Implementation of the *Learning for Performance* Approach in Rwanda: Final Report

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LIST OF ACRONYMS

ANC	Antenatal Care
APEFE	Association for the Promotion of Education and Training Abroad
CTB	Belgian Technical Cooperation Agency
EmONC	Emergency Obstetrical and Neonatal Care
ESI	*Ecole des Sciences Infirmières* (School of Nursing)
FAM	Fertility-Based Awareness Methods
FHI	Family Health International
FP	Family Planning
HC	Health Center
HCSP	HIV/AIDS Clinical Services Program
HTSP	Healthy Timing and Spacing of Pregnancies
IEC	Information, Education and Communication
LFP	*Learning for Performance*
MCH	Maternal and Child Health
MOH	Ministry of Health
OJT	On-the-Job Training
PAC	Postabortion Care
PMTCT	Prevention of Mother-to-Child Transmission
RH	Reproductive Health
TRAC	Treatment and Research AIDS Center
VCT	Voluntary Counseling and Testing

EXECUTIVE SUMMARY

This study documents the implementation of the *Learning for Performance* (*LFP*) approach and the lessons learned from its application in preservice education and in-service training in Rwanda. The Capacity Project used the *LFP* approach to develop the family planning (FP), HIV/AIDS and gender components included in the competency-based A1 nursing and midwifery pre-service curricula. The Capacity Project also used *LFP* to adapt the Rwanda national FP curriculum to an on-the-job training (OJT) approach. In both cases, the participatory development process involved input from many stakeholders, including Rwanda Ministry of Health (MOH) staff, faculty members at the institutions, technical working group members and other partner organizations.

The study team collected qualitative data by reviewing extant documents and conducting individual and group interviews with stakeholders and participants. Study results showed that the development and implementation teams followed the different *LFP* stages partially in the case of the A1 nursing and midwifery curricula. The team developed the FP, HIV/AIDS and gender components based on the scope of practice of the A1 nurses and midwives and the identified gaps in the curriculum. Faculty members are currently using these materials to integrate the FP, HIV/AIDS and gender components into the classes they teach. Overall, students liked the competency-based approach, as it better prepares them for their clinical practica. The schools faced a few obstacles in the integration of the FP, HIV/AIDS and gender components, including insufficient number of faculty trained in the content and in competency-based teaching methods, insufficient quantity of instructional materials (anatomical models, books, etc.) and the movement of trained faculty to other facilities.

The results from the study also showed that the *LFP* stages were followed in full during the adaptation of the national FP curriculum to an OJT approach and its implementation. Though this highly participatory process was time-consuming, it resulted in the successful development of competency-based learning materials and an OJT in-service training strategy. The implementers identified gaps in knowledge and skills and formulated a description of the main OJT stakeholders' roles and responsibilities. The team shaped the content of the learning activities linked to the objectives and created assessment tools in order to monitor the various achievements. OJT trainers and participants were faced with certain constraints during the OJT implementation, including insufficient instructional materials (anatomical models), insufficient time to cover the full extent of certain content areas, a generalized work overload, dysfunctions in the support system (especially during the first OJT session) and occasional motivational problems.

Despite these issues, most stakeholders approved of the *LFP* approach due to its participatory nature—resulting in an in-service training program "owned" by the district—and the OJT approach, as it encouraged collaboration not only among participants but also between them and the trainer. This approach helped participants acquire skills at their work sites and made them feel comfortable delivering FP services. Through two eight-week OJT sessions, 457 service providers from 65 sites in eight districts were trained in FP. Thus, in addition to training a great number of providers over a short period of time, the OJTs produced providers skilled in quality service delivery able to meet the needs of the communities they serve. By

strengthening the providers' level of performance, the OJT approach improved the availability and integration of services and resulted in an increased use of these services.

Our interviews with IntraHealth International staff members in Rwanda showed that their training in the *LFP* approach enhanced their development and adaptation of materials for their own varied projects. The training also prepared them to promote the approach among partners and at the MOH, and support stakeholders during the implementation phase. It is important to note that the training occurred after the FP, HIV/AIDS and gender components had already been developed in the nursing schools' curriculum and after the national FP curriculum had already been adapted to an OJT approach. This might explain the difficulties encountered by the various stakeholders, including IntraHealth staff, in their attempts to reach a common understanding of the *LFP* approach at the time these two activities were launched.

Overall, our document review and interviews with various stakeholders showed that the implementation of the *LFP* approach in Rwanda was successful and that the people involved in the development and implementation of the training materials adhered to the *LFP* methodology. The fact that the Capacity Project and stakeholders used the approach in varied contexts in Rwanda illustrates the *LFP's* adaptability. Using key national documents as references, and a highly participatory approach with local stakeholders and international experts, helped ensure the relevance of the curricula developed using *LFP*. By linking theory and practice and by focusing on the acquisition of skills, this approach helped participants gain proficiency in the tasks that are expected from them. It made participants more proactive during the learning process, promoted self-learning and increased the sense of accountability among faculty/trainers, preceptors and participants. Additionally (and importantly), the *LFP* had a positive outcome on the availability, quality and utilization of services.

Our study concludes that all parties involved in implementation must reach a mutual understanding of the concept of *LFP* and its various steps in order for the transition process to run smoothly. Responsible parties must provide adequate material and human resources, both during the development and implementation phases, and must be mindful of constraints such as work overload and inadequate learning conditions. The entire process should be monitored carefully and continuous support should be granted in order for the approach to be successful.

INTRODUCTION

The IntraHealth International-led Capacity Project used the *Learning for Performance* (*LFP*) approach to develop the family planning (FP), HIV/AIDS and gender components of the competency-based A1 (registered-level) nursing and midwifery curricula used by five nursing and midwifery schools in Rwanda. The Project also used *LFP* to adapt the Rwandan national FP curriculum from a two-week workshop method to a structured on-the-job training (OJT) system in order to improve the accessibility and availability of FP services by rapidly increasing the number of skilled FP providers in Capacity Project-supported districts. Under the workshop approach, providers had to vacate their facilities for two-week periods in order to receive off-site training; the OJT method prevents this interruption of services. As of this assessment, the Capacity Project rolled out the FP OJT in eight districts.

METHODOLOGY

Goal and Objectives

This assessment was aimed at documenting the implementation process of the *LFP* approach and the lessons learned from its application in pre-service education and in-service training in Rwanda. Its specific objectives were to:

- Describe the development of FP, HIV/AIDS and gender components using *LFP*, and their integration in the A1 nursing and midwifery curricula within five nursing and midwifery schools
- Describe the process of altering the training mode from the classroom-based national FP curriculum to an OJT approach, and the implementation of this approach in eight districts
- Document the application of *LFP* skills by the Rwanda-based IntraHealth staff members, who were trained in this approach.

Assessment Approach

We used qualitative data for the bulk of our assessment, though we consulted quantitative data as often as possible. Through interviews with various partners and stakeholders and reviews of reports, we have recognized clear perspectives regarding key successes and challenges resulting from the use of *LFP* in Rwanda.

Data Collection Instruments

IntraHealth International and the Capacity Project developed ten data collection tools that the partners involved in the implementation process used for the interviews and document reviews. These tools were pretested before being finalized.

A. FP, HIV/AIDS and gender components of the pre-service A1 nursing and midwifery curricula

- *Tool 1.1: In-depth interview guide regarding the development of the curriculum's FP, HIV/AIDS and gender components*. This tool was aimed at collecting information on the development of the

competency-based FP, HIV/AIDS and gender components to be integrated into the A1 nursing and midwifery curricula. This tool was administered to a sample group of individuals who were directly involved in the development of these components. We used a semistructured group interview to collect the data.

- *Tool 1*.2: *Questionnaire for managers*. This tool was geared toward collecting perceptions regarding the integration of the FP, HIV/AIDS and gender components into the A1 nursing and midwifery curricula. It was administered to the schools' managers (director, director of studies, financial director, etc.), who were directly involved in the integration of these components in the curricula. A semistructured group interview was used to collect their perceptions.
- *Tool 1*.3: *Questionnaire for faculty members*. This tool was used to determine faculty perceptions of the integration of the FP, HIV/AIDS and gender components into the A1 nursing and midwifery curricula. It was administered to a sample group of faculty members, who were directly involved in the integration of these components in the curriculum. A semistructured group interview was used to collect their perceptions.
- *Tool 1*.4: *Questionnaire for students*. This tool was aimed at collecting perceptions regarding the integration of the FP, HIV/AIDS and gender components into the A1 nursing and midwifery curricula. This tool was administered to third-year students (nurses and midwives) who benefitted from training in these components. A semistructured group interview was used to collect their perceptions.
- *Tool 1*.5: *Questionnaire for preceptors*. This tool was aimed at collecting perceptions regarding the integration of the FP, HIV/AIDS and gender components into the A1 nursing and midwifery curricula. This tool was administered to a sample group of preceptors who were directly involved in the practica of A1 nurses/midwives using these components. A semistructured group interview was used to collect their perceptions.

B. On-the-job training for FP

- *Tool 2.1: In-depth interview guide regarding the adaptation of the national FP curriculum to the OJT approach*. To collect perspectives regarding the use of *LFP* to adapt the national FP curriculum to a structured OJT approach, we administered this tool to a sample group of individuals who were directly involved in the adaptation of the curriculum. We used a semistructured group interview to collect the data.
- *Tool 2.2: Questionnaire for district supervisors and managers*. This tool is aimed at collecting perceptions regarding the *LFP*-designed implementation of the FP OJT approach. This tool was administered to supervisors (clinic managers, OJT supervisors) and managers (FP/maternal and child health [MCH] coordinator, OJT team members at the national and district levels) who were directly involved in the implementation of the OJT approach (support to OJT and supervision). Semistructured individual or group interviews were used to collect the data.
- *Tool 2.3: Questionnaire for trainers*. This tool is aimed at collecting perceptions regarding the *LFP*-designed implementation of the FP OJT approach. This tool was administered to a sample group of trainers who were directly involved in the implementation of the OJT approach. A semistructured individual interview was used to collect the data.

- *Tool 2.4: Questionnaire for participants*. This tool is aimed at collecting perceptions regarding the *LFP*-designed implementation of the FP OJT approach. This tool was administered to a sample group of participants who directly benefitted from the OJT approach. A semistructured group interview was used to collect the data.

C. IntraHealth staff trained in *LFP*

- *Tool 3.1: Interview guide for the LFP-trained IntraHealth staff*. This tool is aimed at collecting feedback regarding how IntraHealth staff put *LFP* skills into practice and how these efforts were documented. This tool was administered to IntraHealth staff members who were trained in *LFP* in May 2008 (nine Capacity Project members, ten HIV/AIDS Clinical Services Program [HCSP] members and 14 Twubakane Decentralization and Health Program members).

Data Collection and Analysis

We pretested the interview guides in two sites within Muhanga district (Kabgayi School and Hospital) and two sites in Huye district (Rusatira and Rango health centers [HCs]).

Data collectors—staff from the Capacity Project/Rwanda and FP/MCH coordinators—became more acquainted with the data collection tools and approaches through a one-day orientation session, which also served to clarify roles and responsibilities and identify the various activities to be carried out in the different sites.

Project staff supervised data collection activities and teams from May 5-18, 2009. The data collection teams visited four nursing and midwifery schools (Byumba, Kibungo, Nyagatare and Rwamagana) and ten HCs in five districts of the Northern, Southern and Western regions.

Table 1. Sites Targeted by the Study on OJT

Province	District OJT 1	HC OJT 1	District OJT 2	HC OJT 2
South	No training OJT 1		Nyanza OJT 2	1. Nyanza
				2. Cyaratsi
			Huye (pretest)	1. Rusatira
				2. Rango
North	Gicumbi OJT 1	1. Byumba	Musanze OJT 2	1. Kinigi
		2. Miyove		2. Shingiro
West	Nyabihu OJT 1	1. Rwankeli	Ngororero OJT 2	1. Kabaya
		2. Bigogwe		2. Nyange
Total: 3 provinces	**2 districts OJT 1**	**4 HCs OJT 1**	**3 districts OJT 2**	**6 HCs OJT 2**

Table 2. Results from the Study on OJT

Activity	Planned	Carried Out
Individual interviews with supervisors	6	6
Individual interviews with site managers	12	11
Group interview with OJT trainers	12	12
Group interview with providers	6	6
Group interview with preceptors	12	12
Total	**48**	**47**

Project staff tabulated and compared costs for implementation of FP training using the two-week workshop approach and the structured OJT approach, and conducted interviews with 26 *LFP*-trained IntraHealth staff to determine how they put their *LFP* skills into practice in their everyday work. Next, they analyzed the collected data. In order to minimize subjectivity issues during the interpretation of data, the analysis team had not been directly involved in the implementation of the intervention. Thus, those in charge of the OJT implementation worked on the data collected at nursing and midwifery schools and vice versa. A representative from the Ministry of Health (MOH) Nursing Education Task Force supervised the collection of data for the schools and participated in its analysis.

Protection of Human Subjects

Before the study began, we obtained the informed consent of the MOH and of the district and school managers selected for the survey. Prior to conducting interviews, we also obtained the informed consent of all individuals who took part in the assessment.

In order to ensure the confidentiality of answers and results, respondents were not identified in the questionnaires. Moreover, the data included in the report were presented in aggregated form. No data or results were shared with any individual who was not part of the evaluation team.

Constraints and Limitations

We originally planned to document the impact of the competency-based training approach on the A1 nursing and midwifery students. However, since the three-year training cycle for the A1 program had not yet come to an end, we deemed this intervention untimely.

CONCEPTUAL FRAMEWORK

As part of the two interventions described in this report, the Capacity Project used the *LFP* approach to develop training materials and strategy. *LFP* is an instructional design process and set of practical tools designed to yield more efficient training that focuses on what is essential for health workers to do their jobs, while addressing the factors that ensure application of new skills on the job. The *LFP* approach systematically links the curriculum content and competency-based learning methods to the job tasks, the specific learners and their work context. The intent is better transfer of learning for improved performance on the job.

FP, HIV/AIDS and Gender Components of the Pre-Service A1 Nursing and Midwifery Curricula

Background for the Intervention

In 2004, the Rwandan government decided to eliminate the insufficiently-trained A2 (enrolled) nursing cadre, replace it with A1 (registered) nurses and close all but five nursing schools that could be upgraded from secondary schools to professional schools providing a quality education for A1 nurses. In February 2005, the Rwanda MOH, in collaboration with the Capacity Project, conducted an assessment at the five nursing schools that revealed the need for improved skills, materials and equipment and human resources in HIV/AIDS care and other areas. Thus the five schools needed a new curriculum and other support to ensure that this new cadre of A1 providers would be adequately trained to meet the population's needs and expectations.

The Capacity Project, the Association for the Promotion of Education and Training Abroad (APEFE), Belgian Technical Cooperation Agency (CTB) and Columbia University developed a common action plan to identify each partner's role in developing and supporting the new A1 competency-based curricula. APEFE and CTB were in charge of developing the overall curriculum and monitoring the nursing school (*Ecole des Sciences Infirmières*, or ESI) faculty members. The Capacity Project was in charge of designing the FP, HIV/AIDS prevention and gender components for integration into the A1 curriculum using the *LFP* approach, with Columbia contributing the HIV/AIDS treatment component.

Design and Integration of the FP, HIV/AIDS and Gender Components

Orientation of the main stakeholders

The Capacity Project divided the orientation of the main stakeholders into two parts. Meetings with managers from the Treatment and Research AIDS Center (TRAC), including the managers in charge of the voluntary counseling and testing (VCT)/prevention of mother-to-child transmission (PMTCT) component, helped clarify the Project's role in adapting the national module by integrating FP and gender components. In addition, the Project organized a workshop on *LFP* with the core trainers from TRAC, Family Health International (FHI), the Elizabeth Glaser Pediatric AIDS Foundation and IntraHealth International/The Capacity Project.

Identification of needs and gaps

In conjunction with partners, the Project identified the acceptable level of performance of A1 nurses. A needs assessment conducted in the five nursing schools' practicum sites showed that there was a sizable gap between the providers' current performance and the acceptable level of performance in the areas of FP, HIV/AIDS and gender.

Design and development of the curriculum

The curriculum design and development process began during a two-day workshop in July 2005, where Project staff worked with implementation partners and a group of ESI directors, doctors, faculty and HIV/AIDS service providers to determine the roles, responsibilities and skills of HIV/AIDS nurses. In September 2005, the Project and partners conducted another workshop to write the learning objectives, identify the content of the HIV/AIDS curriculum and determine the integration methodology during the A1 nurses' and midwives' course of studies. In early

2006, stakeholders drafted the gender and FP competencies, tasks and learning objectives for A1 nurses and midwives.

In February 2006, the Project and all partners, including district schools and hospitals, participated in a workshop aimed at designing the A1 curriculum and the integration of new HIV/AIDS, FP and gender content. This process continued until 2008, facilitated by the APEFE in collaboration with the Capacity Project, Columbia University and Rwandan stakeholders, and included the creation of descriptive guides for each year of the three-year curricula as well as the creation and dissemination of national VCT/PMTCT training modules that were updated based on the competencies identified for A1 providers and on integrated FP and gender components.

Because of the need to start the training of A1 nurses and midwives in February 2007, the preceptors' guides were not designed on time. The production of documents related to the curriculum was a priority in order to provide theoretical and practical training. As a result, the practicum guide and the preceptors' guide were not finalized until 2008.

ESI capacity-strengthening

Between December 2005 and November 2006, the Project provided training in HIV/AIDS, basic computer skills and library management for ESI faculty members and staff. Between April 2007 and February 2008, the Project organized and facilitated HIV/AIDS training workshops for providers from six hospitals that were used as practicum sites by the five nursing schools. The Project and partners provided training materials and learning tools (reference books, national training modules, anatomical models and computers with Internet connection) and facilitated building renovations at each of the ESIs.

Between April and December 2008, the Project provided training for faculty members in FP, emergency obstetrical and neonatal care (EmONC) and gender. ESI directors and accountants, meanwhile, were trained in the management of subcontracts. Finally, the Capacity Project also provided financial resources in order to help students during their practica in the community (e.g., stipends and transportation).

Monitoring the learning process

Capacity Project staff conducted monitoring visits at all ESIs. The purpose of these visits was to:

- Dialogue with directors and faculty members about the effective integration of HIV/AIDS, FP and gender in the various courses
- Give directors and accountants an update on management and data reporting
- Collect monitoring and evaluation data about nursing and midwifery schools (Byumba, Nyagatare, Kabgayi, Kibungo and Rwamagana)
- Supervise the students' practica in the community in order to monitor the effective application of knowledge and skills (during individual and family counseling sessions)
- Provide technical support as needed.

Discussion and Perspectives

We reviewed learning materials to determine to what extent the *LFP* approach was used. We also conducted a series of interviews with the main stakeholders to document their perceptions and feedback regarding the FP, HIV/AIDS and gender components' development and implementation process in the five nursing schools. These interviews helped identify constraints and lessons learned.

Utilization of the *LFP* approach in the development of learning material

As the Capacity Project was not in charge of the entire curriculum development, the FP, HIV/AIDS and gender materials do not clearly show the first three stages of *LFP*: 1) Specify the purpose of the training aimed at fixing the gaps in knowledge and skills; 2) learn about participants and their work environment; and 3) identify existing resources and training conditions. However, our review showed the Project did, in fact, use the *LFP* approach to develop training materials for the FP, HIV/AIDS and gender components as part of the three-year A1 training curricula for nurses and midwives. The Project based the development of the modules on gaps identified during the needs assessment conducted in 2005.

The Project clearly specified the competencies, responsibilities and essential tasks and skills of A1 providers in the areas of FP, HIV/AIDS and gender. The curriculum materials identify learning objectives based on the essential knowledge and skills identified for each main job task, and each learning objective is linked to observable and measurable performance criteria to be assessed by question-and-answer sessions, case studies, quizzes and self-assessments. However, these assessment tools, which are mentioned in the draft session plans, were not available for review by the evaluation team.

The learning objectives match the A1 providers' future responsibilities in FP, HIV/AIDS and gender. However, the way these objectives are linked to job responsibilities identified at the beginning of each chapter remains unclear (especially for HIV/AIDS and gender). Some learning objectives should be updated or adapted according to the national guidelines in health service delivery (e.g., determining the status of nine-month old [instead of 18-month old] infants born to HIV-positive mothers).

All the content identified for each subject (prenuptial counseling, antenatal care [ANC], FP, pregnancy, prenatal care, postabortion care [PAC], HIV-positive newborn care, gender, work environment and HIV prevention) is crucial in providing students with key knowledge in the three main areas of FP, HIV/AIDS and gender. The FP, HIV/AIDS and gender components will help faculty members and preceptors finalize their session plans. Additional reference documents such as the global PAC resources package and the eligibility criteria updated in 2008 should be included in order to provide complete and updated data. The draft session plans are organized in such a way that information can easily be found based on the reference documents and available links.

The content is organized in a logical manner for the training in the three main areas. The recommended learning activities include illustrated lectures, case studies, problem-solving

exercises, role plays, demonstrations and clinical exercises. These activities are considered entirely appropriate in order to meet the learning objectives.

As mentioned above, the content related to FP, HIV/AIDS and gender are integrated into a three-year program. The FP, HIV/AIDS and gender components developed by the Capacity Project are listed as topics covered in relevant courses (e.g., Sociology, Reproductive Health, Infectious Diseases) of the curriculum outline. This does not ensure that the components developed in collaboration with the Capacity Project will be used, since the curriculum outline is more like a syllabus than a detailed session plan for each course, as determined during the collaborative development process with all the stakeholders. However, the Capacity Project trained the full-time faculty and clinical preceptors in FP, HIV/AIDS, EmONC and gender, so it can be assumed that the teachers will use the materials provided by the Capacity Project to finalize their session plans and teach the students.

Feedback from the main stakeholders

Perceptions of the LFP approach. The MOH's decision to eliminate the A2 cadre and replace it with A1providers set the stage for the need to develop a training curriculum for these new A1 nurses and midwives. TRAC doctors and facility managers voiced doubts as to whether nurses would be able to manage HIV/AIDS patients, and A2 nurses themselves balked at the reform, as they were afraid they would become unemployed. Further discussions helped alleviate the concerns of both groups.

To facilitate the necessary development, the partners agreed on a competency-based approach, which all interviewed participants found to be adaptable to their needs. As this approach is based on identified needs, respondents remarked that it correlates well to the realities encountered in the field. Too, despite the fact that this methodology requires a hefty time investment to develop two entire three-year curricula, it fosters participation and involvement from a wide range of stakeholders and creates a collaborative environment that is conducive to the transfer of learning.

Respondents thought that the overall composition of the development team was adequate; all people that needed to be included eventually were, and the involvement from faculty members and preceptors helped bring a different perspective from the field. Respondents also noted that the schools' managers played a significant role and were an asset throughout the process of development.

The development team reached a consensus regarding the work to be done and the methodology to be used, and stakeholders laid out clear expectations. Development team subgroups developed the components and later undertook validation activities. Though the collaborative effort provided excellent opportunities for feedback from all stakeholders, not all had a solid grasp of the basic concepts of the work, and opinions often differed about what themes should be stressed in the training. Despite these difficulties, the team maintained an ability to work harmoniously, which eventually made the entire process smooth.

Overall, the respondents were satisfied with the approach used in the development of the FP, HIV/AIDS and gender components. They said they would reuse the same approach and that,

next time, the process would not be so time-consuming, as they had already experienced it once. They would like to use this innovative approach again, without such pressure-filled constraints, and apply it to all kinds of contexts.

When comparing the *LFP* approach to other methods used in the past, the respondents reported major differences. They noted that the earlier development of the A0 nursing education curriculum simply consisted of collecting and adapting existing curricula; no real change had been made and no innovation was introduced. The process was not participatory and did not foster a good understanding of the methods and the contents. Moreover, perspectives from health care providers working in the field were not taken into account.

All interviewed faculty members agreed that the approach was efficient, though several remarked that it required a lot of preparation time, especially when people using it were not well acquainted with it.

> The approach can be time-consuming in terms of preparation. The mastery of case studies may take time and it is necessary to follow up with students to make sure they understand. In an effort to gain time, the approach should be applied by faculty members who know it perfectly. (ESI faculty member)

According to preceptors interviewed in two sites, the approach is very useful for students, but it requires a greater time investment for the preceptors to prepare training plans and observe each student individually.

Perceptions regarding inputs. Respondents generally agreed that the support provided by the partners (the Capacity Project and APEFE/CTB) helped the process by facilitating the teaching and observation of students. The support included instructional materials; educational follow-up; consumables used to prevent infections; training of faculty members in FP, HIV/AIDS and gender; training of preceptors in HIV/AIDS; procurement of learning materials, computers and books for the library; monitoring of integration processes for the FP, HIV/AIDS and gender components; and financial support to cover the costs incurred by the students' clinical and community practica. Though respondents praised the Capacity Project's supportive efforts and materials, four out of five schools considered the overall amount of materials and support provided to be insufficient.

> The resources were considered insufficient but the partner [the Capacity Project] fulfilled its commitments regarding the resources it provided and the time frame it used. Without IntraHealth, nothing would have been done in a practical manner. (ESI manager)

> The resources were very helpful, but not sufficient! However, without the Capacity Project support, we could not do anything! (Nursing and Midwifery School manager)

Perceptions regarding the process. The curriculum meets the ESIs' needs for training and clinical precepting of A1 nurses and midwives. The managers are satisfied with the development of the curriculum, as it enables students to progressively acquire knowledge and skills. Yet respondents from two schools expressed doubts regarding the implementation process because of the numerous problems they encountered (unclear gender content, excessive HIV

content, unclear process for the new faculty members, late availability of HIV/AIDS-related tools, lack of gender documentation and difficulties encountered in its practical evaluation).

Due to these issues, some faculty members had to make a few adjustments. First-year courses in one school were reorganized; some were split into two or more distinct courses, while others were postponed to subsequent years. Some faculty members worked on their own to modify the course guides or the performance criteria. These modifications generally consisted of integrating additional content to foster a better understanding of the material.

Faculty members felt the implementation process helped to improve communication and teamwork with the clinical preceptors and with their peers. The respondents liked how capacity-building was emphasized throughout the curriculum. Students must first complete a theoretical segment, then advance to practical demonstrations and exercises on anatomical models and then to practice on clients. Respondents were also pleased with the modules, practicum notebooks, learning guides and other tools used to help build capacity:

> The students are extremely satisfied. They are proud of the knowledge and skills they acquired on these aspects, as they can help them raise awareness among the community. (Nursing and Midwifery School manager)

According to the interviewed managers, some learning activities could not be implemented as originally planned. In some instances, this was due to a lack of faculty members (either in terms of overall numbers, or in terms of a lack of knowledgeable faculty available in certain content areas); in others as a result of the lack of funds devoted to practica or the delayed start of the academic year. Only one school reported issues with the FP component; practice there was limited to demonstrations on anatomical models. Some respondents noted that the HIV/AIDS-related content seemed too extensive when compared with the amount of time allotted for it. Meanwhile, some students remarked that not enough time or material was devoted to the gender and antiretroviral aspects.

Two of the five schools lacked proper communication between faculty members and preceptors that could help them share information regarding the students' performance and clinical practica. In the three other schools, this information-sharing is accomplished by two meetings between preceptors and facility managers aimed at organizing the practicum and follow-up and assessing student progress. At the end of each practicum period, the preceptors and school managers meet to provide feedback and discuss any problems. It is important to note that preceptors do not take part in the grading of ESI students as they do for the Kigali Health Institute students, mostly because they do not master the assessment tool, which seems too complicated.

In faculty assessments of the practica, many respondents noted problems with preceptors. Aside from a general shortage of qualified preceptors, faculty felt that those who were available often had difficulties correctly filling out the assessment form, and were often too busy with other tasks (or too unmotivated) to perform their assessment tasks appropriately.

Faculty members felt the training prepared them well, and that they had all necessary learning materials and tools in order to appropriately integrate the FP, HIV/AIDS and gender

components in the curriculum (especially FP). Several noted, though, that in order to sustain the components, learning and reference materials will need to be constantly replenished and kept up to date, and refresher courses for current faculty (and new training for incoming faculty) must be made available.

Preceptors, meanwhile, felt well-prepared for the clinical practicum in the area of HIV/AIDS, but noted that training was lacking in the FP and gender components, probably because the FP and gender training for preceptors did not occur until the latter half of 2008. Moreover, the preceptors felt that their jobs are made easier by the fact that entering students are already provided with enough theoretical knowledge and are able to master the chronological process used on the anatomical model.

Perceptions regarding results. Respondents felt the new curriculum integrates and meets essential health needs, is well adapted to the country's environment and vision and incorporates key elements in the national health policy, including FP, HIV/AIDS and gender.

> The curriculum improved significantly with application of *LFP*. Third-year students are now able to provide FP services and hold group education sessions. In the past, graduates needed further training to be able to provide such services. HIV/AIDS messages are better disseminated throughout the community. Higher quality services are now provided. (ESI faculty members)

Constraints and challenges

Development phase. In our interviews with members of the development team, we found that several factors hampered the development process. Due to the number of stakeholders involved, it was sometimes difficult to coordinate participation and dialogue among all stakeholders at every step in the development process. During the process, new members joined the development team who needed to be oriented to the approach so that they could fully participate.

The extensive volume of content was a real challenge for all programs, especially those related to HIV/AIDS. The curriculum was subsequently reduced to essential contents, and the team recommends that the rest of the content should be covered during in-service training sessions or during the one-day clinical update sessions.

Team respondents also noted the lack of skills in participatory teaching methods and the difficulties encountered in mobilizing resource persons for the new programs (FP, HIV/AIDS, gender) as additional constraints. There was also a lack of participation from the faculty members, who were supposed to take part in the development process while teaching their regular courses.

The team found it difficult to adhere to the planning calendar for development of the FP, HIV/AIDS and gender components because of administrative processes that caused unexpected delays. In fact, the delays that occurred in the implementation of the long-term technical assistance by APEFE and in the purchase of equipment by CTB have considerably hindered the various interventions. In addition, the need to begin implementing the new curricula while the curricula development process was still underway put the development team under pressure, as the team did not have enough time to prepare everything before the implementation phase.

Thus, all resource materials could not be assembled, and faculty members currently have to do some research to prepare their own classes, which can be time-consuming.

Implementation phase. Staffing at some facilities was rather unstable, as some staff moved to other facilities. Some faculty members that received training no longer work in the ESIs; they have not been replaced or the new faculty members have not been trained yet. In addition, in some schools, the faculty members that had been trained were Nigerian volunteers who went back to their country. Therefore, there is a need to train the new contingent even though this will not solve the problem in the long term.

Respondents also noted that some schools lacked sufficient amounts of learning materials for students. The lack of audiovisual material for the FP, HIV/AIDS and gender components, the lack of updated manuals available in libraries, especially in the areas of counseling and gender, and the lack of adequate teaching facilities for the skills demonstrations also hampered the process.

Too, some practicum sites did not have an adequate number of cases to provide all students with proper practice cases, and some sites lacked sufficient numbers of preceptors to oversee this practice. Other noted difficulties included shortages of financial and transportation resources, a wide knowledge base gap between the preceptors and students and an overall lack of motivation.

Suggestions for improvement

Development phase. Members of the development team offered several suggestions for improvement:

- Provide outlines or templates that can be adapted in order to develop tools (report cards, practicum assessment guides) in order to facilitate the development work
- Allow enough time to complete all the work
- Ensure the retention of trained faculty members
- Train the new faculty members in the new HIV/AIDS procedures
- Involve faculty members as much as possible in the development of modules and of the curriculum
- Place the reproductive health (RH) course in the second-year curriculum to facilitate the community practicum
- Involve all stakeholders in the development of the curriculum and modules (e.g., at least two representatives per school).

Implementation process. School managers, faculty and preceptors provided the following suggestions for improving the implementation of the curricula. It should be noted that all of these issues were discussed and addressed during the development of the ESIs' five-year strategic plans and implementation plans, developed with technical assistance from the Capacity Project.

Materials

- Increase financial support to improve and update the instructional material, including audiovisual and information, education and communication (IEC) materials for the three components
- Provide English translation of documents in all subjects and of material in the library, and consider teaching in English
- Make additional materials available (Rita arms, videos, Internet connection)
- Equip the practicum sites with infection prevention supplies and other medical practice supplies (gloves, linens, etc.)

Physical space

- Create a demonstration room
- Renovate, improve and extend practice rooms for FP, HIV/AIDS and gender
- Grant access to the practice room, the library and the Internet on the weekends

Community and clinical practica

- Continue to provide supervision and instructional support in order to strengthen the approach
- Identify the collaborative framework between the school and the practicum sites
- Improve the supervisory activities conducted by the partners and provide technical support
- Increase financial resources used in the program's implementation and the sustainability of efforts, and allow the use of subcontract funds to address some of the school's priorities
- Adapt the use of funds to the period when the academic activities take place, to ensure that the practicum will not be interrupted
- Create secondary health posts close to aggregated HCs
- Implement an efficient communication system between the school, the community and the health system
- Increase financial support in order to facilitate the preceptors' transportation

Human resources

- Provide in-service training in instructional and technical areas
- Create a core group of permanent faculty qualified in this approach
- Increase the number of trained faculty members, and train all new faculty and preceptors in FP, HIV/AIDS and gender
- Identify clinical preceptors (within the school) to ensure permanent supervision

- Through training, ensure that all the faculty members have the same level in the competency-based methodology
- Complete the training of permanent faculty members who understand the program, and apply *LFP* instead of training visiting trainers
- Involve the faculty members in the providers' in-service training in the new procedures
- Motivate field preceptors by giving them training certificates
- Strengthen collaboration between schools and the hospitals to create a better work environment
- Involve preceptors in the grading of ESI students
- Improve collaboration between the school's preceptors and field preceptors

Other

- Continue to monitor and evaluate the program for making improvements
- Assess the knowledge and skills acquired at the end of the training cycle
- Organize study trips to share experiences with others
- Assess how this element can equitably be integrated in all the courses
- Encourage, provide funds and facilitate further anti-AIDS club activities outside of International AIDS Day
- Support the journal initiated by students for FP and HIV/AIDS services promotion
- Allow students' participation in HIV/AIDS counseling sessions
- Review the organization of practica and related expenses.

ON-THE-JOB TRAINING IN FP

Description of the Intervention

Background

One of the Capacity Project's main objectives in Rwanda is to improve providers' skills in FP in order to deliver quality clinical services in 11 out of 30 administrative districts. In 2006, the Project conducted a situation analysis of FP services that showed only 10% of providers were trained in FP (173/1,716). No health facility offered the complete FP activity package according to norms, and the utilization of contraceptives in district health facilities varied from 0.7% to 10%, with an average of 5%.

Based on these results, and given the number of providers to be trained (at least six providers per facility, for a total of 936 providers), the Project embarked on the following in-service FP training plan in order to launch or improve FP services throughout the 11 districts:

1. Training two master FP trainers per district (22 trainers total)
2. Supporting the master trainers to conduct ten FP workshops targeting 193 providers

(one or two FP provider per HC and two per district hospital) in the 11 districts

3. Preparing an FP OJT trainer/preceptor in each health facility and equipping the facility with a small FP library, an FP OJT training materials package and training mannequins/ equipment/supplies
4. Training all eligible health facility coworkers on site by using an OJT approach adapted from the national FP curriculum (for A2, A1, A0, midwives and doctors).

All of the FP training, both the workshops and the OJT, prepared health workers to provide all modern FP methods, including Standard Days Method, short-term methods (pills, injectables, condoms, spermicides) and long-term methods (IUDs and Jadelle implants). The training also included information about FP for people living with HIV, healthy timing and spacing of pregnancies (HTSP) and permanent male and female methods that were not provided at the HCs.

OJT is planned, organized and carried out in the workplace. It is particularly useful in order to develop skills that are unique to a person's job, and allows immediate application of new skills in the workplace. Furthermore, providers can participate in OJT without disrupting health services, which occurs when they leave their facilities to participate in residential workshops.

The Project used *LFP* to identify OJT as an appropriate in-service training approach to accelerate FP training and further expand client access to FP services once health facilities had in place at least one proficient FP provider. Through the Project's OJT strategy, the already-proficient FP providers previously trained by the Project were trained as OJT trainers, so that they could then train their coworkers in the health facilities. A few HCs and secondary posts could not be OJT sites because they did not have proficient FP providers who could be trained as OJT trainers. Therefore, providers from these health centers were trained in nearby HCs designated as OJT sites.

Using the *LFP* process and tools, the OJT implementers tailored learning materials to the learner's needs. As the basis for developing these materials, implementers analyzed the learner's main job requirements (featured in the job description and the performance plan) and related knowledge and skills. An OJT trainer or coach was then assigned to each individual/team to be trained. This OJT trainer was in charge of planning and conducting the training. The implementation of a monitoring and support system was also crucial in order to ensure that the training process goes as planned and to help identify and address problems that can hamper the learning process and that go beyond the OJT trainer's responsibility.

Implementation plan

The specific objective of the OJT approach in Rwanda is to improve the providers' skills in order to deliver quality clinical services in FP in HCs and hospitals within 11 administrative districts (152 HCs, 14 hospitals, 23 community health facilities and 33 secondary health posts). The Capacity Project and the implementation team adhered to the following stages of implementation:

1. Development and planning of OJT

2. Preparation of OJT
3. Launching OJT
4. Supervision
5. Evaluation.

Development of the Intervention

Development and planning/preparation of the OJT
This step consisted of several important activities: developing the OJT strategy with stakeholders' participation; developing OJT tools; implementing management teams; and preparing the various sites.

Development of the OJT strategy and partners' orientation. Capacity Project staff, with support from a consultant and in collaboration with key partners, first developed an in-service training strategy and an OJT plan. A Project team also traveled to Kenya to visit sites where the OJT approach was used in order to share experiences. This study helped make adjustments to the OJT strategy and plan in Rwanda, which were again discussed and finalized with key partners.

Development of the training tools. Using *LFP* tools and processes, Capacity Project staff developed the OJT learning material in collaboration with the MCH/Nutrition Task Force and the FP Technical Working Group. After reviewing the main skills and job tasks related to FP service delivery and specifying the essential knowledge and skills, the development team prepared a Trainer's Guide, Supervisor's Guide and Participant's Notebook. They used the national FP training curriculum as a reference manual to develop competency-based OJT training manuals.

The OJT principles are as follows:

- Service comes first; training comes second
- The participants must read every day
- The participants must practice every day.

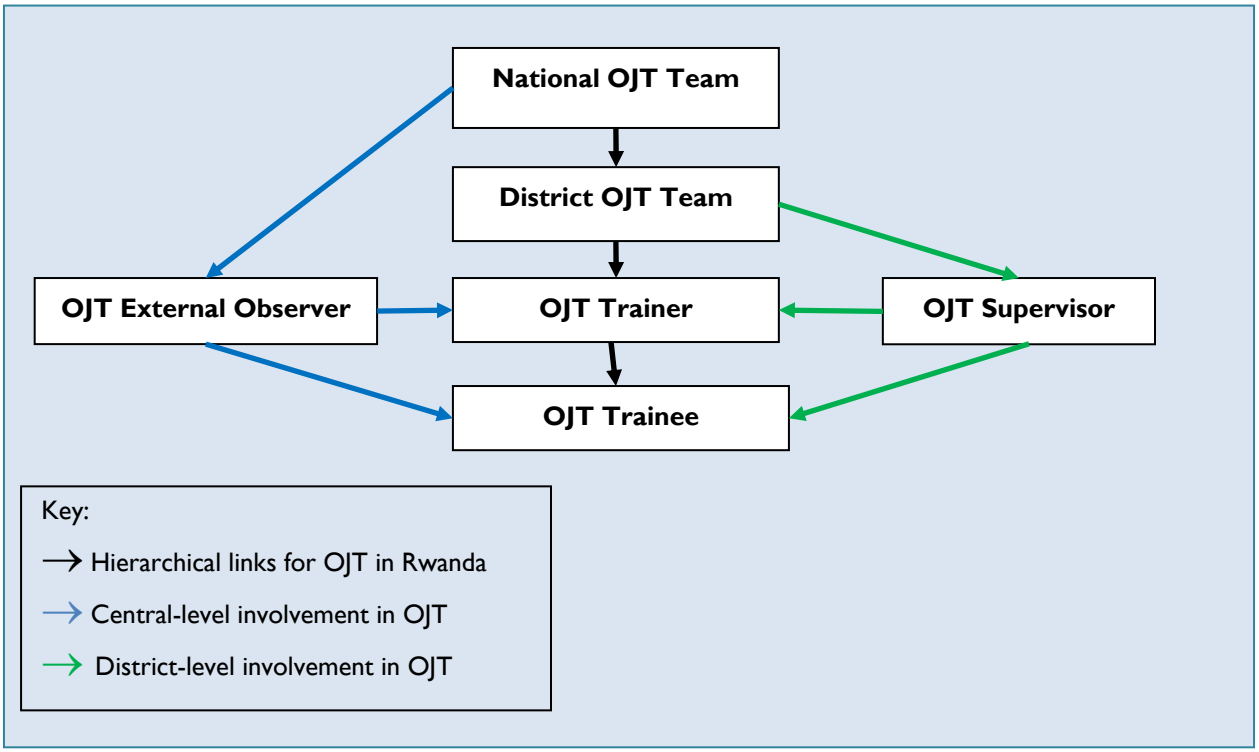
The proposed eight-week curriculum agenda included mandatory reading days, days devoted to meetings and discussions, exercises and practice on anatomical models and real patients.

Implementation of management teams. The OJT approach involved the following cadres at the district level to implement and support the OJT strategy:

- OJT supervisors: the FP/RH district clinical trainers who are already members of the district core team in charge of supervision, and the district FP/MCH coordinators
- OJT trainers: the FP/RH clinical providers in the HCs who were trained and proficient in FP and subsequently trained as trainers
- The health facility manager: a provider directly supervising the staff to be trained
- OJT coordinators: hospital directors and district health directors.

An OJT coordination and management team was formed at the national level to lead the intervention.

Figure 1. Diagram of the OJT Management Team's Support and Monitoring Hierarchy



Site preparation. Between April and December 2007, teams trained two national trainers per district in FP. These trainers then trained two A1 nurses per HC and two per hospital in FP and andragogy/coaching. It is important to note that some time elapsed between the training for OJT trainers and the effective launch of the OJT. Some trainers claimed that they did not feel comfortable at the beginning, as they had not put their newly acquired knowledge and skills into practice immediately after the training.

Implementation teams conducted a needs assessment in the selected sites. The results helped update the data collected during the situational analysis, identify the specific needs for each site and select the eligible sites for OJT. The purpose was to identify the participants meeting the preset eligibility criteria, list the materials needed for OJT in each health facility, confirm the presence of OJT trainers in the various sites and orient them to the OJT plan along with supervisors, coordinators and site managers. Finally, the teams identified a key supervisor, usually the facility manager, for each OJT site.

In order to create the best conditions for the learning process, the Capacity Project equipped each targeted site with the learning materials and supplied other equipment unavailable on-site. In addition to the FP OJT training package, each district received FP equipment, instructional materials used in demonstrations (Zoe model, wooden penis and uterus model), supplies (IEC materials, pens, paper and notebooks), furniture and books for the library within each health

facility selected. The Project also provided financial resources in order to motivate trainers and participants through performance incentives.

Implementation of the OJT

First OJT session

The initial OJT session took place from March 7 to May 16, 2008. The session focused on a total of 40 HCs and helped train 286 participants (see Table 3).

Capacity Project staff supervised the OJT sites during the first week to identify launching problems, during the fourth week to participate in the first evaluation and during the eighth week to take part in the final evaluation. The MCH task force had agreed to supervise the OJT at least once, but the staff w not available to carry out this activity and was subsequently represented by the FP/MCH senior technical advisor seconded by the Capacity Project. The Twubakane and Fertility-Based Awareness Methods (FAM) projects participated in these evaluations as well.

Table 3. Number of Participants at the Launch and at the End of OJT 1

District	Health Facility/ OJT site	Supervisors	Partici-pants
Rulindo	10	2 national district trainers + the district FP/MCH coordinator	58
Nyabihu	12	2 national district trainers + the district FP/MCH coordinator	109
Gicumbi	11	3 national district trainers + the district FP/MCH coordinator	72
Rubavu	7	2 national district trainers + the district FP/MCH coordinator	71
Participants at the beginning	**40**	**13**	**310**
Validated participants at the end of the training	**40**	**13**	**286**

Project staff conducted a theoretical and practical evaluation of the sections completed during the first three weeks (general aspects, client-provider interaction, FP service management, service quality, services integration, prevention of infections, anatomy and physiology), and another evaluation at the end of the training. In order to be certified, the participants had to achieve at least 75% throughout the fourth- and eighth-week evaluations. All the participants in Nyabihu and Rubavu reached the acceptable level of performance; ten participants in Gicumbi and 37 participants in Rulindo did not, however, and therefore were evaluated a second time, bringing the total to 286 participants certified as achieving the acceptable level of performance.

Second OJT session (OJT 2)

A second OJT session was organized in Musanze, Ngororero, Nyanza and Huye districts. The preparation started with a situational analysis and the orientation of OJT trainers, supervisors, coordinators and OJT site managers in June and July 2008. The Capacity Project printed the FP OJT training package and purchased the necessary material, which was subsequently distributed in the HCs. A second orientation from October 13 to 17, 2008, targeted providers, supervisors

and site managers. Starting on October 24, 2008, participants at 25 HCs took part in the OJT (see Table 4).

District supervisors conducted regular visits at the sites, and the Capacity Project team conducted follow-up visits during the first, third and sixth weeks of the OJT. The Project team also conducted a midterm evaluation in conjunction with the Twubakane and FAM Projects from November 17 to 21, 2008. The final evaluation was carried out from December 14 to 19, 2008. One hundred seventy-one out of 195 participants reached the acceptable level of performance and were certified.

Table 4. Number of Participants at the Launch and at the End of OJT 2

District	Health Facility/ OJT site	Supervisors	Partici-pants
Musanze	5	2 national district trainers + the district FP/MCH coordinator	44
Ngororero	6	2 national district trainers + the district FP/MCH coordinator	44
Nyanza	8	2 national district trainers + the district FP/MCH coordinator	45
Huye	8	2 national district trainers + the district FP/MCH coordinator	62
Participants at the beginning	**27**	**12**	**195**
Validated participants at the end of the training	**25**	**12**	**171**

Analysis of Implementation Costs

The Project documented the costs of implementing FP training for both the two-week workshop approach and the structured OJT approach. These only include the training implementation costs for both approaches, and do not include the costs of developing/adapting/ printing the training materials, purchasing reference books and training mannequins or training the trainers. Costs for implementing the workshop approach included transportation and *per diem* for participants, trainers and Project staff; training room rental; office and infection prevention supplies; communications; and refreshments for coffee breaks. Costs for implementing the structured OJT approach included transportation and *per diem* for the district coordinators, OJT supervisors and Project staff; office and infection prevention supplies; communications; and awards for high performance on the FP assessments.

Using two sessions of the eight-week *LFP*-developed structured OJT approach, the Capacity Project was able to train to competency more than twice as many FP providers (457) over the same period of time at half the cost per participant than ten sessions of the two-week workshop approach (193 FP providers).

Furthermore, the OJT approach avoided disrupting regular clinic services. OJT participants served more clients during training than the workshop participants did, particularly clients requesting long-acting methods such as Jadelle implants.

Table 5. Comparison of Trainees and Cost between Workshop and OJT Approaches

FP clinical training approach	Number of sessions	Period of time	Total number of trainees	Cost per trainee
Two-week workshop	10	November 2006– July 2007	193	$419
Eight-week structured OJT	2	March–December 2008	457	$208

Discussion and Perspectives

Implementation of LFP to develop learning material

The Capacity Project used the *LFP* approach to adapt the Rwanda national in-service FP training curriculum to OJT. An independent expert reviewed the training material (Trainer's Guide, Supervisor's Guide and Participant's Notebook) to determine to what extent the *LFP* approach had been applied to that material (also see Annex B). The results of the review show that the Project followed the majority of the *LFP* steps in the development of the FP OJT. Too, the Project linked the course contents to the objectives and assessment tools in order to monitor how the objectives were met.

Feedback from the main stakeholders

According to the individuals we interviewed, both partners and providers participating in the OJT found the concepts slightly difficult to comprehend and accept at the beginning. Many respondents noted that they did not quite understand the benefits of the system at first. This, then, translated to uncertainty and resistance at the organizational level. However, as the partners and providers became more familiar with the concepts, the issues abated. The lessons learned from the first session helped us to avoid problems during the second session.

The various stakeholders agreed that by increasing the number of providers able to offer services, the OJT approach helps solve the problems related to the unavailability of services and allows for a better integration of these services. Because it focuses on the development of skills through the *LFP* approach, OJT contributes to the improvement of the facilities' performance. The demand for OJT is growing, and the MOH is considering scaling up the approach in all districts.

Perceptions regarding inputs. Stakeholders in the field were very satisfied with the OJT approach, and agreed that the Project's support contributed to the smooth running of the training.

> We were trained and oriented before the OJT was organized and all the necessary resources were made available. (Trainer in OJT 2)

> It really helped us to meet our goals to have the mayor supporting the OJT and the district health officials prohibiting any other in-service trainings during the OJT implementation. (Facility manager in OJT 1)

According to the respondents, the OJT trainers had enough experience in FP and had been sufficiently trained in clinical FP and andragogy. Moreover, they participated in orientation meetings on OJT and were given the necessary resources before the training started. They

were able to prepare the sessions in advance, adequately answer questions, use the learning guides as part of observations and monitor participants individually.

The OJT supervisors received adequate support, including coverage of costs for transportation and meals as well as phone cards to facilitate communication with other health posts. They also received various material and technical support from the Capacity Project.

The facility managers also helped to create a positive learning environment for participants by assisting in the organization of the course, actively participating in the training, providing material and financial resources, adjusting the way services were organized and encouraging participants to be proactive throughout the training. Participants noted that most barriers to the learning process were alleviated on-site.

The trainers, managers, supervisors and district staff held regular meetings to share information regarding the facilitation of the OJT, the performance of the participants and the way potential problems should be addressed. Communication between trainers and supervisors occurred over the phone, and these contacts were maintained after the training.

Perceptions on the process. The respondents noted several benefits to the on-site training offered through the OJT approach, namely the lower cost, longer and more comprehensive training lessons, improved availability of instructional materials, simultaneous training of all staff in the facility and better trainer-student interactions.

> The main difference is that usually, at school, the subject is covered in a superficial manner. With the OJT, we have the opportunity to go deeper through lots of practice. (Participant in OJT 1)

> The OJT motivated students and encouraged them to read in their modules, which improved their general understanding of the subject. The daily [clinic] activities took place as usual. Theory was immediately followed by practice. (Participant in OJT 2)

The respondents felt that the collaborative atmosphere among providers and participants led to improved overall interpersonal relations and reinforced a sense of accountability. Trainers became more confident with the help of their colleagues, and participants' self-esteem increased as they learned more from these interactions.

> There is no reason to feel uncomfortable. When you don't understand, you can just ask a question since the trainer is also a colleague. (Participant in OJT 2)

Respondents felt that time management is key to implementing OJT. Though the reference manuals and checklists improve the self-learning process, and the OJT method itself works to minimize the time providers are taken away from their respective duties, it is still important for trainers to keep the training on task and on schedule. On average, an OJT trainer was responsible for training 11 participants in the first OJT session and nine participants in the second. This low trainer-to-participant ratio facilitated class discussions and made it easier for participants to meet their objectives and express their ideas.

Overall, the initial course objectives, contents and plans did not change. As noted previously, though, some facilitators and participants commented that there was insufficient time for the completion of an activity or section. This led them to work on the activities during weekends; thus some trainers modified the course schedule depending on the providers' availability, the extent of the content to be covered and other internal arrangements made for study time during weekends or after-hours.

> We did not have enough time so we added extra hours (after 5:00 p.m.), on Saturdays and Sundays, in order to cover the entire subjects. This helped us implement all the activities even though it did not happen according to the schedule that was originally planned. (Trainer in OJT 2)

It is important to note that during OJT 2, the training or supervision teams remained constant. This facilitated the overall OJT and helped maintain a consistent positive atmosphere throughout the training.

The participants felt that the theory, practical demonstrations and exercises taught using anatomical models adequately prepared them for practice on clients. Participants found all learning materials used throughout the process (reference manuals, participant's notebooks, illustrated wall charts and learning guides) to be very helpful.

Perceptions on the results. The respondents stated that the training markedly improved the quality and quantity of services, and that trained providers are now able to deliver quality FP services. Following the OJT, the number of clients served at the health posts increased to nearly as many as would normally be seen at an HC. As the number of FP clients increased, service providers received performance incentives; this increased worker morale.

Constraints and challenges

The interviewed respondents noted that their inexperience in the OJT method was the main challenge. The lack of available resources was also an important constraint and, therefore, the material development process took longer than expected (from June 2006 to March 2008). Finally, the instructional material needed to be validated by the MCH/Nutrition Task Force, which took time and delayed the launch of the OJT.

The Capacity Project team noted the following difficulties and disruptions in the organization of the first OJT session:

- In almost every district, some participants had been identified as nurses, but were actually social workers or accountants.
- Almost half of the supervisors and some hospital directors and health directors did not perform the tasks they were assigned. Apart from a supervisor in Gicumbi, the supervisors did not complete the site supervisions they were assigned. Some participants did not do the required reading and exercises.
- A site in Gicumbi had to stop the training due to a lack of trainers.
- Only some OJT trainers and supervisors were skilled in IUD insertion and removal.

- Some providers were participating in two to three trainings at once (providers in Rulindo failed for this reason).
- Some sites interrupted the OJT due to other urgent training needs.
- Twenty-four participants (7.7%) dropped out of the training for various reasons (disease, childbirth, vacation, transfer, inadequate profile, refusal to participate, other trainings).

Participants also mentioned certain constraints during the implementation phase of both OJT 1 and OJT 2. Trainers and participants noted work overload and a lack of sufficient time allotted for tasks. Both also noted the lack of sufficient numbers of anatomical models and inadequate materials at some sites. Some participants had problems with the learning material (missing pages, vocabulary). Finally, the organization of the OJT during the rainy season was a problem for some supervisors. Apart from the issue related to the lack of anatomical models, the other problems were solved on site through collaboration with the Capacity Project, the trainer and the site manager.

Suggestions for improvement

Development phase. Respondents offered several suggestions for improvement.

- Make certain that all training materials are up to date. Review other outside documents related to the topic, and consult with partners and national trainers in order to develop and implement training manuals. Update the manuals and the trainers' skills accordingly, and further develop materials related to the integration of gender in health services.
- Strengthen the monitoring and evaluation of the trained providers.
- Allow more time for certain exercises or for practice, or reduce the amount of content covered weekly to allow more time to absorb the material. Select the appropriate season to organize the training; do not schedule training during the rainy season.
- Create only one training document (module) instead of a reference module in addition to the Participant's Notebook.
- Organize the training in two OJT sessions instead of one. It may also help to split the sessions into two groups, or hold the OJTs during the weekends.
- Make sure all trainers are properly trained and competent in the modules.
- Ensure that all individuals in charge of organizing the training are certified trainers.
- Plan follow-up sessions in order to assess the impact of the training.

Implementation phase. Respondents offered several suggestions for improvement.

Financial and material resources

- Keep participants motivated throughout the training. Raise the performance incentives for participants and trainers. Encourage the providers by giving them the performance incentive during the training, rather than only at the end of training. Providing the incentives during the training will also ensure that participants can have lunch, stay on duty and have time for the required readings in the evenings.

- Make the instructional material, especially anatomical models, available from the very beginning of the training session. If possible, provide audiovisual training materials on how to insert IUDs and how to perform vasectomy and tubal ligation. Be sure to have enough materials (especially anatomical models) on hand, and provide IEC materials dealing with FP and gender issues. Bring French translations, or a dictionary, for all materials written in English.
- Provide refreshments and schedule a coffee break for the participants, but make sure the breaks are scheduled appropriately.
- Try to get providers to have lunch together during the OJT.
- Make sure that transportation is available for participants coming from distant areas, and ensure that transportation is available late in the evening. If training must occur during the rainy season, make appropriate transportation arrangements[1].
- Give the supervisor a communication allowance.
- Strengthen supportive supervision.

Human resources

- Give refresher courses to the trainers, and make sure that all trainer knowledge and skills are up to date.
- Train at least two trainers in each HC so they can help each other.
- Alternate the training teams so that one team can work while the other is trained; this will help ensure that service is not interrupted.
- Plan meetings with trainers so that they can share information.

Other

- Organize study tours.
- Plan financial resources in order to train the newly-recruited staff.
- Extend the training approach to other subjects like malaria, EmONC and HIV/AIDS.
- Organize refresher courses for the participants.

LFP SKILLS APPLIED BY INTRAHEALTH STAFF

A total of 33 individuals participated in the two *LFP* workshops organized by the Capacity Project and Twubakane. Held in Kigali from May 12 to 16 and May 19 to 23, 2008, these workshops targeted IntraHealth's staff in Rwanda involved in training (training coordinators, project assistants and supervisors). The participants belonged to three different projects: Twubakane, HCSP and the Capacity Project.

[1] Transportation was provided for a few participants who traveled to the OJT sites for training because the health facility or secondary post where they worked did not meet the criteria to be an OJT site.

The *LFP* training revolved around three components:

- A self-learning phase, during which the participants used the *LFP* training guide to improve their knowledge of the methodology and IntraHealth's training and learning standards
- A structured workshop training to develop skills in the application of the *LFP* process
- A practical component, through which the participants received support from a technical advisor as part of a curriculum development or adaptation process.

This training approach is in compliance with the key components of the *LFP* method and the transfer of learning. At the end of the training, participants identified the next steps in their curriculum project and developed action plans for the development of additional knowledge and skills. We interviewed a sample group of 26 participants to determine the extent to which the IntraHealth staff members had applied and documented their *LFP* skills.

Feedback from Trained Staff

According to participants, the *LFP* worked well as a systematic approach, and the methodology and steps are very clear. This approach helps them anticipate results, identify training needs and gaps, develop contents based on essential knowledge and skills and better plan the training. Participants also noted that the *LFP* helped keep the main stakeholders involved throughout the process.

Respondents noted that they routinely used the "Training and Learning Standards" developed by IntraHealth in the planning, preparation, implementation, monitoring, evaluation and documentation of the training. This is particularly true for the ESI faculty members' training in EmONC. Even those respondents who had not used the checklist systematically still considered it very useful. Several staff members noted that they had internalized the process, and some also shared the process with their counterparts at the MOH and other partners.

Since the *LFP* training, the trained staff has applied the *LFP* approach to most of their training activities. Specifically, staff used the *LFP* phases in the training of ESI trainers in FP and EmONC, the development of the FP OJT and the refresher courses aimed at HC providers in VCT/ PMTCT/ART and palliative care. Staff used the approach to train Capacity Project staff in gender issues. The trained staff also helped the districts understand and apply the *LFP*.

> For training of Nursing/Midwifery teachers in FP and EmONC, we used all the *LFP* steps: conducted a pretest to identify their gaps in knowledge, developed learning objectives according to these gaps. We also identified gaps at the schools in materials needed for the training. We provided participants with certificates only after following up and validating their competence. (staff respondent)

According to the respondents, the *LFP* approach definitely impacted training approaches and curricula, and was subsequently applied at the ESI level.

> We pre-assess to find out gaps in knowledge/skills, then organize the training to focus on essential knowledge/skills, remove what they already know. We identify what materials they already have and save money because we only bring materials that they don't have. (staff respondent)

The *LFP* skills helped trained staff develop a wide variety of documents, including FP and EmONC training materials, training material about gender issues for Capacity Project staff, training manuals in management/administration and accounting regarding the *mutuelles* (community-based health insurance) and supervision tools.

The development of the training approach and curricula using *LFP* was beneficial for several reasons. According to participants, having the training focused on the identified gaps increased their level of involvement and motivation.

> Before, participants took their *per diem* and left. Now, the learning plan is based on individual participants who are motivated to have cases for practice, even coming when they are on leave. (staff respondent)

Since the *LFP* was shared with partners, this created more interest in and demand for the approach. The MOH and various partners became interested in the process and now want to use OJT in their own training. Basic Support for Institutionalizing Child Survival (BASICS) asked for assistance in order to use the OJT approach as part of training in the integrated management of childhood illnesses. UNICEF is also interested in the OJT approach for FP training, and the Catholic Relief Services would like to use the approach as part of a training session on MCH.

Constraints and Challenges

Respondents noted that during the *LFP* workshop, they did not have enough time to complete all the stages of *LFP* in order to develop the training approaches and materials. As an example, at the time of this report, the EmONC manuals are not yet validated. They also noted that implementation of competency-based training methods requires more time (than simply lecturing).

Since Capacity Project staff were the only ones skilled in *LFP*, the transition from the traditional approach was difficult at times. Respondents noted that some district trainers were quite resistant to these changes. Also, the wide range of profiles and needs of participants made it hard to meet everyone's expectations.

Additionally, some facilities lacked sufficient quantities of training materials. In order to better focus on practice, respondents noted a need for more anatomical models in particular.

> They don't have enough models or ways to practice before they work with patients. Not every HC has a Rita Arm or Zoe model. And they are very expensive. For OJT we circulate the models, but they [participants] don't always have time to practice before they go with clients. (staff respondent)

Overall, though, respondents were very satisfied with the *LFP* approach and reported that it improved their organizational skills and efficiency, as well as the performance of providers and partners.

Recommendations

Respondents recommended the following:

- Training all new staff in *LFP*, especially district coordinators and partners (FHI, UNICEF, MOH, TRAC, ACCESS/Jhpiego)
- Strengthening the skills acquired by the staff in terms of training material development by documenting best practices and successful approaches
- Updating supervision tools used during observations with nurses (based on the behavior of the supervisor who will use them)
- Continuing support from headquarters (follow-up, feedback on areas to be improved, sharing of experiences, review of documents)
- Documenting what has been done so far in order to advocate for areas that still need to be improved
- Continuing advocacy efforts for the *LFP* at the MOH
- Creating and disseminating a CD of *LFP* training materials and best practices.

CONCLUSION AND RECOMMENDATIONS

Our study indicates that the Capacity Project and partners successfully implemented the *LFP* approach in Rwanda, and that the members of the development and training teams adhere to this approach. The application of *LFP* to different contexts in Rwanda showed how greatly adaptable it can be. Using key national documents as references, and a highly participatory approach with local stakeholders and international experts, helped ensure the relevance of the curricula and successful implementation of the training strategies developed using *LFP*. By linking theory to practice and by focusing primarily on the acquisition of skills, this approach helped the participants improve their mastery of skills required for the tasks they are expected to perform, made them more proactive throughout the learning process and encouraged self-learning. It helped increase accountability among faculty members/trainers, supervisors and participants. Finally, this approach increased the availability, quality and use of services.

In order for the approach to be implemented as successfully and smoothly in other contexts, the various stakeholders must reach a mutual understanding of the concept and its stages. Adequate material and human resources must be available, during both the development and implementation phases. Implementers will need to deal with constraints such as work overload, poor learning environment and the lack of motivation, and will need to engage in strict monitoring and continuous support.

In the ESIs, we recommend:

- Reviewing the training materials and resolving the identified problems (see Annex A)
- Scheduling enough time to develop material so that all necessary tools are made available before the beginning of the training

- Providing a reference guide to facilitate the integration of the FP, HIV/AIDS and gender components in the curriculum, and improving the instructional material and the documents related to HIV/AIDS and gender
- Strengthening the faculty members' and preceptors' knowledge in gender issues
- Stabilizing staff trained in the ESIs, and continuing to support the ESIs through the end of the academic year
- Providing financial support to cover the costs incurred by the practicum and the various observations
- Improving the communication mechanism between the school and the practicum sites
- Reorganizing the practica schedules
- Continuing to conduct supervision and to provide support.

Regarding the FP OJT, we recommend:

- Reviewing the training materials and resolving the identified problems (see Annex B)
- Accounting for factors such as the rainy season and the distance between secondary posts when scheduling the course meetings
- Reconsidering the time required for the training in comparison with the extent of the content to be covered
- Reorganizing the performance incentive system
- Making the instructional material (anatomical models) available in sufficient quantities
- Extending the OJT approach to other subjects
- Planning and conducting a closing ceremony.

Regarding training staff in the *LFP* approach, we recommend:

- Training the new project staff, district coordinators and district trainers in the *LFP* approach, particularly all staff involved in in-service training activities within the MOH
- Disseminating the study results and maintaining advocacy efforts toward the MOH and its partners.

ANNEX A: REVIEWER COMMENT FORM FOR RWANDAN A1 NURSING/MIDWIFERY CURRICULUM

HIV/AIDS, FP, and Gender components

Please use the form below to record your feedback on the HIV/AIDS, FP, and gender components of the Rwanda A1 Nursing/ Midwifery curriculum. Write in the Comments column any detailed explanations or examples for your responses. Please write any additional comments (electronically or handwritten) directly in the documents. Thank you very much for your assistance.

Reviewer's Name: Boniface Sebikali

*Note: Change the color of the number on the scale to **red** to select it.*

	Features	**Comment:**
1 2 3 4 **5**	The competencies for HIV/AIDS, FP, and gender are clearly stated.	Job responsibilities or competencies for A1 in HIV/AIDS (23), FP (9) and gender (9) are clearly stated.
1 2 3 4 **5**	The major job tasks for each of the HIV/AIDS, FP, and gender competencies are clearly stated.	Major job tasks (85 VIH/AIDS, 9 FP and 9 gender) deriving from job responsibilities are also clearly described
1 2 3 **4** 5	The learning objectives for HIV/AIDS, FP, and gender are clearly stated.	Essential knowledge and skills required to perform each major job tasks are specified. Learning objectives based on essential K&S are identified for each major job tasks. Each learning objective clearly described an observable and measurable performance, with conditions and criteria to measure it. Learning objectives are based on the essential skills and knowledge identified for each major job task. A few objectives need to be revised for typos or updates or adapted to the revised national health service guidelines (e.g. Determine the status of infant at nine months instead of 18 months when born from HIV-positive mother) or delete areas that do not exist in the Rwandan context or culture (e.g. genital cutting see gender and FP). Missing: HTSP information especially FP after abortion (post-abortum period)
1 2 3 **4** 5	The learning objectives are relevant and at the appropriate level for the A1 nursing/midwifery students' future job responsibilities.	Learning objectives are appropriate for the A1 nursing /midwifery students' future job responsibilities for gender, HIV and FP services. But, it is not very clear how the

	Features	**Comment:**
		learning objectives are related to the job responsibilities listed at the beginning of each chapter (especially for HIV/AIDS and gender).
1 2 3 4 (5)	The contents outlined in the session plans (activity plans) are suitable to the anticipated settings, conditions and cultural context of A1 nurses and midwives.	The content outlined is suitable for anticipated settings, conditions and cultural context. It is also good to see some valuable practices that are not currently part of the Rwandan culture, such as newborn's circumcision.
1 2 3 (4) 5	ALL content outlined in the session plans (activity plans) is ESSENTIAL for preparing the students to understand the HIV/AIDS, FP, and gender concepts and perform the skills.	All content outlined for each topic (Premarital care/ANC/FP/Labor/Childbirth care/PPC/PAC/Newborn care in context of HIV infection, gender, Work environment, HIV prevention) is essential for the preparation of the students to understand the three major areas (HIV, FP, gender). The reference documents mentioned would help faculty/tutors to finalize their session plans. Some additional references need to be added for updates and comprehensive information: PAC Global Resource Package (http://www.infoforhealth.org/pac/index.shtml), WHO MEC 2008Updates (http://www.who.int/reproductive-health/publications/mec/mec_update_2008.pdf), FP Global Handbook (http://www.who.int/reproductive-health/publications/fp_globalhandbook/index.htm and HTSP (http://www.esdproj.org/site/DocServer/PP_FP_for_Healthy_Outcomes_Training_Manual_FINAL.pdf?docID=2621).
1 2 3 (4) 5	The curriculum documents are well-organized so that I can find information easily.	It is possible to find information or read more from the reference materials (available links). I tried some of them and it worked. The question is about the students' notes. I did not see anything for students (or participants' notes).
1 2 3 4 (5)	The content of the curriculum documents is sequenced logically for learning HIV/AIDS, FP, and gender concepts and skills.	The content is logically sequenced for learning the three major areas (HIV Prevention and Treatment, gender, FP) in overview, definitions, concepts/new information/steps-by-steps, strategies, verification/detection, interpretation of findings, managing signs and symptoms, prevention/treatment,

	Features	**Comment:**
		documentation…depending on the topic.
1 2 3 4 (5)	Each learning activity (e.g., illustrated lectures, classroom exercises, case studies, role plays, demonstrations, assignments, clinical exercises, community and clinical practice) is relevant and essential to achievement of the learning objectives.	Suggested learning activities include illustrated lectures, case studies, problem-solving exercises, role plays, demonstrations, clinical exercises…which are totally relevant to achieve learning objectives.
1 2 3 4 (5)	The suggested learning activities in the session plans provide enough review and practice opportunities for achievement of the learning objectives.	Suggested activities for the student **before**, **during** and **after** classes, give her/him opportunities (review/practice) to achieve the objectives.
1 2 3 4 (5)	The suggested learning activities are likely to be engaging / interesting to the students.	The student activities include **preparation** (reading literature, review references on topics to be taught), **class-room activities** (group discussions, case studies, clinical exercises, role plays, observation/feedback/questions during demonstrations/simulations..), **after class activities** (study reference, self-study, clinical studies, continued practices on anatomic models), **before clinical activities** (review learning guide, assessment by tutors, **clinical activities** (observing clinical preceptors using checklist/observation guide, discuss demonstrations, clinical practices assessed by preceptor or tutor using checklist, coaching/feedback…). All these activities definitely engaging and interesting.
1 2 3 (4) 5	The suggested learning activities seem to be at the proper level of difficulty for the students -- not to easy, not too hard.	With their logical sequence, the learning activities discussed above should be at the level of difficulty for each student. This is part of a three-year program. The content is thus spread on the three years. The problem is how the content is divided.
1 2 3 4 (5)	Concepts and terms are used consistently throughout the curriculum materials.	Yes, concepts and terms are used constantly throughout the documents and curriculum.
1 2 (3) 4 5	The HIV/AIDS, FP and gender content is adequately integrated into courses throughout the three years of the A1 Nursing and Midwifery curriculum.	I am undecided, because if I look at Capacity work of developing HIV/AIDS, FP, gender modules using *LFP*, this is work is not clearly reflected in the reference guide for core competence for A1 and other documents (references #5-9). But the topics are mentioned (see details below) and taught, I guess! Maybe we need more information on how the materials developed with Capacity

Features	**Comment:**
	support are used. This brings us to the following **recommendation**: in the future, we should conduct the external review of the materials before developing the interview tools. This will help in developing some questions that would reflect more on the use of materials.

Please add any additional specific suggestions or comments below:

Below are examples of where HIV/AIDS, STI, FP and gender are integrated in the nursing and midwifery curriculum and how they are ranked (Note: (1) = Essential and very important and has to be evaluate; (2) = Important and needs to be evaluated; (3) = Interesting, non essential and does not have to be evaluated.):

1st year of nursing and midwifery:

- Gender: Definition (3); difference between gender and sex (3); role of gender in social development (1)
- Anatomy: Reproductive health system (2)
- Nutrition: Breastfeeding (1); women with HIV (2)
- Infectious diseases: Bacteria (gono, syphilis) (1); parasites (1).

2nd year of nursing:

- Gynecology: Vulvo-vaginitis, cervicitis, endometritis, salpingitis (1)
- Infection diseases: Viral infections (HIV, cytomegalovirus, zonal zoster) (1); fungus infections (Cryptococcus, candida, aspirgillosis) (2)
- Pharmacology: Antiretroviral (1); antifungal (1)
- ANC/Postnatal care: FP, PMTCT (1). But nothing described on FP pp.114-115
- Newborn care: HIV (1); Palliative care (2).

2nd year of midwifery:

- Communication: IEC/counseling (1); counseling techniques (2)
- Gynecology: Gynecological signs and symptoms (1); gynecological infectious diseases (1); infertility (1)
- Obstetrics: Female organs (3); functioning of female organs (2)
- Infectious diseases: Viral infections (HIV, zonal zoster, cytomegalovirus) (1); fungus infections (candida, Cryptococcus) (1)
- Pharmacology: Drugs for uro-genital infections (2) pp.87
- FP: IEC (1), contraceptive methods (1) pp.87
- STI/HIV (1), PMTCT (1) pp.87
- Prenuptial care (1) pp.87
- Pediatrics: Children with HIV (1) pp.123
- Obstetric techniques: PMTCT (1) pp.129 and Labor (PMTCT) (1) pp.130.

3rd year of nursing:

- Reproductive health: FP (1) pp.23; STI/HIV prevention (3) ????? pp.23; PMTCT (1) pp.23
- GBV Prevention and treatment (2) pp.24
- Prenuptial care, FP (2) pp.24
- Pediatrics: Children with HIV (2) pp.30, Palliative care (2) pp.30
- Dermatology: fungus infections (2) and conjunctivitis (1) pp55-56
- Health Promotion: sexual behavior-STI/HIV (1) pp.62 ; gender equality (1) pp.62
- Special care: Palliative care (2) pp. 72.

3rd year of midwifery:

- Reproductive Health: FP (1): PLWHIV (1), Logistics and follow-up (1), IUDs and Implants (1) pp.29
- Adolescent RH: Contraception (1) pp.29
- Gender and RH: Gender audit (2) pp.29
- Special care: Clients with HIV/AIDS (1) pp.63

ANNEX B: REVIEW OF THE RWANDAN IN-SERVICE FP ON-THE-JOB TRAINING PACKAGE

Wendy Dufour, MEd.

The IntraHealth-led Capacity Project in Rwanda has used Learning for Performance (*LFP*) to adapt the national FP in-service curriculum to on the job training (OJT). This is a review of the FP OJT package (Trainer's Guide, Supervisor's Guide and Participant's Notebook) to determine the extent to which *LFP* was applied to the materials.

The findings of this review are that *LFP* was followed to a large extent in the development of the FP OJT package. The very important steps of identifying gaps in skills and knowledge, defining course goals and objectives, describing roles and responsibilities for all actors were all completed. Course content and activities are all tied to objectives and evaluation tools to monitor the achievement of the objectives were developed. Areas to improve include a review of learning objectives to emphasize performance as well as knowledge acquisition, reinforcement of activities to cover learning objectives, reorganization of content and editing. Specific comments are given in the Reviewer Comment Form.

LFP uses a step-by-step process to develop training. Evidence can be found in the FP OJT package that the *LFP* process was used to develop the training. This review will be presented in terms of the *LFP* steps. Information in French, from the curriculum, will not be translated here.

Learning for Performance Steps

Step 1: Specify the learning goal related to the gap in skills and knowledge.
The goal of the FP OJT curriculum is stated very clearly. From the goal we understand that the need is to offer quality FP services throughout the country. The curriculum targets service providers who should be offering FP and who wish to improve their skills and who are recognized by their supervisors as needing and being committed to the training program. A lack of trained FP providers has been identified.

Step 2: Learn about the learners and their work setting
Although there is no direct evidence of how learners' attitudes, knowledge and skills in relation to FP were analyzed, the curriculum describes the institutional structure and makes good use of existing trainers, supervisors and FP-trained personnel. Selection criteria were identified for participants, trainers and supervisors to make sure that each group would be able to perform their different roles.

Comment: The academic level of the participants for completing the program is not identified. The reading assignments require a higher level of independent reading and problem solving that may be an obstacle for some participants. If materials are too difficult, it will be evident in results from field tests.

Step 3: Identify existing resources and requirements for training and learning
The curriculum identifies all existing resources and requirements for training and learning. The decision to use an OJT approach is explained and all material and personnel needs are identified.

Step 4: Determine job responsibilities (or competencies) and major job tasks related to the gap is skills and knowledge
The curriculum identifies roles and responsibilities for participants, trainers and supervisors during the OJT course as well as post-training roles for the participants. This was a vital step to ensuring that the curriculum was targeted and enabled this review of the materials.

Step 5: Specify essential skills and knowledge
Essential skills and knowledge were identified based on national FP protocols.

Step 6: Write learning objectives
Learning objectives were written for each content/skill area and are found in the Course Outline.
Comment: Learning objectives need to be reviewed to make sure that important knowledge and skills are not missing and that the objectives emphasize performance as well as knowledge acquisition. The form of the objectives also needs to be analyzed to make sure that they are "SMART". Most if not all objectives in the curriculum are specific, measurable, attainable and relevant. There was confusion over making them timely. It is not necessary to make statements such as "after independent reading" or "after the role plays" in an objective. See Review Comment Form for more details.

Step 7: Decide how to assess learning objectives
Knowledge-based objectives are assessed through the mid-term (post?) questionnaire. Skill-based objectives are assessed using learning guides and checklists.

Comment: More self-corrected questionnaires should be included in the curriculum so that participants can judge their understanding and review/ask questions when necessary. The pre-test and mid-term questionnaires should be reviewed to make sure that key knowledge is being tested and that the broad range of objectives is covered.

Learning guides and checklists provide a very good way to assess performance. They are in need of slight editing to make sure that they correspond.

Step 8: Select the learning activities, materials and approaches and create the instructional strategy
All the learning activities described in the curriculum address the identified objectives and the OJT approach is explained.

Comments: Learning activities should be added that allow learners to test their new knowledge, problem solve and practice their new skills. Course materials need to be reorganized and edited to make them more usable and more relevant to the given audience (trainer, supervisor or participant). See Reviewer Comment Form for details.

Step 9: Develop, pretest and revise lessons, learning activities and materials, and learning assessment instruments
I do not know if the materials were pre-tested, but they have now been used in eight districts, as a field test.

Step 10: Prepare for implementation
Roles and responsibilities are identified for trainers, supervisors and participants. Most can be carried out with information found in the curriculum documents (✓). Others would require more instructions or information (X) or might need more (?). See Reviewer Comment Form for more details.

Trainer's roles and responsibilities (1.2.2.3)

- (X) Rapidly assess training needs in FP (knowledge, skills, clinical experience) based on the participants' responsibilities or refer to the results from the needs analysis, if already conducted
- (X) Prepare and adapt the participants' curriculum based on FP responsibilities (meetings, demonstrations, clinical practicum) and develop tasks with the team

- (✓) Create a sound and positive instructional environment for on-site training
- (✓) Coordinate clinical training with the other trainers, including demonstrations, role plays, etc. for all the subjects taught
- (✓) Guide the participants' clinical training (demonstrations on anatomical model, role plays, observations followed by feedback, suggestions and answer to questions) based on the learning guides and the checklists
- (✓) Monitor the progress made by the participants in the mastery of new skills
- (✓) Individually support and assist participants in solving identified problems, including in other areas
- (✓) Create a schedule for clinical practice
- (?) Motivate the other members form the health facility's team so that they participate in the training according to their responsibilities
- (?) Evaluate on-site training
- (✓) Report on the evolution of the training at least once a week to the training's coordination team at the district level or during meetings with the site supervisor
- (X) Write a report on the training
- (X) Take part in the post-training follow-up with FP providers trained on site.

District supervisor's and FP coordinator's responsibilities

- (X) Assess the FP training needs in the district based on FP providers' job responsibilities
- (✓) Assess the needs in materials and equipments before the training
- (✓) Participate in the selection of trainers and participants, who meet the eligibility criteria, in collaboration with the OST national coordination team
- (✓) Provide the necessary equipments, materials and consumables, as well as the instructional support materials, including anatomical models, before the OST starts
- (✓) Support the organization of the OST
- (✓) Supervise the facilitation of the OST
- (?) Assess the application of technical skills acquired during the training in order correct and improve the OST
- (?) Maintain an OST database
- (?) Document the on-site training process and its impact on the quality of services
- (?) Monitor the progress made in the participants' action plan and the application of the skills acquired during the training
- (✓) Give certificates to the OST participants after the knowledge and skills assessment tests
- (?) Promote the links between FP and the other services.

Trainee's responsibilities

- (?) Accept to have his/her performance evaluated so that the training can meet his/her needs
- (✓) Follow the FP training program created for him/her
- (✓) Perform the tasks required by the training (required reading assignments, exercises, role play, demonstrations and clinical practice) in clinical FP
- (✓) Use learning forms to monitor his/her own progress in the acquisition of new skills or self-learning
- (✓) Attend meetings to monitor progress made
- (X) Develop an action plan regarding the knowledge and skills acquired during the training.

Step 11: Implement and monitor learning and logistics
This is an ongoing process that is being conducted.

Step 12: Assess effectiveness of the learning intervention and revise
Results from the field will provide the best judge of the effectiveness of the learning intervention. Based on this review of the curriculum, I believe that participants will be able (✓) or not (X) be able to perform the following post-training functions and responsibilities listed in the curriculum introduction: Post-training tasks and responsibilities expected from the trained providers:

- (✓) Give advice regarding the method available where s/he works
- (X) If necessary, orient women towards facilities providing the method they selected
- (✓) Conduct FP counseling sessions based on the BERCER components and the Rwandan health services procedures
- (✓) Prescribe the methods while complying with medical eligibility criteria and the national health services procedures
- (✓) Administer contraceptive methods (combined oral contraceptives, injectable and oral progestative drugs, barrier methods and self-observation methods) in accordance with Rwanda's national health protocols
- (?) Monitor FP methods' users in accordance with the national health protocols
- (✓) Prevent infections among clients according to protocols
- (?) Fill out the service management tools according to norms.

Further comment can be found on the Review Comment Form that follows.

Conclusion
It is obvious that the development of the FP OJT curriculum was a very large undertaking. The "bones" of the curriculum are solid, based on identified needs. The strategy for conducting the OJT approach is well thought out and there seems to be good participation at all levels in the FOSA. The well defined roles and responsibilities for the different actors are an important factor for success. Areas for potential improvement in the curriculum come from the details, starting with the learning objectives. Results from the implementation of the course will help identify which recommendations from this review are the most relevant for the improvement of the curriculum.

Reviewer Comment Form for FP OJT Curriculum Materials

Three manuals: Trainer's Guide, Participant's Notebook, and Supervisor's Guide

Please use the form below to record your feedback on the FP OJT curriculum materials. Write in the Comments column any detailed explanations or examples for your responses. Please write any additional comments (electronically or handwritten) directly in the documents. Thank you very much for your assistance.

Name: Wendy Dufour

*Note: Change the color of the number on the scale to **red** to select it.*

	Features	**Comment:**
1 2 **3** 4 5	1. The information presented in the **Introduction** to the trainer's manual is clear and easy to understand. (Trainer's Guide, section 1)	The introduction covers a wealth of information, much of it clear and well explained. One section that was confusing was 1.3.2, describing the organization of the clinic experience. The timing of practice with clients was confusing throughout the document. The examples of forms should be either the forms themselves (in annex), titled as such, or an example of a correctly filled out form. It seemed that the forms were not complete or the instructions do not correspond. The Introduction needs to be edited to remove unnecessary repetition, to use consistent titles (even the title of the module varies within the document) and to make sure that everything described is actually in the document. For example, two descriptions of the guide du formateur appear in the introduction and they are not the same. <u>For participants' guide</u> Make introduction participant specific. It could be helpful to add information for the trainee on managing his/her time during the training, interactions with colleagues and the titulaire. Correct table of contents. <u>For supervisor's guide</u> Make introduction supervisor specific instead of geared toward trainer, OR give the supervisors the trainers manual plus a supplement targeting supervisors. Provide information for how to keep a data base on the OJT (supervisor role).

	Features	**Comment:**
		Provide directions for documenting how training affects the quality of service (supervisor role) The document does not contain the "fiche d'observation du formateur pendant l'animation et la fiche d'observation pendant l'encadrement" as cited in the introduction. The document does not contain the « canevas de rapport de la formation » as cited in the introduction, Correct table of contents.
1 2 **(3)** 4 5	2. The information about the OJT training structure and responsibilities of the OJT team members (OJT coordinators, participants, trainers, supervisors, facility titulaires) was clear and easy to understand. (Trainer's Guide, section 1.2)	(Figure 1) "Structure de la formation sur le site du Rwanda" needs to be explained in the text. The same titles need to be used in Figure 1 and "table" 1.2.2. and all teams should be listed in both. Selection criteria for the OJT sites should be included in this section. The pre-requisites mentioned for participants are not listed. No information given for how to write the training report or how to conduct post training follow-up. No information for titulaires on how to carry out roles of conducting meetings and being a trainer as described in 1.2.2.4 <u>For supervisor's guide</u> The role of the supervisor for evaluation needs better explanation
1 2 3 **(4)** 5	3. The course goals and learning objectives are clearly stated. (Trainer's Guide, section 1.4, pp 10-11)	The goal of the course is clear and gives good focus to the training. The objectives correspond to the goal, in general, but need to be improved in the following way: Take out "at the end of the training," make sure that objectives indicate performance where appropriate ("conduct a health talk" instead of "explain the steps of a health talk").
1 2 3 4 **(5)**	4. The learning objectives are relevant and at an appropriate level for participants' post-training job responsibilities. (Trainer's Guide, section 1.4, pp 10-11)	Learning objectives correspond clearly with post training job responsibilities.

	Features	**Comment:**
1 (2) 3 4 5	5. The **OJT Course Schedule** is clear and easy to understand. (Trainer's Guide, section 2)	Nice and simple, easy to read. However, the schedule does not correspond with the "course outline (section 3)" in content or order of presentation. Sections present in the course schedule that do not appear in the course outline include: • Implications du Genre en PF • Normes de prestation des services de PF au Rwanda (although this may be included in the generalities section) • Qualité des services PF • Communication (IEC, Causerie Educative, Counseling) : Counseling is the only part covered. Section present in the course outline but not in the schedule is: • La résolution des problèmes en clinique. It is not clear what the participants should do on their own and when they are with the group or the trainer. Do they really work Sunday–Thursday? It is also unclear when participants practice their skills with clients since groups get together at the end of each topic to practice and show skills to trainer and they then move on directly to the next topic.
1 (2) 3 4 5	6. The information in the Introduction and OJT Course Schedule is arranged in an order that was easy for me to follow (sequenced logically). (Trainer's Guide, sections 1 & 2)	The introduction needs to be reorganized to present important information near the beginning. Training goals and objectives of the training should move to 1.2. Forms could go to the annex. Some information, such as evaluation is split between two sections 1.3.2 and 1.3.4 and this leads to confusion.
1 2 (3) 4 5	7. The amount and type of information (length of the material; essential information) in the Introduction and the OJT Course Schedule is appropriate. (Trainer's Guide, sections 1 & 2)	The introduction is quite long. With good editing, removal of repetitions and moving forms to an annex the length would be reduced. More information is needed to explain how the trainer should use assessments to adapt to participants' needs and how to evaluate performance with clients. The course schedule is a very usable length and can be developed into a helpful tool.
1 2 (3) 4 5	8. The **Course Outline** (Agenda de formation) is logically organized and easy to follow. (Trainer's Guide, section 3)	The layout of the agenda is clear and quite easy to follow. It is particularly helpful to see how activities are linked to specific objectives. Given the relatively small number of activities for the supervisor, it might be worthwhile to eliminate the Supervisor column to give more space to the other columns so the table will not be so long. Supervisory activities could be presented in a different fashion.
1 (2) 3 4 5	9. The course outline contains the necessary information to guide the OJT trainer, participant and supervisor through the program.	The course outline contains much of the necessary information; however, there are important details missing: • Reading assignments (page numbers) • Exercise numbers for the learners. The exercise numbers do not correspond to the exercises in the

	Features	**Comment:**
		document. • Practice with clients (no info is given on when/how to do this and how to keep track of information. Before these details are added, the session objectives need to be reviewed to ensure that they respond to the course objectives. For example, there are no session objectives for carrying out a "causerie." Session objectives often include extraneous information ("after completing the reading assignment") and focus on knowledge rather than performance. One section, "La resolution des problèmes en Clinique," has no content in the reference manual. Make sure that all exercises mentioned exist in the exercise section and, likewise, make sure that all exercises or fiches d'apprentissage/listes de vérification are mentioned in the agenda. <u>For supervisor's guide</u> The supervisor's role in evaluation is not clear. The introduction implies that the supervisor is responsible for all testing, yet this is not shown in the course outline. The number and timing of supervisory visits differ in the description of the course outline and the actual outline.
1 2 3 **(4)** 5	10. The learning activities described in the course outline correspond to the learning objectives (i.e., EACH learning activity is relevant and essential to achievement of the learning objectives).	The learning activities described correspond to some of the learning objectives defined in the training. Additional activities should be developed so that there is a chance for learners to check their understanding of reading (through questionnaires), to problem solve with given the new information (through case studies) and to practice new skills (through role plays) with use of learning guides and checklists.
1 **(2)** 3 4 5	11. The instructions for the learning activities are sufficiently clear.	More directions are needed to explain whether learning activities are to be carried out individually or in a group, independently or facilitated by the trainer. Page numbers for reading assignments and exercises are needed. Currently roles plays are conducted in front of the class by two volunteers. More time should be given for all participants to do role plays. Opportunities for practice with clients are not well explained.

	Features	**Comment:**
1 2 3 (4) 5	12. The learning activities are likely to be engaging / interesting to the students.	It is hard to be sure if participants will be engaged with the reading because page assignments are not included and the participants' reading level is not described and the reference manual may be too advanced for some participants. The questionnaires, case studies and role plays are directly related to course objectives and should be engaging.
1 2 (3) 4 5	13. The questions in the **Pre-Course Questionnaire** are clear and easy to understand. (Trainer's Guide, section 4)	The layout of the questionnaire makes it hard to read the questions. Acronyms should be avoided. Questions should cover a wide range of learning objectives and not be too specific in nature. No indication is given as to whether participants can refer to OMS criteria tables or other job aids when completing the questionnaire. It would be good to add multiple choice questions such as those currently found in the exercise "Prestations des services de PF." Specify role of supervisor for this activity.
1 2 (3) 4 5	14. The questions in the Pre-Course Questionnaire correspond to the learning objectives.	Not always. The following questions do not relate to specific learning objectives listed in the course outline, although they may be covered in the content: 7, 9, 13, 28, 32-35 (there are no objectives that target these "groupes particuliers"), 37. There are more knowledge-based learning objectives that are not covered by the pre-course questionnaire (pre-test). For example there are 6 knowledge-based objectives for infection prevention and only one is covered in the test (with two questions).
1 2 3 (4) 5	15. The **Checklists and Learning guides** correspond to the skills the FP provider needs to learn. (Trainer's Guide, sections 5 & 7)	The checklists and learning guides do correspond to needed skills. Make sure that the learning guides and checklists match the "Fiche de consultation" used in the FOSA.
1 2 (3) 4 5	16. The checklists and learning guides are clear, well-organized and easy to use.	In general the checklists and learning guides are clear, well-organized and easy to use. However, there are some issues that need to be addressed: • Learning guide instructions differ from form to form. It is sometimes confusing who should be filling out the learning guide as one thinks it should be the participant or an observer but the instructions indicate that the trainer should be filling it in. • Checklists and learning guides do not always correspond with steps missing from one or the other. • Learning guides and checklists are not always in the same order in the manuals and there are more

	Features	**Comment:**
		checklists than learning guides. Sometimes the titles of the learning guide and checklist differ. • The amount of detail in checklists varies. • For counseling a FP client it is necessary to jump between learning guides and checklists for counseling and for the chosen method. It would be helpful to indicate in the counseling lists where these jumps occur (the IUD lists include counseling steps – should this be taken out to make it like the others or is there something special about IUD counseling?)
1 2 (3) 4 5	17. The **Practice Exercises** are clear and easy to understand. (Trainer's Guide, section 8)	In general, the exercises are clear but the directions are insufficient. Many exercises are poorly numbered. Some exercises cited in the course outline are missing (e.g., les exercices de remplissage des outils de collecte des données). Some exercises do not have instructions for how they should be used (e.g., Prestations des services: évaluation des connaissances asks questions not covered in the section and has no directions for either the learner or the trainer). Some role plays are identified but no description is included in the text. For role plays, participants should be reminded to use applicable learning guides and checklists. Instructions are needed on how to provide feedback after role plays. Verify that answers to case studies can be found in the reference manual or in a protocol that the learners can access. If there are changes/updates since the reference manual this information must be included in the training manual (e.g., answers for the case studies for implants differ from the PEC in the reference manual). Leave enough space for participants to write in their answers. Make sure to include/provide blank forms when they are part of the performance. Reference is made to using "tableaux récapitulatifs des critères de recevabilité" that are not included in the documents. Finally, answers should be provided for all questionnaires.
1 2 3 (4) 5	18. The Practice Exercises correspond to the learning objectives (i.e., all exercises are relevant and essential to achievement of the learning objectives)	Almost all the exercises relate directly to learning objectives. In cases where they do not correspond I often assume that there should be an objective (e.g., there is no objective for causerie).

	Features	**Comment:**
1 (2) 3 4 5	19. The suggested **learning activities (including Practice Exercises, simulated practice with models and role plays, and clinical practice)** provide enough review and practice opportunities for achievement of the learning objectives.	More opportunities to test knowledge, problem solve and practice new skills need to be added to the curriculum. A learning activity should be planned for each learning objective (or combination of objectives). Currently there are objectives with no associated activities. Clinical practice with patients needs to be better described. Besides managing secondary effects, client follow-up is not emphasized in any of the activities and is an important part of FP.
1 2 3 (4) 5	20. The questions in the **Mid-Course Questionnaire** are clear and easy to understand. (Trainer's Guide, section 9)	I assume this is the post-test since no mention is made of a mid-course questionnaire in the description of course evaluation and no post-test is given? Most questions are clear and easy to understand. Questions 7 and 8 are confusing. If a physical exam is optional, how can it be used to prescribe a contraceptive method? There are comments (BS) about the answers to questions "20", 26. Question 33: The term "hystérométrie" is found only in parentheses in the learning guides so it may not be appropriate to ask the definition in the evaluation.
1 2 (3) 4 5	21. The questions in the Mid-Course Questionnaire correspond to the learning objectives.	Questions not related to objectives in the course outline include: 9, 10, 15-17, 27 (there is no objective specific to counseling for implants), 37-39 and 41 (although the answers to these questions is found in the content there are no specific objectives for special groups (e.g., post-abortion) with the exception of emergency contraception.
1 2 3 (4) 5	22. The purpose of the **Participant's Action Plan** is clear. (Trainer's Guide, section 10)	The purpose of the Action plan is well stated, but more direction is needed to help the participant identify the types of actions he/she should include and how supervisors and "titulaires" will use this plan for post-training follow-up.
1 2 (3) 4 5	23. The instructions for completing the Participant's Action Plan are clear and easy to understand.	If the participant is familiar with action plans he/she may be able to do this exercise. If not, he/she will need more help, either by written instructions or with the trainer, including an example of a filled-in plan and how it was written and how decisions were made. It is important for the participant to know how the plan will be evaluated and used in the future. The instructions ask the participant to review a discussion of the five performance factors in the introduction, but this does not exist.

	Features	**Comment:**
1 2 (3) 4 5	24. The questions in the participant's feedback form (**Formulaire d'évaluation de la formation**) are clear and likely to provide useful information for the OJT trainers and supervisors. (Trainer's Guide, section 11)	Part 1 of the evaluation form would be useful for trainers and supervisors. Part 2, is confusing because it refers the participants to activities that are numbered in a different way than the training. It is not clear exactly what the participant is supposed to be evaluating and answers may be too general to be useful. Questions 20-23 may be helpful to determine the applicability of the training to the participants' job responsibilities More specific information should be gathered pertaining to the helpfulness/usability of learning activities (e.g., reading assignments, questionnaires, case studies, role plays, practice with clients); problems encountered due to the OJT approach; participant attitudes about providing FP services (see training goal).
(1) 2 3 4 5	25. The purpose of **Section 9: Gestion de la pratique, in the Supervisor's Guide** is clear.	No directions are given to the supervisor for what they should look for in the table, how they can help or evaluate participant or what should be done with the information. As is, they can evaluate whether the table was filled in but not the quality of the information provided.
1 (2) 3 4 5	26. The instructions for completing the chart in **Section 9: Gestion de la pratique, in the Supervisor's Guide** are clear and easy to understand.	This chart is missing from the carnet du participant. Participants are asked to take notes about clients, but not told what kind of notes to take or how these notes will be used or evaluated.
1 2 3 (4) 5	27. Visuals included in the 3 manuals (charts, illustrations, tables, ordinogrammes) are clear and contribute to the understanding of the content.	There are very few visuals used in the training manuals. Visuals used in the reference manual are clear. Ordinograms are helpful in general. They need to be re-sequenced in the document. Some of the information may be too abstract for the learners. Specific examples of pills to offer or estrogen/progesterone levels would improve the usability of the ordinograms. Other job aids could be developed.
1 (2) 3 4 5	28. All content that is essential for preparing and implementing the FP OJT course is included in the 3 manuals and the reference guide.	Missing information has been mentioned in the comments above, including forms, directions, role play descriptions, etc. Information about post-training follow-up and supervision needs to be added.
1 (2) 3 4 5	29. The manuals are well-organized so that I can find information easily.	More page referencing within the training manual and between the training manual and the reference manual need to be added. Content needs to be rearranged so that similar topics in different sections (i.e., learning guides & checklists) are presented in the same order.

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