaire (F)	Content Experts
Ethical Considerations and Professional Guidelines Questionnaire (G)	Content Experts
Instructional Design of the Core Curriculum Questionaire (H)	Education Experts
Code of Ethics for Adult Educators Checklist (I)	Education Experts

Summative Evaluation Process

Name of Tool (Appendix Reference)	Data Source
Pre-Program Participant Survey (J)	Program Participants
Post-Program Participant Survey (K)	Program Participants
Delayed Post-Program Survey (L)	Program Participants
Program Evaluation Tool (M)	Program Participants
Clinical Supervisors' Post-Program Assessment Survey (N)	Clinical Supervisors of Program Participants
Focus Group Discussion Guide (O)	Program Participants
Focus Group Discussion Guide (P)	Local Program Planning Committee Members

Appendix F

Content Review of the

Core Program Questionnaire

Evaluating the Breastfeeding Educator Program™

Content Review of the Core Curriculum Questionnaire

Thank you for evaluating the core curriculum of the Breastfeeding Educator Program™. After reviewing the curriculum plan and the Resource Manual for the Breastfeeding Educator Program™, please evaluate the core curriculum by circling the number on the scale that reflects your response to the following statements. Add comments directly below the statement or on an attached page.

Thank you, Debi Bocar

1. The goals of the program support optimal breastfeeding management.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

2. The goals of the program are appropriate for the target audience.
(The target audience includes health care providers who assist childbearing families and community-based breastfeeding advocates.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

3. The learning objectives support the goals of the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

4. The presenters are academically, professionally, and clinically qualified to teach the Breastfeeding Educator Program™.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

5. The *Resource Manual for the Breastfeeding Educator Program™* supports the attainment of the program goals.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

6. References to the professional literature are appropriate, accurately cited, and up-to-date.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

7. Attitudes, as well as critical knowledge and skills related to optimal lactation management are addressed in the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

8. The topics are logically organized and sequenced in a clinically relevant order

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

9. There are additional topics that should have been included in the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments: (If you agree, please list topics)

10. There are topics that should have been omitted from the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments: (If you agree, please list topics)

Please use an attached page to share additional comments regarding the content of the core curriculum.

Appendix G

Ethical Considerations and

Professional Guidelines Questionnaire

For Continuing Education Programs in

Breastfeeding Management

Evaluating the Breastfeeding Educator Program™

Ethical Considerations and Professional Guidelines Questionnaire for Continuing Education Program in Breastfeeding Management

Thank you for participating in the evaluation of the Breastfeeding Educator Program™. After reviewing the materials for the Breastfeeding Educator Program™, please circle the number on the scale that reflects your response to the following statements*. Add comments directly below the statement or on an attached page.

Thank you. Debi Bocar

*These statements are synthesized from the World Alliance for Breastfeeding Action's (WABA) *Code of Conduct for Conferences and Events*, the World Health Organization's (WHO) *The International Code of the Marketing of Breast Milk Substitutes*, the International Lactation Consultant Association's (ILCA) *Guide to Selecting a Lactation Management Course*, and the International Board of Lactation Consultant Examiners' (IBLCE) *Speaker Disclosure/Conflict of Interest Declaration Policy*

1. No funds from manufacturers and distributors of breastmilk substitutes and related products are accepted to organize or sponsor events.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

2. No advertisements, displays or other forms of promotion for breastmilk substitutes and related products are permitted in program site or in program materials.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

3. No hospitality for organizers or program participants is accepted from manufacturers or distributors of the above products.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

4. Lists of conference participants are not sold to or otherwise made available to manufacturers of the above products.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

5. All financial support for the program is fully acknowledged & disclosed to participants.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

6. Speakers disclose to the participants any real or apparent affiliations that may have a bearing on the subject matter of their presentation.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

7. Mothers and infants are welcome to breastfeed anywhere in the conference site.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

8. A convenient private space is available for women to breastfeed or to express breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

9. The program director is currently certified by the International Board of Lactation Consultant Examiners or a licensed, registered or certified health care professional with referenced experience or training in lactation management.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

10. The program is compliant with the World Health Organization *International Code of Marketing of Breastmilk Substitutes*.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I m Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

11. Continuing education units (CEUs) and/or continuing education recognition points (CERPs) are granted from a health profession agency and/or college credits are earned by participants in the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

12. A detailed description of the program including topical outlines is available to potential program participants.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

13. The program is offered on an ongoing basis.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

Appendix H

Instructional Design Review

of the

Core Program Questionnaire

Evaluating the Breastfeeding Educator Program™

Instructional Design Review of the Core Program Questionnaire

Thank you for evaluating the core curriculum of the Breastfeeding Educator Program™ After reviewing the curriculum plan and the Resource Manual for the Breastfeeding Educator Program™, please evaluate the core curriculum by circling the number on the scale that reflects your response to the following statements. Add comments directly below the statement or on an attached page.

Thank you. Debi Bocar

1. There is evidence that an instructional analysis of the learning context, learning tasks, and prospective learners informed the developers when they designed the Breastfeeding Educator Program™.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

2. The learning goals of the program are clearly stated.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

3. The performance learning objectives describe the expected learner outcome of the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments:

4. Learning objectives address knowledge related to breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Comments

5. Learning objectives address attitudes related to breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

6. Learning objectives address psychomotor skills related to breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments

7. The topics are sequenced from known to unknown, simple to complex, and follow a logical order (such as chronologic order.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

8. Numerous instructional strategies which are appropriate for the specific learning tasks are used in the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

9. The program includes the following "events of instruction." (Events of Instruction: gaining attention of learners, informing learners of the goals and objectives, stimulating learners to recall prerequisite learning/reviewing prerequisite learning, presenting the learning stimulation, providing guidance for the learners, eliciting performance by the learners, assessing performance, enhancing retention and transfer of learning experience)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

10. The program utilizes numerous types of media which are appropriate for the specific learning tasks.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

11. The program incorporates principles of adult education.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments

12. Active participation by program enrollees is encouraged.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

13. Sufficient time is allotted to accomplish the learning objectives.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments

14. Participants complete a structured evaluation of the program that includes open-ended questions and solicits their suggestions for improving the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5
Comments:

Please share additional comments regarding the instructional design of the core curriculum.

Appendix I

Code of Ethics

for Educators of Adults

Checklist

Evaluating the Breastfeeding Educator Program™

Code of Ethics for Adult Educators Checklist

The following criteria were developed from principles identified in *The Guidelines for Developing and Implementing a Code of Ethics for Adult Educators* (Coalition of Lifelong Learning Organizations, 1993).

Please place the number that reflects your response on the line to the left of the following criteria as you evaluate the ethical considerations related to the Breastfeeding Educator Program™. Please use the following key:

1 - the code criterion was **addressed**

2 - the code criterion was **partially addressed**

3 - the code criterion was **not addressed**

4 - the code criterion was **not applicable**

Include comments regarding any of the code criterion related to the Breastfeeding Educator Program™ at the end of this survey.

Participant Focused Ethical Principles

____ 1. Qualified persons are admitted to the program without discrimination as to race, gender, age, disability, sexual orientation, religion, or national origin.

____ 2. The dignity and worth of all program participants is recognized, protected, and where possible, enhanced.

____ 3. Participants are informed in advance about planned content, pass/fail procedures, registration deadlines and cancellation policies, methods of instruction, assessment, and support services.

____ 4. Policies governing award of credit for successful completion, continuing education units (CEUs), or certificates are disclosed in advance.

____ 5. The amount and structure of fees and expenses for program participation, as well as refund policies, are disclosed in advance.

____ 6. Participants have freedom of expression as guaranteed by the First Amendment.

____ 7. Participants accepted for enrollment in a course or program have the right to have their personal and cultural values acknowledged and understood within the context of the program objectives.

____ 8. Program participants have the right to evaluate the appropriateness of the planned program content, performance of their instructors and other resource personnel, and effectiveness of support services, and to have such evaluations carefully reviewed by the program sponsor.

Employer or Sponsor Focused Ethical Principles

____ 9. "Competing" programs are not misrepresented or unfairly disparaged.

____ 10. Course and program advertising is accurate in terms of the sponsor's purposes and objectives and is in good taste.

____ 11. Credentials, competence, education, training, and experience of instructors and program leaders are accurately represented.

____ 12. Competencies and intentions of instructors and program leaders are matched with requirements of the program and with the expectations of the anticipated participants.

____ 13. Possible conflicts of interest bearing on program objectives for instructors and program leaders are fully disclosed in advance of participant enrollment and again at the onset of instruction.

____ 14. Instructors and program leaders have freedom of expression except as limited by other code of ethics provisions.

____ 15. All programs offered are within the mission of the institution or sponsoring agency.

____ 16. The prerequisite skills and knowledge, planned content, and purposes of courses programs are accurately represented in syllabi and informational materials.

____ 17. Methods for assessing learning are appropriate for the skills and knowledge being taught and the backgrounds and experiences of the learners.

____ 18. Records of program enrollments and successful completion are accurately kept and are appropriately reported.

____ 19. The sponsor has a developed a policy on cheating and plagiarism by

____ 20. Grant funds are used in accord with budget and other agreements with the granting organizations.

____ 21. Regulations governing the award of CEUs and academic credit are scrupulously followed.

____ 22. Within an institution or agency, adult educators are not marginalized; neither are adult learning programs developed at an inferior level of quality for the purpose of using adult fees they generate to subsidize programs considered more central to a sponsor's mission.

____ 23. Employers and sponsors have explicit arrangements that enable them appropriately to protect the integrity of individuals who call attention to alleged ethical violations within the organization itself.

Profession Focused Ethical Principles

____ 24. Research and efforts of others are properly acknowledged not only in scholarly books and papers, but also in program presentations and course materials.

____ 25. In preparing materials, instructors and program leaders comply fully with all appropriate copyright laws and document their efforts.

____ 26. Possible conflicts of interest related to potential participants, agencies, or institutions are disclosed by an instructor or program leader in advance of employment by or involvement with the program.

____ 27. Only persons who have the qualifications and prerequisites to succeed in a program are recruited and enrolled. Counseling, guidance, and/or supplementary or refresher instruction are provided for persons who desire to enroll but are not yet qualified.

____ 28. Program applicants who would clearly learn better and achieve their goals through enrollment in other programs are informed about the availability of such programs.

____ 29. Class time is not used to sell a product or service or to distribute flyers and business card that are oriented to the financial interests of an instructor or program leader (unless the explicit and preannounced purposes of the program include explaining such products or service.)

____ 30. Class time is not used to solicit contributions or support for political, religious, civic, or social causes (unless the explicit and preannounced purposes of the class include explaining products or service.)

____ 31. Privileged information is maintained in confidence and trust.

____ 32. Instructors or program leaders explicitly identify their educational philosophies at an early stage of work with individuals and groups and likewise identify their personal beliefs or philosophies if they become a point of educational direction or emphasis during the course of instruction.

____ 33. Instructors or program leaders do not use credentials or organizational memberships to make false claims of competence.

____ 34. Instructors or program leaders make it clear that they are open to competing ideas during the course of instruction.

____ 35. Instructors or program leaders engage in professional development to assure that their knowledge, skills, and competence are continuously updated.

____ 36. Instructors or program leaders speak out against abuses in practice and in practices that adversely affect adult learners.

Please share comments regarding ethical considerations related to the Breastfeeding Educator Program™.

Appendix J

Pre-Program Participant Survey

Participant Name: _____

Please PRINT

Pre-Program Participant Survey

Thank you for participating in this evaluation of the Breastfeeding Educator Program™

PLEASE COMPLETE THIS SURVEY BEFORE THE PROGRAM BEGINS.

Please circle the number on the scale that reflects your response to the following statements.

Thank you, Debi Bocar

1. If a mother has a breast infection, she should immediately wean from the breast.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

2. The American Academy of Pediatrics considers most drugs compatible with breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

3. Children who have been breastfed as babies tend to be more intelligent.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

4. There are many foods that *all* breastfeeding mothers must avoid.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

5. Additional assessment is necessary if a breastfed baby has not regained his/her birth weight at two weeks after birth.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

6. The new and improved infant formulas essentially contain the same ingredients as breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

7. Placing healthy, term babies to breast within 30 to 60 minutes after birth is an important factor in getting breastfeeding off to a good start.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

8. If a mother has had reduction mammoplasty, any breastfeeding should be discouraged.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

9. Frequent, effective removal of milk stimulates continued breastmilk production.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

10. The American Academy of Pediatrics recommends that mothers breastfeed for at least twelve months and then for as long as mother and baby want to continue.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

11. Babies who are given bottles during the first two weeks after birth may have more problems with breastfeeding than babies who are not given bottles during the first two weeks.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

12. During the first 24 to 48 hours after birth, babies rely on their fluid and caloric reserves and need to go to breast only three or four times a day to get breastfeeding off to a good start.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

13. According to research studies, babies who use pacifiers stop breastfeeding earlier than babies who do not use pacifiers.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

14. It is recommended to teach new parents to wait until their baby starts crying loudly before offering the breast so that the parents know the baby is adequately awake.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

15. Mothers living in the U.S. who are HIV positive are encouraged to breastfeed in order to reduce the chance of their babies becoming HIV positive.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

16. In order to make appropriate quality and quantity of breastmilk, mothers need to eat a near-perfect diet.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

17. The way babies suck at breast is different than the way they suck on a bottle.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

18. Latch-on may be more difficult during engorgement because the areola is firm.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

19. Applying continuous heat packs to an engorged breast is recommended because heat reduces swelling.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

20. During the first 48 hours after birth, health care providers can rely on first-time mothers' self-reports about how breastfeeding is going. (No other assessment is necessary if mother thinks breastfeeding is going well.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

21. If a mother continues to smoke during pregnancy and after her baby is born, breastfeeding should be discouraged.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

22. Breastfeeding mothers with previous surgery involving peri-areolar incisions are more likely to have infants who have difficulty gaining weight appropriately.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

23. If breastfeeding is not possible during the first week after birth (due to baby's or mother's condition), it is better to wait until after engorgement and the appearance of mother's full milk supply before teaching the mother how to express breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

24. If a baby has lost about 10% of his/her birth weight, a health care provider should seriously consider recommending supplementation.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

25. From five days to one month after birth, breastfed babies who are well nourished have at least three to four bowel movements per day.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

26. Screening for breast cancer (self breast exams and mammograms) is not necessary while mothers are lactating.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

27. The effectiveness of different breast pumps is about the same since all pumps must meet FDA (Food and Drug Administration) standards before being marketed to the public.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

28. The cradle hold is often the "position of choice" for *early* feedings with a premature infant.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

29. Mothers who do not take a prenatal breastfeeding class can still meet their breastfeeding goals if they have access to knowledgeable and supportive health care providers in the birth setting and during follow-up care.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

30. Microwaving is a safe way to warm breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

31. Mothers can establish and maintain a good milk supply for several months by using a hospital-grade, electric breast pump.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

32. Health care providers should avoid telling mothers why breastfeeding is better for babies, mothers, and society because mothers may feel guilty if they choose not to breastfeed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

33. Currently, more than half of the mothers in the U.S. who start breastfeeding, continue to breastfeed for six months or more.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

34. The World Health Organization encourages health care providers to distribute educational materials produced by infant formula companies for breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

35. Most breastfeeding challenges have specific solutions that work for most mothers so once a recommendation is given to a mother, no additional follow-up care or assessments are needed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

36. Premature babies should *prove* their ability to coordinate sucking, swallowing, and breathing by bottle-feeding successfully before they attempt to breastfeed directly.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

37. Many mothers consider infant formula as an attractive and acceptable alternative if they experience a breastfeeding challenge.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

38. Children who have been breastfed as babies tend to have less cancer.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

39. Mothers' breast secretions immediately after birth (colostrum) are not especially beneficial. Babies don't need to go to the breast very often until mother's milk "comes in" several days later.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

40. A mother's childhood experiences can influence her breastfeeding success.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

41. Mothers with small breasts (e.g., mothers who wear bras with size A cups) usually have more difficulty making enough milk for their babies than mothers with large breasts.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

42. The World Health Organization recommends that all pregnant women be informed about the benefits and management of breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

43. Most mothers can continue breastfeeding when employed outside their homes if they have appropriate information and support.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

44. It is considered safe for a woman to defer a breast biopsy until after she weans her baby from breast.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

45. A baby should be positioned so that her/his head and shoulders face the breast directly when latching-on to the breast.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

46. The health care system should consider the extra time often needed to help breastfeeding mothers and babies as an *investment* in the health and development of babies and mothers.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

47. Breastfed babies tend to have fewer ear infections than formula fed babies.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

48. Mothers who express breastmilk while separated from their babies (e.g., due to employment) find it easier to maintain their milk supply than mothers who do not express breastmilk during separations.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

49. Many mothers of multiples can exclusively breastfeed if they have appropriate information and support.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

50. Pre-school children who are breastfed after their second birthday have fewer infections than pre-school children who stop breastfeeding before their first birthday.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

51. Except in special circumstances, a healthy, term infant should remain with her/his mother throughout the recovery/transition period immediately after birth.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

52. If a breastfed baby needs supplementation during the first two weeks, cup feeding may be less physiologically stressful than bottle-feeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

53. The quiet alert state of consciousness is an ideal state in which to interact with a baby or to teach new skills to a baby.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

54. Newborns who make smacking and clicking sounds while breastfeeding reassure health care providers that breastfeeding is getting off to a good start.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

55. Breastfeeding should be discouraged among adolescent mothers because their bodies are not physically mature.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

56. Because it is sometimes difficult to teach new parents the signs of hunger and satiety, it is better to teach them to watch the clock when breastfeeding to insure appropriate infant weight gain.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

57. After attending a breastfeeding education program, health care providers can usually convince their colleagues to change their breastfeeding management recommendations immediately.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

58. Breastfed babies die less often from sudden infant death syndrome than formula-fed babies.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

59. During the first 24 hours after birth, breastfed babies need at least 1 oz of milk or water at every feeding to avoid developing jaundice.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

60. Bilirubin is excreted primarily in urine.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

61. Mothers who receive discharge packs containing infant formula discontinue breastfeeding more quickly than mothers who receive discharge packs that do not contain formula.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

62. Babies who are exclusively breastfed (receiving no other fluids or foods) and are 3 to 6 months old, will only need to breastfeed about 5 to 6 times in a 24 hour period if their mothers are producing an adequate amount of milk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

63. Having parents record their baby's breastfeedings and bowel movements during the first week after birth provides valuable information for assessing the effectiveness of breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

64. Routine glucose water supplementation during the first few days after birth causes no problems related to the establishment of breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

65. If a breastfeeding mother or baby requires hospitalization, the American Academy of Pediatrics recommends discontinuation of breastfeeding upon hospital admission.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

66. Children who were formula-fed as babies tend to be more overweight when they enter elementary school compared to children who were breastfed as babies.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

67. During the first six months after birth, breastfed babies should be offered the breast when they show *early* signs of hunger or at least every three hours during the day.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

68. Rooming-in while in the birth setting has little influence in establishing successful breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

69. Most breastfed infants require iron supplementation during the first six months.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

70. If a mother receives pain medication or anaesthesia during labor, it may influence her baby's temporary ability to breastfeed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

71. One of the characteristics of an effective suck is that the baby's tongue extends over her/his lower gumline.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

72. High-need breastfed babies usually cry less when they are weaned from the breast and given soy formula.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

73. If a mother has large breasts, she does not need to support her breasts while breastfeeding a newborn because there is plenty of tissue for the baby to grasp.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

74. The U.S. government has established this health goal for the nation: 75% of mothers will breastfeed their babies at the time of discharge from the birth setting.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

75. Nipple tenderness usually improves three to five days after birth.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

76. During prenatal care, health care providers should be neutral when discussing infant feeding choices.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

77. Breastfeeding is beneficial only if it is exclusive and continues at least six months.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

78. Mothers can more successfully combine employment and continued breastfeeding if they delay returning to the employment setting for as long as possible.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

79. The majority of perinatal professional organizations have published statements that promote breastfeeding as the preferred infant feeding choice.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

80. If a mother is continuing to experience sore nipples after two weeks, an assessment of the infant at breast should be performed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

81. The World Health Organization recommends routine screening for hypoglycemia in low-risk, asymptomatic newborns.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

82. Most breastfeeding difficulties experienced in the birth setting improve once mothers relax at home, so contact with a health care provider during the first two to four weeks after birth is usually not needed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

83. Nipple shields may be helpful in overcoming some breastfeeding challenges.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

84. If a baby requires supplementation, supplementing at the breast encourages continued breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

85. Babies tend to suck more vigorously on the first breast if they breastfeed at both breasts during a feeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

86. Chin and cheek support increases suction and suck efficiency for premature and neurologically impaired infants.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

87. When a baby is in a *deep* sleep state, latch-on is fairly easily accomplished because the baby is so relaxed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

88. Any amount of human milk that a baby receives provides some benefits.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

89. Breastfeeding mothers who require an incisional breast biopsy should wean their babies immediately prior to the biopsy.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

90. There are several objective, reassuring signs that can be taught to parents so that they feel more confident that their baby is getting enough breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

91. Recommendations related to breastfeeding management should be individualized for each family based on accurate assessments of anatomical, physiological, psycho-social, and spiritual factors.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

92. Removing more milk more frequently is an effective way to increase breastmilk supply.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

93. There are several known risk factors ("red flags") which increase a mother's likelihood of experiencing a breastfeeding challenge.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

94. Breastfeeding a newborn (or expressing breastmilk) every four to five hours during the day provides adequate breast stimulation so that most mothers can establish an abundant milk supply.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

95. Nipples that were marginally everted (protruding or "sticking out" from the breast) during the last trimester of pregnancy may become flatter during engorgement.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

96. When working with mothers who are experiencing breastfeeding challenges, it is important that health care providers communicate in ways which help mothers avoid feeling like they are being criticized or blamed for their experiences.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

97. Appetite/growth spurts occur at fairly predictable times during lactation.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

98. Supplementation during an appetite/growth spurt can reduce mothers' milk supply.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

99. Accurate assessments rather than assumptions provide a basis for more effective plans of care for breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

100. In some cultures, the majority of babies/children are breastfed until their immune system is fully functioning (occurring several years after birth.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

101. Health care providers can influence how confident parents feel about caring for their new baby.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

102. When making breastfeeding management recommendations, one should always consider the risk-benefit ratio.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

103. It is important for health care providers to have *personal* experience breastfeeding in order to effectively assist breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

104. Successful breastfeeding is easier than many mothers think.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

105. Breastfeeding success occurs when a mother meets her breastfeeding goals.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

The following statements are regarding <u>your assessment</u> of your <u>clinical/community practice</u>.

1. I can describe the basic anatomic and physiologic rationales for early, frequent feeding; appropriate areolar grasp and compression; and milk removal principle of milk production?

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

2. Given that there is a limited amount of time available for client education, I am able to prioritize the learning needs of breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

3. I am able to help prevent or decrease the severity of common breastfeeding challenges (e.g., difficult latch-on, prolonged feeding intervals, sore nipples, engorgement, etc.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

4. My colleagues (if applicable) and I who attend the Breastfeeding Educator Program™ will probably be able to provide more consistent recommendations to breastfeeding families after participating in the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

I do not have colleagues who are participating in the Breastfeeding Educator Program™
0

The following statements are regarding your perceptions of your clinical/community practice.

1. I have confidence in my knowledge and skills related to breastfeeding management.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

2. I provide appropriate information and use therapeutic communication skills so families can make *informed decisions* regarding how they will feed their baby.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

I rarely have opportunities to discuss *informed decision making* related to infant feeding methods
0

3. I have an overview understanding of the phases of lactation from pre-conception to weaning.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

4. I provide breastfeeding management recommendations that are evidence-based when evidence-based recommendations are available.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

5. I try to help new parents develop confidence in their baby care skills.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree

1 2 3 4 5

6. I make individualized breastfeeding management recommendations for each family using assessments that address anatomical, physiological, psycho-social, and spiritual factors.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree

1 2 3 4 5

7. I help families use problem-solving skills to overcome their breastfeeding challenges.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree

1 2 3 4 5

8. I provide and/or refer to services for breastfeeding families that help them meet their breastfeeding goals.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree

1 2 3 4 5

9. I continue to assist families in overcoming their breastfeeding challenges until they meet (or they change) their breastfeeding goals.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree

1 2 3 4 5

10. I try to avoid practices that undermine continued breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree

1 2 3 4 5

11. I consider factors that may influence mothers' postpartum adjustment.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree

1 2 3 4 5

12. The families with which I work seem pleased with the breastfeeding assistance I provide.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree

1 2 3 4 5

13. I enjoy providing assistance with breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree

1 2 3 4 5

The following questions are about your clinical/community practice.

<u>During the last month</u>, how would you rate the effort you have made to . . .

1. get babies to breast within 30 to 60 minutes after birth?

   Made great effort - - - - - Made some effort - - - - - Made a little effort - - - - - Made no effort - - - - - Does not apply
   1 2 3 4 5

2. talk with families about breastfeeding and infant formula feeding and help them gather more information so that they can make an informed choice about infant feeding.

   Made great effort - - - - - Made some effort - - - - - Made a little effort - - - - - Made no effort - - - - - Does not apply
   1 2 3 4 5

3. help parents learn to accurately interpret their baby's behavior and helped them learn to respond to their baby appropriately.

   Made great effort - - - - - Made some effort - - - - - Made a little effort - - - - - Made no effort - - - - - Does not apply
   1 2 3 4 5

4. How would you rate the effort you have made to systematically assess an infant at breast and evaluate milk transfer?

   Made great effort - - - - - Made some effort - - - - - Made a little effort - - - - - Made no effort - - - - - Does not apply
   1 2 3 4 5

5. How often have you given glucose water to prevent or treat <u>hypoglycemia</u>?

   Several times each week - - - - - At least once a week - - - - - Once a month - - - - - Not at all - - - - - Does not apply
   1 2 3 4 5

6. How often have you given glucose water or formula to prevent or treat <u>jaundice</u>?

   Several times each week - - - - - At least once a week - - - - - Once a month - - - - - Not at all - - - - - Does not apply
   1 2 3 4 5

7. How often have you given a baby a pacifier between feedings or recommended a pacifier to be given between feedings?

   Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
   1 2 3 4 5

8. How often have you distributed a discharge pack that contained formula?

   Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
   1 2 3 4 5

9. How often have you distributed educational or promotional materials produced by formula companies that included the formula company's name?

   Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
   1 2 3 4 5

10. How often have you explained to parents how they can know "if their baby is getting enough breastmilk"?

    Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
    1 2 3 4 5

11. How often have you referred mothers interested in breastfeeding to resources (pamphlets, books, video tapes, equipment, health care providers, clinics, support people, etc.) that can help mothers meet their breastfeeding goals?

    Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
    1 2 3 4 5

When I first thought about attending the Breastfeeding Educator Program™

(Check the blank by the statement that most closely applies to you)

____ I was very interested in attending.

____ I was mildly interested in attending.

____ I did not care one way or another about attending.

____ I was not very interested in attending.

____ I had no interest in attending. I was required to attend.

Clinical Practice Setting (Please check all that apply)

Hospital Based:

____ Labor & Delivery

____ Postpartum

____ Newborn Nursery

____ Mother-Baby Care

____ N.I.C.U.

____ Other (Please describe)

Community Based:

____ WIC / Nutrition

____ Mother-to-Mother Support

____ Clinic (Please describe)

____ Dr. Office (Please describe)

____ Childbirth Educator - Doula
(Circle title[s] that apply)

____ Other (Please describe)

Please describe your credentials in health care

(if applicable) Examples: RN, RNC LPN, RD, MD, Certified Childbirth Educator, Certified Doula, International Board Certified Lactation Consultant

_____

Please describe check degrees you have earned

____ Associate degree

____ Bachelors degree

____ Masters degree

____ MD

____ Other (Please describe)

Please share any suggestions you have to improve the Breastfeeding Educator Program™ before the program begins.

Thank you for participating in this evaluation project. *Debi*

Appendix K

Immediate Post-Program

Participant Survey

Participant Name: _____

Please PRINT

Immediate Post-Program Participant Survey

Thank you for participating in this evaluation of the Breastfeeding Educator Program™ Please complete this survey AFTER completing the program.

Please circle the number on the scale that reflects your response to the following statements.

Thank you, Debi Bocar

1. If a mother has a breast infection, she should immediately wean from the breast.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

2. The American Academy of Pediatrics considers most drugs compatible with breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

3. Children who have been breastfed as babies tend to be more intelligent.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

4. There are many foods that *all* breastfeeding mothers must avoid.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

5. Additional assessment is necessary if a breastfed baby has not regained his/her birth weight at two weeks after birth.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

6. The new and improved infant formulas essentially contain the same ingredients as breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

7. Placing healthy, term babies to breast within 30 to 60 minutes after birth is an important factor in getting breastfeeding off to a good start.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

8. If a mother has had reduction mammoplasty, any breastfeeding should be discouraged.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

9. Frequent, effective removal of milk stimulates continued breastmilk production.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

10. The American Academy of Pediatrics recommends that mothers breastfeed for at least twelve months and then for as long as mother and baby want to continue.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

11. Babies who are given bottles during the first two weeks after birth may have more problems with breastfeeding than babies who are not given bottles during the first two weeks.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

12. During the first 24 to 48 hours after birth, babies rely on their fluid and caloric reserves and need to go to breast only three or four times a day to get breastfeeding off to a good start.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

13. According to research studies, babies who use pacifiers stop breastfeeding earlier than babies who do not use pacifiers.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

14. It is recommended to teach new parents to wait until their baby starts crying loudly before offering the breast so that the parents know the baby is adequately awake.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

15. Mothers living in the U.S. who are HIV positive are encouraged to breastfeed in order to reduce the chance of their babies becoming HIV positive.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

16. In order to make appropriate quality and quantity of breastmilk, mothers need to eat a near-perfect diet.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

17. The way babies suck at breast is different than the way they suck on a bottle.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

18. Latch-on may be more difficult during engorgement because the areola is firm.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

19. Applying continuous heat packs to an engorged breast is recommended because heat reduces swelling.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

20. During the first 48 hours after birth, health care providers can rely on first-time mothers' self-reports about how breastfeeding is going. (No other assessment is necessary if mother thinks breastfeeding is going well.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

21. If a mother continues to smoke during pregnancy and after her baby is born, breastfeeding should be discouraged.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

22. Breastfeeding mothers with previous surgery involving peri-areolar incisions are more likely to have infants who have difficulty gaining weight appropriately.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

23. If breastfeeding is not possible during the first week after birth (due to baby's or mother's condition), it is better to wait until after engorgement and the appearance of mother's full milk supply before teaching the mother how to express breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

24. If a baby has lost about 10% of his/her birth weight, a health care provider should seriously consider recommending supplementation.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

25. From five days to one month after birth, breastfed babies who are well nourished have at least three to four bowel movements per day.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

26. Screening for breast cancer (self breast exams and mammograms) is not necessary while mothers are lactating.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

27. The effectiveness of different breast pumps is about the same since all pumps must meet FDA (Food and Drug Administration) standards before being marketed to the public.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

28. The cradle hold is often the "position of choice" for *early* feedings with a premature infant.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

29. Mothers who do not take a prenatal breastfeeding class can still meet their breastfeeding goals if they have access to knowledgeable and supportive health care providers in the birth setting and during follow-up care.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

30. Microwaving is a safe way to warm breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

31. Mothers can establish and maintain a good milk supply for several months by using a hospital-grade, electric breast pump.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

32. Health care providers should avoid telling mothers why breastfeeding is better for babies, mothers, and society because mothers may feel guilty if they choose not to breastfeed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

33. Currently, more than half of the mothers in the U.S. who start breastfeeding, continue to breastfeed for six months or more.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

34. The World Health Organization encourages health care providers to distribute educational materials produced by infant formula companies for breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

35. Most breastfeeding challenges have specific solutions that work for most mothers so once a recommendation is given to a mother, no additional follow-up care or assessments are needed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

36. Premature babies should *prove* their ability to coordinate sucking, swallowing, and breathing by bottle-feeding successfully before they attempt to breastfeed directly.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

37. Many mothers consider infant formula as an attractive and acceptable alternative if they experience a breastfeeding challenge.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

38. Children who have been breastfed as babies tend to have less cancer.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

39. Mothers' breast secretions immediately after birth (colostrum) are not especially beneficial. Babies don't need to go to the breast very often until mother's milk "comes in" several days later.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

40. A mother's childhood experiences can influence her breastfeeding success.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

41. Mothers with small breasts (e.g., mothers who wear bras with size A cups) usually have more difficulty making enough milk for their babies than mothers with large breasts.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

42. The World Health Organization recommends that all pregnant women be informed about the benefits and management of breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

43. Most mothers can continue breastfeeding when employed outside their homes if they have appropriate information and support.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

44. It is considered safe for a woman to defer a breast biopsy until after she weans her baby from breast.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

45. A baby should be positioned so that her/his head and shoulders face the breast directly when latching-on to the breast.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

46. The health care system should consider the extra time often needed to help breastfeeding mothers and babies as an *investment* in the health and development of babies and mothers.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

47. Breastfed babies tend to have fewer ear infections than formula fed babies.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

48. Mothers who express breastmilk while separated from their babies (e.g., due to employment) find it easier to maintain their milk supply than mothers who do not express breastmilk during separations.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

49. Many mothers of multiples can exclusively breastfeed if they have appropriate information and support.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

50. Pre-school children who are breastfed after their second birthday have fewer infections than pre-school children who stop breastfeeding before their first birthday.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

51. Except in special circumstances, a healthy, term infant should remain with her/his mother throughout the recovery/transition period immediately after birth.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

52. If a breastfed baby needs supplementation during the first two weeks, cup feeding may be less physiologically stressful than bottle-feeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

53. The quiet alert state of consciousness is an ideal state in which to interact with a baby or to teach new skills to a baby.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

54 Newborns who make smacking and clicking sounds while breastfeeding reassure health care providers that breastfeeding is getting off to a good start.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

55. Breastfeeding should be discouraged among adolescent mothers because their bodies are not physically mature.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

56. Because it is sometimes difficult to teach new parents the signs of hunger and satiety, it is better to teach them to watch the clock when breastfeeding to insure appropriate infant weight gain.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

57. After attending a breastfeeding education program, health care providers can usually convince their colleagues to change their breastfeeding management recommendations immediately.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

58. Breastfed babies die less often from sudden infant death syndrome than formula-fed babies.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

59. During the first 24 hours after birth, breastfed babies need at least 1 oz of milk or water at every feeding to avoid developing jaundice.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

60. Bilirubin is excreted primarily in urine.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

61. Mothers who receive discharge packs containing infant formula discontinue breastfeeding more quickly than mothers who receive discharge packs that do not contain formula.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

62. Babies who are exclusively breastfed (receiving no other fluids or foods) and are 3 to 6 months old, will only need to breastfeed about 5 to 6 times in a 24 hour period if their mothers are producing an adequate amount of milk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

63. Having parents record their baby's breastfeedings and bowel movements during the first week after birth provides valuable information for assessing the effectiveness of breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

64. Routine glucose water supplementation during the first few days after birth causes no problems related to the establishment of breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

65. If a breastfeeding mother or baby requires hospitalization, the American Academy of Pediatrics recommends discontinuation of breastfeeding upon hospital admission.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

66. Children who were formula-fed as babies tend to be more overweight when they enter elementary school compared to children who were breastfed as babies.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

67. During the first six months after birth, breastfed babies should be offered the breast when they show *early* signs of hunger or at least every three hours during the day.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

68. Rooming-in while in the birth setting has little influence in establishing successful breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

69. Most breastfed infants require iron supplementation during the first six months.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

70. If a mother receives pain medication or anaesthesia during labor, it may influence her baby's temporary ability to breastfeed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

71. One of the characteristics of an effective suck is that the baby's tongue extends over her/his lower gumline.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

72. High-need breastfed babies usually cry less when they are weaned from the breast and given soy formula.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

73. If a mother has large breasts, she does not need to support her breasts while breastfeeding a newborn because there is plenty of tissue for the baby to grasp.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

74. The U.S. government has established this health goal for the nation: 75% of mothers will breastfeed their babies at the time of discharge from the birth setting.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

75. Nipple tenderness usually improves three to five days after birth.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

76. During prenatal care, health care providers should be neutral when discussing infant feeding choices.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

77. Breastfeeding is beneficial only if it is exclusive and continues at least six months.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

78. Mothers can more successfully combine employment and continued breastfeeding if they delay returning to the employment setting for as long as possible.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

79. The majority of perinatal professional organizations have published statements that promote breastfeeding as the preferred infant feeding choice.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

80. If a mother is continuing to experience sore nipples after two weeks, an assessment of the infant at breast should be performed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

81. The World Health Organization recommends routine screening for hypoglycemia in low-risk, asymptomatic newborns.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

82. Most breastfeeding difficulties experienced in the birth setting improve once mothers relax at home, so contact with a health care provider during the first two to four weeks after birth is usually not needed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

83. Nipple shields may be helpful in overcoming some breastfeeding challenges.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

84. If a baby requires supplementation, supplementing at the breast encourages continued breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

85. Babies tend to suck more vigorously on the first breast if they breastfeed at both breasts during a feeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

86. Chin and cheek support increases suction and suck efficiency for premature and neurologically impaired infants.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

87. When a baby is in a *deep* sleep state, latch-on is fairly easily accomplished because the baby is so relaxed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

88. Any amount of human milk that a baby receives provides some benefits.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

89. Breastfeeding mothers who require an incisional breast biopsy should wean their babies immediately prior to the biopsy.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

90. There are several objective, reassuring signs that can be taught to parents so that they feel more confident that their baby is getting enough breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

91. Recommendations related to breastfeeding management should be individualized for each family based on accurate assessments of anatomical, physiological, psycho-social, and spiritual factors.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

92. Removing more milk more frequently is an effective way to increase breastmilk supply.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

93. There are several known risk factors ("red flags") which increase a mother's likelihood of experiencing a breastfeeding challenge.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

94. Breastfeeding a newborn (or expressing breastmilk) every four to five hours during the day provides adequate breast stimulation so that most mothers can establish an abundant milk supply.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

95. Nipples that were marginally everted (protruding or "sticking out" from the breast) during the last trimester of pregnancy may become flatter during engorgement.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

96. When working with mothers who are experiencing breastfeeding challenges, it is important that health care providers communicate in ways which help mothers avoid feeling like they are being criticized or blamed for their experiences.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

97. Appetite/growth spurts occur at fairly predictable times during lactation.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

98. Supplementation during an appetite/growth spurt can reduce mothers' milk supply.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

99. Accurate assessments rather than assumptions provide a basis for more effective plans of care for breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

100. In some cultures, the majority of babies/children are breastfed until their immune system is fully functioning (occurring several years after birth.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

101. Health care providers can influence how confident parents feel about caring for their new baby.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

102. When making breastfeeding management recommendations, one should always consider the risk-benefit ratio.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

103. It is important for health care providers to have *personal* experience breastfeeding in order to effectively assist breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

104. Successful breastfeeding is easier than many mothers think.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

105. Breastfeeding success occurs when a mother meets her breastfeeding goals.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

The following statements are regarding <u>your assessment</u> of your <u>clinical/community practice</u>.

1. I can describe the basic anatomic and physiologic rationales for early, frequent feeding; appropriate areolar grasp and compression; and milk removal principle of milk production?

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

2. Given that there is a limited amount of time available for client education, I will be able to prioritize the learning needs of breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

3. I will able to help prevent or decrease the severity of common breastfeeding challenges (e.g., difficult latch-on, prolonged feeding intervals, sore nipples, engorgement, etc.) after attending the Breastfeeding Educator Program™.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

4. I expect that my colleagues (if applicable) and I who attended the Breastfeeding Educator Program™ will tend to provide more consistent recommendations to breastfeeding families after participating in the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

I do not have colleagues who participated in the Breastfeeding Educator Program™
0

The following questions are about the Breastfeeding Educator Program™.

1. Which topics do you think <u>needed more emphasis</u> in the Breastfeeding Educator Program™?

2. Which topics do you think <u>received too much emphasis</u> in the Breastfeeding Educator Program™?

3. What learning activities would you have liked to have had included in the Breastfeeding Educator Program™?

Please complete the following information so a **survey can be mailed to you in one month.** Please list address at which it is easiest to receive mail.

Your Name _____
Please PRINT

Your Address _____
Street

_____
City/Town State Zip Code

Your Telephone (_____) _____ Your Fax: (_____) _____

Your e-mail address (Please print carefully.) _____

* * * *

Appendix L

Delayed Post-Program

Participant Survey

Participant Name: _____

Please PRINT

Delayed Post-Program Participant Survey

Thank you for participating in this evaluation of the Breastfeeding Educator Program™

PLEASE COMPLETE THIS SURVEY APPROXIMATELY ONE MONTH AFTER YOU PARTICIPATED THE PROGRAM.

Please circle the number on the scale that reflects your response to the following statements.

Thank you, Debi Bocar

1. If a mother has a breast infection, she should immediately wean from the breast.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

2. The American Academy of Pediatrics considers most drugs compatible with breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

3. Children who have been breastfed as babies tend to be more intelligent.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

4. There are many foods that *all* breastfeeding mothers must avoid.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

5. Additional assessment is necessary if a breastfed baby has not regained his/her birth weight at two weeks after birth.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

6. The new and improved infant formulas essentially contain the same ingredients as breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

7. Placing healthy, term babies to breast within 30 to 60 minutes after birth is an important factor in getting breastfeeding off to a good start.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

8. If a mother has had reduction mammoplasty, any breastfeeding should be discouraged.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

9. Frequent, effective removal of milk stimulates continued breastmilk production.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

10. The American Academy of Pediatrics recommends that mothers breastfeed for at least twelve months and then for as long as mother and baby want to continue.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

11. Babies who are given bottles during the first two weeks after birth may have more problems with breastfeeding than babies who are not given bottles during the first two weeks.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

12. During the first 24 to 48 hours after birth, babies rely on their fluid and caloric reserves and need to go to breast only three or four times a day to get breastfeeding off to a good start.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

13. According to research studies, babies who use pacifiers stop breastfeeding earlier than babies who do not use pacifiers.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

14. It is recommended to teach new parents to wait until their baby starts crying loudly before offering the breast so that the parents know the baby is adequately awake.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

15. Mothers living in the U.S. who are HIV positive are encouraged to breastfeed in order to reduce the chance of their babies becoming HIV positive.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

16. In order to make appropriate quality and quantity of breastmilk, mothers need to eat a near-perfect diet.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

17. The way babies suck at breast is different than the way they suck on a bottle.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

18. Latch-on may be more difficult during engorgement because the areola is firm.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

19. Applying continuous heat packs to an engorged breast is recommended because heat reduces swelling.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

20. During the first 48 hours after birth, health care providers can rely on first-time mothers' self-reports about how breastfeeding is going. (No other assessment is necessary if mother thinks breastfeeding is going well.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

21. If a mother continues to smoke during pregnancy and after her baby is born, breastfeeding should be discouraged.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

22. Breastfeeding mothers with previous surgery involving peri-areolar incisions are more likely to have infants who have difficulty gaining weight appropriately.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

23. If breastfeeding is not possible during the first week after birth (due to baby's or mother's condition), it is better to wait until after engorgement and the appearance of mother's full milk supply before teaching the mother how to express breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

24. If a baby has lost about 10% of his/her birth weight, a health care provider should seriously consider recommending supplementation.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

25. From five days to one month after birth, breastfed babies who are well nourished have at least three to four bowel movements per day.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

26. Screening for breast cancer (self breast exams and mammograms) is not necessary while mothers are lactating.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

27. The effectiveness of different breast pumps is about the same since all pumps must meet FDA (Food and Drug Administration) standards before being marketed to the public.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

28. The cradle hold is often the "position of choice" for *early* feedings with a premature infant.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

29. Mothers who do not take a prenatal breastfeeding class can still meet their breastfeeding goals if they have access to knowledgeable and supportive health care providers in the birth setting and during follow-up care.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

30. Microwaving is a safe way to warm breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

31. Mothers can establish and maintain a good milk supply for several months by using a hospital-grade, electric breast pump.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

32. Health care providers should avoid telling mothers why breastfeeding is better for babies, mothers, and society because mothers may feel guilty if they choose not to breastfeed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

33. Currently, more than half of the mothers in the U.S. who start breastfeeding, continue to breastfeed for six months or more.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

34. The World Health Organization encourages health care providers to distribute educational materials produced by infant formula companies for breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

35. Most breastfeeding challenges have specific solutions that work for most mothers so once a recommendation is given to a mother, no additional follow-up care or assessments are needed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

36. Premature babies should *prove* their ability to coordinate sucking, swallowing, and breathing by bottle-feeding successfully before they attempt to breastfeed directly.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

37. Many mothers consider infant formula as an attractive and acceptable alternative if they experience a breastfeeding challenge.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

38. Children who have been breastfed as babies tend to have less cancer.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

39. Mothers' breast secretions immediately after birth (colostrum) are not especially beneficial. Babies don't need to go to the breast very often until mother's milk "comes in" several days later.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

40. A mother's childhood experiences can influence her breastfeeding success.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

41. Mothers with small breasts (e.g., mothers who wear bras with size A cups) usually have more difficulty making enough milk for their babies than mothers with large breasts.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

42. The World Health Organization recommends that all pregnant women be informed about the benefits and management of breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

43. Most mothers can continue breastfeeding when employed outside their homes if they have appropriate information and support.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

44. It is considered safe for a woman to defer a breast biopsy until after she weans her baby from breast.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

45. A baby should be positioned so that her/his head and shoulders face the breast directly when latching-on to the breast.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

46. The health care system should consider the extra time often needed to help breastfeeding mothers and babies as an *investment* in the health and development of babies and mothers.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

47. Breastfed babies tend to have fewer ear infections than formula fed babies.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

48. Mothers who express breastmilk while separated from their babies (e.g., due to employment) find it easier to maintain their milk supply than mothers who do not express breastmilk during separations.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

49. Many mothers of multiples can exclusively breastfeed if they have appropriate information and support.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

50. Pre-school children who are breastfed after their second birthday have fewer infections than pre-school children who stop breastfeeding before their first birthday.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

51. Except in special circumstances, a healthy, term infant should remain with her/his mother throughout the recovery/transition period immediately after birth.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

52. If a breastfed baby needs supplementation during the first two weeks, cup feeding may be less physiologically stressful than bottle-feeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

53. The quiet alert state of consciousness is an ideal state in which to interact with a baby or to teach new skills to a baby.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

54. Newborns who make smacking and clicking sounds while breastfeeding reassure health care providers that breastfeeding is getting off to a good start.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

55. Breastfeeding should be discouraged among adolescent mothers because their bodies are not physically mature.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

56. Because it is sometimes difficult to teach new parents the signs of hunger and satiety, it is better to teach them to watch the clock when breastfeeding to insure appropriate infant weight gain.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

57. After attending a breastfeeding education program, health care providers can usually convince their colleagues to change their breastfeeding management recommendations immediately.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

58. Breastfed babies die less often from sudden infant death syndrome than formula-fed babies.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

59. During the first 24 hours after birth, breastfed babies need at least 1 oz of milk or water at every feeding to avoid developing jaundice.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

60. Bilirubin is excreted primarily in urine.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

61. Mothers who receive discharge packs containing infant formula discontinue breastfeeding more quickly than mothers who receive discharge packs that do not contain formula.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

62. Babies who are exclusively breastfed (receiving no other fluids or foods) and are 3 to 6 months old, will only need to breastfeed about 5 to 6 times in a 24 hour period if their mothers are producing an adequate amount of milk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

63. Having parents record their baby's breastfeedings and bowel movements during the first week after birth provides valuable information for assessing the effectiveness of breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

64. Routine glucose water supplementation during the first few days after birth causes no problems related to the establishment of breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

65. If a breastfeeding mother or baby requires hospitalization, the American Academy of Pediatrics recommends discontinuation of breastfeeding upon hospital admission.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

66. Children who were formula-fed as babies tend to be more overweight when they enter elementary school compared to children who were breastfed as babies.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

67. During the first six months after birth, breastfed babies should be offered the breast when they show *early* signs of hunger or at least every three hours during the day.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

68. Rooming-in while in the birth setting has little influence in establishing successful breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

69. Most breastfed infants require iron supplementation during the first six months.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

70. If a mother receives pain medication or anaesthesia during labor, it may influence her baby's temporary ability to breastfeed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

71. One of the characteristics of an effective suck is that the baby's tongue extends over her/his lower gumline.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

72. High-need breastfed babies usually cry less when they are weaned from the breast and given soy formula.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

73. If a mother has large breasts, she does not need to support her breasts while breastfeeding a newborn because there is plenty of tissue for the baby to grasp.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

74. The U.S. government has established this health goal for the nation: 75% of mothers will breastfeed their babies at the time of discharge from the birth setting.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

75. Nipple tenderness usually improves three to five days after birth.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

76. During prenatal care, health care providers should be neutral when discussing infant feeding choices.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

77. Breastfeeding is beneficial only if it is exclusive and continues at least six months.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

78. Mothers can more successfully combine employment and continued breastfeeding if they delay returning to the employment setting for as long as possible.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

79. The majority of perinatal professional organizations have published statements that promote breastfeeding as the preferred infant feeding choice.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

80. If a mother is continuing to experience sore nipples after two weeks, an assessment of the infant at breast should be performed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

81. The World Health Organization recommends routine screening for hypoglycemia in low-risk, asymptomatic newborns.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

82. Most breastfeeding difficulties experienced in the birth setting improve once mothers relax at home, so contact with a health care provider during the first two to four weeks after birth is usually not needed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

83. Nipple shields may be helpful in overcoming some breastfeeding challenges.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

84. If a baby requires supplementation, supplementing at the breast encourages continued breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

85. Babies tend to suck more vigorously on the first breast if they breastfeed at both breasts during a feeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

86. Chin and cheek support increases suction and suck efficiency for premature and neurologically impaired infants.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

87. When a baby is in a *deep* sleep state, latch-on is fairly easily accomplished because the baby is so relaxed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

88. Any amount of human milk that a baby receives provides some benefits.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

89. Breastfeeding mothers who require an incisional breast biopsy should wean their babies immediately prior to the biopsy.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

90. There are several objective, reassuring signs that can be taught to parents so that they feel more confident that their baby is getting enough breastmilk.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

91. Recommendations related to breastfeeding management should be individualized for each family based on accurate assessments of anatomical, physiological, psycho-social, and spiritual factors.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

92. Removing more milk more frequently is an effective way to increase breastmilk supply.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

93. There are several known risk factors ("red flags") which increase a mother's likelihood of experiencing a breastfeeding challenge.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

94. Breastfeeding a newborn (or expressing breastmilk) every four to five hours during the day provides adequate breast stimulation so that most mothers can establish an abundant milk supply.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

95. Nipples that were marginally everted (protruding or "sticking out" from the breast) during the last trimester of pregnancy may become flatter during engorgement.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

96. When working with mothers who are experiencing breastfeeding challenges, it is important that health care providers communicate in ways which help mothers avoid feeling like they are being criticized or blamed for their experiences.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

97. Appetite/growth spurts occur at fairly predictable times during lactation.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

98. Supplementation during an appetite/growth spurt can reduce mothers' milk supply.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

99. Accurate assessments rather than assumptions provide a basis for more effective plans of care for breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

100. In some cultures, the majority of babies/children are breastfed until their immune system is fully functioning (occurring several years after birth.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

101. Health care providers can influence how confident parents feel about caring for their new baby.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

102. When making breastfeeding management recommendations, one should always consider the risk-benefit ratio.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

103. It is important for health care providers to have *personal* experience breastfeeding in order to effectively assist breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

104. Successful breastfeeding is easier than many mothers think.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

105. Breastfeeding success occurs when a mother meets her breastfeeding goals.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

The following questions are about your clinical/community practice.

<u>During the last month</u>, how would you rate the effort you have made to . . .

1. get babies to breast within 30 to 60 minutes after birth?

Made great effort - - - - - Made some effort - - - - - Made a little effort - - - - - Made no effort - - - - - Does not apply
1 2 3 4 5

2. talk with families about breastfeeding and infant formula feeding and help them gather more information so that they can make an informed choice about infant feeding.

Made great effort - - - - - Made some effort - - - - - Made a little effort - - - - - Made no effort - - - - - Does not apply
1 2 3 4 5

3. help parents learn to accurately interpret their baby's behavior and helped them learn to respond to their baby appropriately.

Made great effort - - - - - Made some effort - - - - - Made a little effort - - - - - Made no effort - - - - - Does not apply
1 2 3 4 5

4. How would you rate the effort you have made to systematically assess an infant at breast and evaluate milk transfer?

Made great effort - - - - - Made some effort - - - - - Made a little effort - - - - - Made no effort - - - - - Does not apply
1 2 3 4 5

5. How often have you given glucose water to prevent or treat <u>hypoglycemia</u>?

Several times each week - - - - - At least once a week - - - - - Once a month - - - - - Not at all - - - - - Does not apply
1 2 3 4 5

6. How often have you given glucose water or formula to prevent or treat <u>jaundice</u>?

Several times each week - - - - - At least once a week - - - - - Once a month - - - - - Not at all - - - - - Does not apply
1 2 3 4 5

7. How often have you given a baby a pacifier between feedings or recommended a pacifier to be given between feedings?

Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
1 2 3 4 5

8. How often have you distributed a discharge pack that contained formula?

Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
1 2 3 4 5

9. How often have you distributed educational or promotional materials produced by formula companies that included the formula company's name?

Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
1 2 3 4 5

10. How often have you explained to parents how they can know "if their baby is getting enough breastmilk"?

Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
1 2 3 4 5

11. How often have you referred mothers interested in breastfeeding to resources (pamphlets, books, video tapes, equipment, health care providers, clinics, support people, etc.) that can help mothers meet their breastfeeding goals?

Several times each day - - - - - Several times a week - - - - - Once a week - - - - - Not at all - - - - - Does not apply
1 2 3 4 5

The following statements are regarding <u>your assessment</u> of your <u>clinical/community practice</u>.

1. I can describe the basic anatomic and physiologic rationales for early, frequent feeding; appropriate areolar grasp and compression; and milk removal principle of milk production?

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

2. Given that there is a limited amount of time available for client education, I am able to prioritize the learning needs of breastfeeding families.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

3. I am able to help prevent or decrease the severity of common breastfeeding challenges (e.g., difficult latch-on, prolonged feeding intervals, sore nipples, engorgement, etc.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

4. My colleagues and I who attended the Breastfeeding Educator Program™ tend to provide more consistent recommendations to breastfeeding families since we participated in the program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

I do not have colleagues who participated in the Breastfeeding Educator Program™
0

The following statements are regarding your perceptions of your clinical practice.

1. I have confidence in my knowledge and skills related to breastfeeding management.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

2. I provide appropriate information and use therapeutic communication skills so families can make *informed decisions* regarding how they will feed their baby.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

I rarely have opportunities to discuss *informed decision making* related to infant feeding methods
0

3. I have an overview understanding of the phases of lactation from pre-conception to weaning.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

4. I provide breastfeeding management recommendations that are evidence-based when evidence-based recommendations are available.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

5. I try to help new parents develop confidence in their baby care skills.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

6. I make individualized breastfeeding management recommendations for each family using assessments that address anatomical, physiological, psycho-social, and spiritual factors.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

7. I help families use problem-solving skills to overcome their breastfeeding challenges.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

8. I provide and/or refer to services for breastfeeding families that help them meet their breastfeeding goals.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

9. I continue to assist families in overcoming their breastfeeding challenges until they meet (or they change) their breastfeeding goals.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

10. I try to avoid practices that undermine continued breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

11. I consider factors that may influence mothers' postpartum adjustment.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

12. The families with which I work seem pleased with the breastfeeding assistance I provide.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

13. I enjoy providing assistance with breastfeeding.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Please share suggestions (on an attached page) for improving the Breastfeeding Program™.

Appendix M

Program Evaluation Tool

BREASTFEEDING EDUCATOR PROGRAM™
PROGRAM EVALUATION TOOL

Thank you for participating the Breastfeeding Educator Program™. We appreciate your interest and enthusiasm in promoting and supporting breastfeeding. Families value your clinical expertise in breastfeeding assistance.

Your ideas for improving the program are important to us. Please share your evaluations of the program. Your name is not needed. Thank you

Clinical Practice Setting (Please check all that apply)

Hospital Based:

_____ Labor & Delivery
_____ Postpartum
_____ Newborn Nursery
_____ Mother-Baby Care
_____ N.I.C.U.
_____ Other (Please describe)

Community Based:

_____ WIC / Nutrition
_____ Mother-to-Mother Support
_____ Clinic (Please describe)
_____ Dr. Office (Please describe)
_____ Childbirth Educator - Doula
(circle title[s] that apply)
_____ Other (Please describe)

Please describe your credentials in health care (if applicable) Examples: RN, RNC LPN, RD, MD, Certified Childbirth Educator, Certified Doula, International Board Certified Lactation Consultant

_____

Please describe check degrees you have earned

_____ Associate degree
_____ Bachelors degree
_____ Masters degree
_____ MD
_____ Other (Please describe)

Please circle the number below that reflects your level of agreement or disagreement with the following statements. Share comments below the statement or on the third page of this tool.

1. I learned what I expected to learn from participating in this program.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

2. The program was well organized and effectively conducted.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

3. The program moved at an appropriate rate (not too fast, not too slow.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

4. This facility was conducive to learning.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

5. The role-play activities helped me learn the skills that we practiced.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

18. What did you like best about the Breastfeeding Educator Program™?

19. What did you like least about the Breastfeeding Educator Program™?

20. How can we improve the Breastfeeding Educator Program™?

Please share comments about statements one through seventeen.

6. Using the equipment in the skills kits helped me learn how to use that equipment.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

7. The books, models, and exhibits were beneficial to have on display.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

8. The videos were helpful in learning the concepts they discussed.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

9. The slides clarified and reinforced the information that was presented.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

10. The presenter was enthusiastic.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

11. The presenter showed respect to different views.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

12. The presenter was knowledgeable and well prepared.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

13. I enjoyed the activity bags.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

13. The program was presented in interesting ways.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

15. I will be able to use what I learned in the program in my clinical/community setting.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

16. The benefits I received from participating the Breastfeeding Educator Program™ justified the expense of attending the program. (The program was a good value.)

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

17. I would recommend that my colleague(s) attend the Breastfeeding Educator Program™.

Strongly Agree - - - - - - - Somewhat Agree - - - - - - I'm Not Sure - - - - - Somewhat Disagree - - - - Strongly Disagree
1 2 3 4 5

Breastfeeding Educator Program™

SESSION EVALUATIONS

Program Purpose/Goals

1. Describe the process of normal lactation.
2. Discuss strategies that health care providers can use to enhance breastfeeding during prenatal, intrapartum, postpartum, and weaning phases of lactation.
3. Describe assistance techniques to facilitate breastfeeding in special circumstances.
4. Identify services and resources that assist each family meet their unique breastfeeding goals based on *informed* decision-making.

Please indicate how well the learning objectives for each session were met, the relevance of the session's content to the overall program purpose/goals, the effectiveness of the teaching methods, and the effectiveness of each presenter using the following scale:

Excellent Good Poor
1 2 3 4 5

Day One

Session 1: Breastfeeding: Is It Still the Best?

Primary Objectives for Session One

1. Discuss at least two cultural and historical perspectives related to infant feeding trends.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

2. Discuss at least two advantages of breastfeeding and two risks of artificial feeding.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

3. Discuss at least two contraindications for breastfeeding.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

4. Describe health care providers' role in *informed* infant-feeding decision-making.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

5. Differentiate between the role of a certified breastfeeding educator and a certified lactation consultant.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

	Excellent		Good		Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 2: Prenatal Care for Breastfeeding Families

Primary Objectives for Session Two

1. Give an example of the three phases of the social marketing approach to breastfeeding promotion including: seeking to understand client's perceptions; acknowledging client's statements; and educating.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

2. Discuss how previous breast surgery may impact continued milk production.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

3. Identify at least three "flags" which indicate additional assistance and follow-up care.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

	Excellent		Good		Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 3: Optimizing First Feedings

Primary Objectives for Session Three

1. Describe typical behavior of newborns during the first hours after birth.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

2. Discuss the importance of breastfeeding within 30 minutes of birth.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

3. Discuss the importance of avoiding "routine" interventions in the perinatal period.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

4. Describe optimal states of consciousness of infants for breastfeeding as well as the importance of touch (especially skin-to-skin contact) for enhancing parental-infant attachment.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

	Excellent		Good		Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 4: Positioning and Latch-On

Primary Objectives for Session Four

1. Describe effective positioning of mother and baby in the cradle, transitional, football (clutch), and side-lying positions.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

2. Describe techniques for effective cuing and latch-on.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

3. List four components for assessing the infant at breast.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

	Excellent			Good	Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 5: Demystifying Milk Supply

Primary Objectives for Session Five

1. Discuss the implications of frequency and duration of breastfeeding sessions and suck effectiveness on continued milk production.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

2. Discuss the importance of teaching families to respond to infants' hunger and satiety cues.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

3. Identify at least three hazzards of routine supplementation.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

4. Discuss potential problems associated with artificial nipples and pacifiers during the first two weeks postpartum.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

5. Describe at least three hospital practices that can influence breastfeeding success.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

	Excellent			Good	Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 6: Maternal Learning Needs

Primary Objectives for Session Six

1. Describe at least two criteria that can be used to assess the appropriateness of educational activities and materials for breastfeeding families.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

2. Describe learning needs related to breastfeeding including assessing adequacy of milk supply, normal infant weight gain, appetite spurts, and resources for breastfeeding support and assistance.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

3. Discuss the recent reduced emphasis on dietary and lifestyle restrictions related to breastfeeding..

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

4. Describe strategies to assist family members incorporate the newborn into the family system and optimize the growth and development of each family member (including fathers, siblings, grandparents.)

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

	Excellent		Good		Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Day Two

Session 7: Later Breastfeeding and Special Infant Situations

Primary Objectives for Session Seven

1. Discuss how new baby / new parent adjustment issues can be attributed to breastfeeding and describe at least two strategies to assist parents cope with postpartum challenges.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

2. Identify the American Academy of Pediatrics' recommendations for breastfeeding and vitamin and mineral supplementation (including iron and fluoride) for breastfed infants.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

3. Describe at least two strategies of mother-led weaning.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

	Excellent		Good		Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 8: Difficult Latch-On

Primary Objectives for Session Eight

1. Describe at least two general strategies for difficult latch-on.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

2. Describe at least two strategies to enhance latch-on when an infant is drowsy or frantically crying.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

3. Discuss at least two strategies to enhance latch-on in challenging situations including flat, inverted, or large maternal nipples, unsustained latch-on, and preference for one breast.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

4. Discuss the appropriate use of nipple shields.

	Excellent		Good		Poor
Learning objective was met	1	2	3	4	5

	Excellent			Good	Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 9: When Supplementation is Indicated

Primary Objectives for Session Nine

1. Discuss at least two situations when supplementation should be considered and explain the importance of adequate infant nourishment on subsequent infant growth and development.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

2. Describe how to instruct families regarding cup feeding, finger-feeding, supplementing at breast, and bottle-feeding.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

3. Discuss the importance of close follow-up care of families who infants require supplementation.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

	Excellent			Good	Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 10: Nipple Soreness

Primary Objectives for Session Ten

1. Describe the usual frequency, severity & duration of nipple soreness in the course of normal lactation.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

2. Describe treatment recommendations for nipple soreness related to unrelieved negative pressure, inappropriate areolar grasp, traumatic removal from the breast, and fungal (yeast) overgrowth

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

3. Discuss the principles of demonstrating desired behavior and positively reinforcing desired behavior related to "suck training."

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

4. Critique at least three comfort strategies to relieve nipple soreness after the underlying cause has been identified and corrected.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

	Excellent			Good	Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 11: Additional Early Challenges

Primary Objectives for Session Eleven

1. Discuss the importance of early frequent breastfeeding for prevention and treatment of hypoglycemia.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

2. Describe the role of breastfeeding management related to physiologic jaundice, pathologic jaundice, and breastmilk jaundice.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

3. Discuss the importance of effective milk removal and cold compresses for treatment of engorgement.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

4. Discuss the importance of keeping breastfeeding recommendations as simple as possible.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

	Excellent			Good	Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 12: Employed Breastfeeding Mothers

Primary Objectives for Session Twelve

1. Describe how health care providers can assist mothers to combine employment and breastfeeding.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

2. Explain the importance of the following factors in selecting an expression method or breast pump:
   1) How frequently will mother express breastmilk?
   2) How much time will she have to express breastmilk?

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

3. Describe how to hand-express breastmilk and how to use a breast pump.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

4. Discuss how to encourage employed breastfeeding mothers to perceive that their efforts to provide breastmilk are worthwhile.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

	Excellent			Good	Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Day Three

Session 13: Special Maternal Situations

Primary Objectives for Session Thirteen

1. Describe at least three strategies to increase milk supply and enhance infant weight gain.

   Excellent Good Poor
   Learning objective was met 1 2 3 4 5

2. Discuss strategies to enhance breastfeeding and mothering in the following situations: adolescents, cesarean births, mothers of multiples, acute or chronic illness, physically or cognitively challenged mothers, cultural or language diversity, less-than-optimal childhood experiences.

   Excellent Good Poor
   Learning objective was met 1 2 3 4 5

3. Describe at least two management strategies for treatment of obstructed ducts and mastitis.

   Excellent Good Poor
   Learning objective was met 1 2 3 4 5

4. Discuss at least two appropriate resources for information regarding safety of drugs during lactation and describe how timing the administration of drugs can reduce the levels of medications in breastmilk.

   Excellent Good Poor
   Learning objective was met 1 2 3 4 5

5. Describe the importance of follow-up care when mothers have experienced early feeding challenges.

   Excellent Good Poor
   Learning objective was met 1 2 3 4 5

	Excellent	Good	Poor
Relevance of objectives to program purpose/goals	1 2 3 4 5		
Effectiveness of teaching methods	1 2 3 4 5		
Teaching effectiveness of presenter	1 2 3 4 5		

Session 14: Critically Ill Infants

Primary Objectives for Session Fourteen

1. Describe at least two strategies to support mothers' decision to provide breastmilk.

   Excellent Good Poor
   Learning objective was met 1 2 3 4 5

2. Describe at least two ways health care providers can assist mothers maintain their milk supply when expressing breastmilk for an extended period before direct breastfeedings.

   Excellent Good Poor
   Learning objective was met 1 2 3 4 5

3. Discuss how the following factors enhance successful breastfeeding of a critically ill infant
   Early direct feedings
   Positioning of mother and baby (with skilled assistance during early feedings)
   Accurate determination of intake from the breast

   Excellent Good Poor
   Learning objective was met 1 2 3 4 5

4. Describe strategies to improve transition from hospital to home
   Rooming-in before discharge, Follow-up services

   Excellent Good Poor
   Learning objective was met 1 2 3 4 5

	Excellent			Good	Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

Session 15: Breastfeeding Advocacy: Creating an Effective Team

Primary Objectives for Session Fifteen

1. Discuss how characteristics of effective athletic teams can be applied to breastfeeding promotion and assistance teams.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

2. Describe at least two principles of planned change.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

3. Discuss the "Baby Friendly" Initiative.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

4. Discuss health care providers' influence on breastfeeding success.

	Excellent			Good	Poor
Learning objective was met	1	2	3	4	5

	Excellent			Good	Poor
Relevance of objectives to program purpose/goals	1	2	3	4	5
Effectiveness of teaching methods	1	2	3	4	5
Teaching effectiveness of presenter	1	2	3	4	5

How can we improve the Breastfeeding Educator Program™?

Please share your suggestions for improving the Breastfeeding Educator Program™. Please comment on such things as the program brochure, registration procedure, schedule of program [time of year, days of week, length of day], importance of C.E.U.s, program content [degree of depth and breadth], presentation format, exhibits/displays, break format, resource manual, facility, refreshments and lunch breaks, opportunities for networking, costs, etc.

Appendix N

Clinical Supervisors'

Post-Program Assessment Survey

Evaluating the Breastfeeding Educator Program™

Clinical Supervisors' Post-Program Assessment Survey

Staff from your setting attended the Breastfeeding Educator Program™ last month. Please complete this questionnaire reflecting your assessment regarding the staff member(s) who attended the program.

Only ONE FORM is needed to summarize your observations for all your staff who attended the program. Your name or your staff's names are not needed.

Thank you

Clinical Practice Setting: (Please check all that apply)

Hospital Based:

_____ Labor & Delivery
_____ Postpartum
_____ Newborn Nursery
_____ Mother-Baby Care
_____ N.I.C.U.
_____ Other (Please describe)

Community Based:

_____ WIC / Nutrition
_____ Mother-to-Mother Support
_____ Clinic (Please describe)
_____ Dr. Office (Please describe)
_____ Childbirth Educator - Doula (circle title[s] that apply)
_____ Other (Please describe)

Please circle the number that reflects the amount of **improvement** observed in staff who attended the Breastfeeding Educator Program™ related to the following outcomes.

1. Demonstrate an increased **commitment to "investing" clinical time** and **resources** in breastfeeding services.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

2. Use therapeutic communication skills to provide appropriate information so families **can make *informed decisions*** regarding how they will feed their baby.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

3. Demonstrate **improved confidence in breastfeeding management skills** that reflects an understanding of the normal course of lactation from pre-conception through weaning.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

4. Provide breastfeeding management **recommendations** that are **evidence-based** and **consistent** with recommendations given by colleagues.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

5 **Individualize breastfeeding management** recommendations for each family using accurate assessment data for anatomical, physiological, psycho-social and spiritual factors

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

6. **Prioritize teaching topics** that reflect the family's learning needs during each phase of the childbearing cycle.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

7. **Assist families to locate resources** to help meet their breastfeeding goals.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome

0

8. Facilitate **early, frequent, effective feedings.**

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome

0

9 Teach parents how to **accurately interpret** and **appropriately respond** to their babies' **behavioral cues**.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

10. Assist mothers and babies to **accomplish effective latch-on**, **assess latch-on** and **milk transfer** and **generate interventions** to optimize breastfeeding.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

11 Assist families to **develop problem-solving skills** to overcome breastfeeding challenges.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

12. Recognize and avoid **practices that undermine continued breastfeeding**. (e.g., test feeds, unnecessary supplementation, pacifier use, prolonged feeding intervals, etc.)

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

13. Provide and/or refer to effective **follow-up services** for breastfeeding families.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

14. Assist parents to develop **confidence in baby care skills** and optimize **postpartum adjustment** with their new baby.

Noticeable Improvement - - - - - - - - - - - - - - - Some Improvement - - - - - - - - - - - - - - - - - No Improvement
1 2 3 4 5

Not clinically applicable and/or I have not had an opportunity to observe this potential outcome
0

Please indicate any changes in **satisfaction related to breastfeeding services**

15. **Client/customer/patient satisfaction** with breastfeeding services

Noticeable Improvement		Some Improvement		No Improvement
1	2	3	4	5

16. **Staff satisfaction related** to breastfeeding services provided

Noticeable Improvement		Some Improvement		No Improvement
1	2	3	4	5

Please share other observations related to changes among staff who attended the *Breastfeeding Educator Program™*. Please address staff commitment, knowledge, attitudes, performance, confidence, persistence, and satisfaction related to providing breastfeeding promotion and assistance services.

Appendix O

Focus Group Discussion Guide

for

Program Participants

Summative Evaluation of the Breastfeeding Educator Program™

Focus Group Discussion Guide for Program Participants

After indicating their consent to participate by signing consent form, participants will be asked to discuss the following questions.

1. Was the information presented up-to-date and accurate?
   If not, which topics/information needs modification?

2. Was too much emphasis or too little emphasis placed on particular topics?
   If yes, which topic emphasis should be modified?

3. Was the sequencing of topics appropriate?
   If not, how could the sequencing could be changed?

4. Were principles of effective instruction/adult education considered?
   Were participants encouraged to *actively* participate in the program?
   Was there adequate time for participation?
   If not, which activities needed more time allotted to them?
   Did the program presenter demonstrate respect for participants' previous knowledge and experience?
   Was the program sensitive to race, gender, age, disability, sexual orientation, religion, and ethnicity?
   Were alternate points of view encouraged?

5. Could other teaching strategies have been used that would been more effective?
   If yes, which teaching strategies should be considered?

6. Was there sufficient time allotted and was there sufficient equipment to practice psychomotor skills?
   If not, which skills needed more time or equipment?
   Were there other psychomotor skills that should have been practiced?

7. Were topics specifically related to the diversity of clinical/community settings adequately addressed?
   (e.g., prenatal/postpartum clinics, hospitals, home health agencies, mother-to-mother support groups, parent support programs, etc.)

8. How can we improve the Breastfeeding Educator Program™?

Appendix P

Focus Group Discussion Guide

for

Program Planning Committee Members

Summative Evaluation of the Breastfeeding Educator Program™

Focus Group Discussion Guide

for Program Planning Committee

After indicating their consent to participate by signing consent form, program planning committee members will be asked to discuss the following questions.

1. Were the learning goals prioritized according to your requests?
   (Refer to Program Planning Committee's Priorities Survey.)
   If not, which goals should have had a lesser or higher priority?

2. Were principles of effective instruction/adult education considered?
   Were participants encouraged to *actively* participate in the program?
   Did the program presenter demonstrate respect for participants' previous knowledge and experience?
   Was the program sensitive to race, gender, age, disability, sexual orientation, religion, and ethnicity?
   Were alternate points of view encouraged?

3. Were a variety of learning activities (visual, auditory, kinesthetic) offered to accommodate diverse styles of participants?
   Which types of learning activities need more emphasis?

4. Were the expenses related to sponsoring the program cost-effective?
   Which areas could have had reduced expenditures?
   Which areas needed more financial resources?

5. What went well with the program?
   How can the program be improved?

6. What would you have liked to have occurred differently with the program?
   How could the program developers and presenters have helped you anticipate potential problems with the program?

7. Would you sponsor this program again?
   If not, please identify your concerns or reservations.

Appendix Q

Program Evaluation Standards Checklist

Evaluating the Breastfeeding Educator Program™

Program Evaluation Standards Checklist

The following criteria were modified from *The Program Evaluation Standards* which serve as a reference for evaluating an evaluation process (Joint Committee on Standards for Educational Evaluation, 1994).

Determine if the standard was met, partially met, not met, or not applicable. Place the number that reflects your response on the line to the left of the standards using the following key.

1 - the standard was **met**

2 - the standard was **partially met**

3 - the standard was **not met**

4 - the standard was **not applicable**

Utility Standards

____ 1. Stakeholders related to the evaluation process are identified.

____ 2. Evidence exists that the evaluators are trustworthy and competent.

____ 3. The scope and selection of the information collected addresses pertinent questions and is responsive to the needs of the stakeholders.

____ 4. The perspectives, procedures, and rationale used to interpret the findings are carefully described so that the bases for value judgements are clear

____ 5. The evaluation report adequately describes the program being evaluated (including context, purpose, procedures and findings of the evaluation) so that essential information is understood with clarity.

____ 6. The evaluation report is disseminated to intended users in a timely fashion.

____ 7. The evaluation is planned, conducted, and reported in ways that encourage follow-through by stakeholders so that the findings are actually utilized by the stakeholders.

Feasibility Standards

____ 8. The evaluation procedures are practical and keep disruption to a minimum while needed information is obtained.

____ 9. The evaluation is planned and conducted with anticipation of the different positions of various interest groups. Cooperation is obtained from the different groups and possible attempts to curtail evaluation operations or to misapply the results are averted or counteracted.

____ 10. The evaluation is efficient and produces information of sufficient value so that the resources expended can be justified.

Propriety Standards

____ 11. The evaluation is designed to assist organizations/agencies to address and effectively serve the needs of the full range of targeted participants.

____ 12. The evaluation agreements are written.

____ 13. The rights of human subjects are respected and protected.

____ 14. Human dignity and worth are respected so that participants are not threatened or harmed during the evaluation process.

____ 15. The evaluation is complete and fair in its examination of strengths and weaknesses of the program so that the strengths can be built upon and the problem areas addressed.

____ 16. The full set of evaluation findings along with pertinent limitations are disclosed to the stakeholders.

____ 17. Conflict of interest is dealt with openly and honestly so that it does not compromise the evaluation process.

____ 18. The evaluation process is conducted in a fiscally responsible manner. The allocation and expenditure of resources are appropriate, accountable, and ethically responsible.

Accuracy Standards

____ 19. The program is described and documented accurately so that the program is clearly identified.

____ 20. The context in which the program exists is examined in enough detail so that the likely influences on the program can be identified.

____ 21. The purposes and procedures of the evaluation process are described in adequate detail so that they can be identified and assessed.

____ 22. The sources of information used in a program evaluation are described in sufficient detail so that the adequacy of information can be assessed.

____ 23. The information gathering procedures assure that the interpretation of the data is valid for the intended users.

____ 24. The information gathering procedures are chosen, developed, and implemented to assure that the information obtained is reliable for the intended use.

____ 25. The information collected, processed, and reported in an evaluation is systematically reviewed and any errors found are corrected.

____ 26. Quantitative information obtained in an evaluation process is appropriately and systematically analyzed so that the evaluation questions are effectively answered.

____ 27. Qualitative information obtained in an evaluation process is appropriately and systematically analyzed so that the evaluation questions are effectively answered.

____ 28. The conclusions reached through the evaluation process are based on all pertinent information collected and throughly discussed so that the stakeholders can accurately assess the conclusions. When possible the conclusions are accompanied by a discussion of plausible alternative explanations of the findings and why those explanations were rejected.

____ 29. Reporting procedures are guarded against distortion caused by personal feelings and biases so that the evaluation report fairly reflects the evaluation findings.

____ 30. The evaluation itself is formatively and summatively evaluated against pertinent standards so that its conduct is appropriately guided and stakeholders can closely examine its strengths and weaknesses.

Appendix R

Approval Letter

from the

Institutional Review Board

The University of Oklahoma

OFFICE OF RESEARCH ADMINISTRATION

June 28, 2001

Ms. Debi Leslie Bocar
11320 Shady Glen Road
Oklahoma City OK 73162

Dear Ms. Bocar:

Your research application, "A Meta-Evaluation of the Systematic Evaluation Model for Repeated Continuing Education Programs (SEM-ReCEP)," has been reviewed according to the policies of the Institutional Review Board chaired by Dr. E. Laurette Taylor and found to be exempt from the requirements for full board review. Your project is approved under the regulations of the University of Oklahoma - Norman Campus Policies and Procedures for the Protection of Human Subjects in Research Activities.

Should you wish to deviate from the described protocol, you must notify me and obtain prior approval from the Board for the changes. If the research is to extend beyond 12 months, you must contact this office, in writing, noting any changes or revisions in the protocol and/or informed consent form, and request an extension of this ruling.

If you have any questions, please contact me.

Sincerely yours,

Susan Wyatt Sedwick

Susan Wyatt Sedwick, Ph.D.
Administrative Officer
Institutional Review Board

SWS:pw
FY01-338

cc: Dr. E. Laurette Taylor, Chair, Institutional Review Board
Dr. Teresa DeBacker, Education

1000 Asp Avenue, Suite 314, Norman, Oklahoma 73019-0430 PHONE: (405) 325-4757 FAX: (405) 325-6029

Appendix S

Summary of

Evaluation Findings and Recommendations

Summary of Evaluation Findings and Recommendations

Formative Evaluation Process - Input by Panels of Experts regarding Core Program

- Instructional design principles effectively utilized
- Comprehensive content organized to enhance clinical application
  - Primary Recommendations by Panels of Experts
    - Decrease content or lengthen the program
      - (Content Experts, n=4)
    - Increase discovery instructional strategies
      - (Instructional Design Experts, Continuing Education Experts, n=3)

Summative Evaluation Process - Input by Participants, Committees, Supervisors

- Pre-, Immediate Post-, and Delayed Post-Program Participant Surveys (n=72)
  - Improvement in knowledge and attitude scores for five of six scales
  - Some decay in improvement over one month period
  - Delayed Post-Program Surveys reflected improved scores compared to Pre-Program Surveys
  - Perceptions and reports of clinical practice improved from the Pre-Program to Delayed Post-Program Survey
- Evaluation Tool (n=244)
  - Program described as helpful in clinical setting, and a good value
  - Learning objectives were accomplished
- Clinical Supervisors' Post-Program Assessment Survey (n=22)
  - Some to noticeable improvement was reported in all clinical practice categories and in patient and staff satisfaction indices
- Focus Group Recommendations
  - Participant Focus Group (n=14)
    - Recommended more active participation by attendees
  - Planning Committee Members (n=12)
    - Recommended omitting (unidentified) content

Summary Statement: The evaluation process indicated that the BEP was an effective educational program with changes occurring in learning, behavior, and agency systems. However, improvements are recommended. More active participation and less content are suggested. More investigation is needed to determine which topics should be omitted or reduced in scope.