Integrated Customer Services: A Case Study

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Introduction

We are convinced that teamwork will be the key to the success of Xerox’s new Integrated Customer Service centers, and in turn, the company’s long-term revenue enhancement. While we have built significant elements of behavioral and cognitive learning perspectives into our proposed design for the retraining and redeployment of Xerox’s customer service representatives, we have chosen to focus the heart of our effort on the situative learning perspective. We intend to create a community of learners that can construct knowledge in a collaborative, practical, contextualized environment. We are determined to change the pattern of dissatisfaction that marks the current office environment. In particular, we will teach customer service representatives new skills that enable them to solve customers’ problems – and supplement those skills with a team of mentors and a supportive learning environment that can help them build additional skills.

In our prototype, the trainees will be divided into teams, six members to a team. These teams will learn together during training, and work together thereafter. Once they begin their work as ICS representatives, they will sit together in cubicle pods. Between every two pods, models of the major copier lines will be accessible in a common copier area. Each team will have two members from each of the once-separate service divisions: Supply Ordering, Customer Account Information and Customer Service. These two members will act as “experts” for the areas they are familiar with. At least one of the two members will be an experienced employee with several years of work experience in that area. All team members will take courses in each area, however, and will be responsible for basic skills in all three categories. Through the team system, members will be able to answer each other’s questions quickly, point each other to documents and offer computer tips in their “expert” subject.

Learning in teams makes learning more effective and motivates participants. By working together continually, social bonds will be created which will increase employee loyalty to the company and lower turnover rates. Moreover, as they go through training, no matter what the topic, at least one member will always have prior experience and some in-depth knowledge. Thus the team is guaranteed to have a personal coach for each topic. This team member will take responsibility for the learning of the entire team for that particular topic: she will ensure that everyone is learning, answer questions, explain difficult concepts or tasks, demonstrate procedures, share advice and experiences (strategic knowledge), give rationale, etc. (apprenticeship, scaffolding – Greeno et al 1995)

The equal distribution of experts and beginners assures that no team will consist of only beginners. Thus, the beginners in each team will benefit from the presence of the veterans who will share their experience, “show them the ropes,” and increase their confidence by example.
Teams will spend their 15-week training period working together, forming collegial as well as professional bonds that will make the workplace more fun and fulfilling. In turn, customers will notice the changed atmosphere and more efficient service, strengthening their loyalty to the company. Every effort will be made to promote collaboration within teams, including required weekly meetings, reinforcements for team success and communal resources including self-created FAQ sheets and reference guides. Team members will consult each other day-to-day, solve problems together and share strategic knowledge that can speed up and clarify their tasks.

For our pilot program, we intend to select 12 customer service representatives from each of the current four call-center facilities. They will be a mix of skill and experience levels, though all representatives chosen will have had at least one year of service to the company. We intend to fly the group to a common location, where we will begin our training of the group, all together. The reps will be divided into six-member teams, according to their home facility, and will therefore be able to take their skills back to their home facilities and serve as coaches to help replicate this design in the four disparate locations.

**Week 1: Camp Xerox**

When the 48 pilot reps arrive in the central location, overnight bags in hand, they will be taken by bus to a campsite near Xerox’s main campus for their first corporate retreat. Most of these low-level employees will never have been lavished such attention by their company – we hope this week will convince them that the company knows their skills are important, and emphasize the commitment necessary for the next 15 weeks.

At Camp Xerox, each team will be assigned to a cabin, where they will stay for the night. To motivate all participants, the initial discussion will focus on convincing everyone that the new Integrated Customer Service Initiative is desirable and beneficial to everyone. Team members will be asked to work in teams listing all the advantages of the new system to 1) customers, 2) employees and 3) company. Every team will share its list with the entire group and all advantages will be listed on the board. Finally, a representative of management will give the company’s rationale for the changes. The first two days of Week 1 will be focused on team-building exercises, trust games, and time to get to know teammates. There will be role-playing to address anger management, communication and presentation skills. The 2-day retreat will be fun, energizing and informative, with team members emerging as part of a cohesive unit with trust and respect for their team members.
With that foundation, the work can begin in earnest. The rest of the week will be spent at Xerox’s main facility, where workshops on team building and communication will be held for all 48 representatives. They will get a foundation of soft, interpersonal skills, learning how to deal with their teammates under stressful conditions and how to keep themselves and their work organized. Xerox will also take this opportunity to formally introduce its corporate philosophy, letting employees know what is expected of them, where to go with questions, what the organizational and hierarchical structure is, etc.

This week will also introduce representatives to the major Xerox copier lines, with copier “puzzles” of major pieces that must be fit together to provide employees with a cognitive framework to understand their functioning (that information will come later). Teams will work together to identify parts and lock them together into a copier unit. Simultaneously, they will learn the names of the parts to refer to during phone calls, and learn how they interact with each other.

In addition, trainees will be introduced to the new incentive system. The new teams will be evaluated on the number of calls solved successfully. The highest achieving teams will receive incentive rewards. Individuals will receive a small commission on supply order sales.

After Week 1, the customer service reps will return to their home facilities for the remaining 14 weeks of their training. This part will be done in classes of 12, with two teams per section. They will remain in the teams that were introduced during this initial phase, but will help with the training of their facilities’ teams once the pilot program is extended to the entire company.

**Training Modules (Weeks 2 – 10)**

The team will work together during the three training modules, each lasting three weeks. Each module prepares the team for assuming and executing the responsibilities currently belonging to one of the three divisions. Each one of the three modules will consist of two major parts: one week of short courses in a class or workshop setting, and two weeks of apprenticeship. In each module, the two members of the buddy team who previously worked in the corresponding division will be designated as “experts”.

Following the cognitive perspective, specifically the idea that knowledge should be presented in a sequential way in order to aid conceptual understanding, the order of the modules has been chosen so that the trainees begin with the easiest, Customer Account Information, and end with the hardest and most complicated, Customer Service. This order allows each module to build on what was taught in the previous ones. For example, in the first module the trainees learn about
the company's key products. In the second they learn about each product family's parts and supplies. In the third module they learn about the common problems each family has and how they can be solved.

**MODULE 1: CUSTOMER ACCOUNT INFORMATION**

**WEEK 2**

**Conceptual and Procedural Understanding of Account Information System**
The purpose of this part is to teach the team members the concepts and procedures they need in order to be able to confidently handle accessing and communicating account information.

**Getting to know the company’s products**

*Design Principles:*
Cognitive: Learners will be provided with an organized, conceptual overview in which further learning may be assimilated. (Explicit attention to generality. Greeno et al, 1995)

*Presentation:*
Training will begin with a general conceptual overview of the company’s products. Each product line will be introduced and a list of its features and a macroscopic view of its functions will be presented. Differences between one product family and another will be outlined, emphasizing a customer-centric view: the instructors will explain what each product family offers the customer, why the customer would want it and why she would choose that family over the others. All members will be handed sheets summarizing all this information.

**Database use training**

*Design Principles:*
Cognitive: the instructor begins by explaining overall concepts. Once those have been understood, she moves on to more concrete concepts and procedures. (Explicit attention to generality. Greeno et al, 1995)

Situative: the trainees practice their learning through solving real-world problems in a setting that models the situation in which they would use it (through role-play). (Situated learning. Greeno et al, 1995)

Cognitive: the more experienced team members act as coaches to their fellow team members. (Scaffolding and fading. Greeno et 1995)

*Presentation:*
The instructors will begin introducing the database system used for customer service by explaining what kinds of information it contains, and how it is to be used by Telereps. Next, using a projector showing the computer screen seen by Telereps, the instructor will demonstrate how to log in into the database and introduce the database interface. She will show what modules the
database contains, how to browse the contents, how information in each record is displayed, where to find what important pieces of information and how to query the database. Each participant will receive a sheet with step-by-step information on the most important procedures: how to log in, how to query the database by product serial number, how to find a customer, how to update information, etc.

**Practice:**
Each team will sit around two computer terminals. So that each trainee receives more attention, the team splits into two groups of three with one of the account information experts being in each group. Each group will receive a sheet with two sets of tasks. Each one of the non-experts will have to complete one set of tasks while the expert watches, coaches and gives feedback. The tasks will all be example of real-worlds tasks that account information representative have to perform. The first task will be simple (logging in) and each subsequent task will be a little more difficult and advanced. There will be repetition to drill the new skills. The experts will coach the non-experts, explaining to them what they must do when they don’t know, helping them get started again when they get lost, showing them better ways to do something, and giving feedback on their performance.

**Design Principles:**
Situative: Trainees will practice using their accumulated account information knowledge in real life scenarios.

**Activity:** Instructors will talk about the most common account information calls. The trainees will then be presented with scenarios in which customers are seeking account information or attempting to update information. The trainees will work together to update and supply account information. They will also determine if the call needs to be routed to another division.

**Use of documents training**

**Design Principles:**
Behaviorist: The trainees are given exercises to practice the component skills of the procedures they have to learn. Experienced members of each group act as trainers, giving individualized attention and feedback. (Sequences of skills, drills, individualization, clear feedback)

Situative: Through practice knowledge is acquired in its applied form, tying it to its intended use. (Authentic learning)

**Presentation:**
The instructor will begin by giving an overview of the types of documents the account information specialist has available to him and what they should be used for. She will then introduce the different documents and explain where they can be found—on paper or on-line. She will also talk
about how and how often documents are updated and what Telereps should do to make sure they have the latest versions of all documents.

**Practice:**
Each team will receive a set of paper documents and a list of tasks, and will be given access to a computer. The experts will read each task and the non-experts will take turns completing them. Tasks will require that the trainees use either paper-based or on-line documents, or both. The experts will observe what their buddies do, help them when they are unable to complete the task, give feedback on their work and give them advice on how to finish the task faster if possible.

**WEEK 3 & 4**

**Apprenticeship: Observing and participating in current practices**

**Design Principles:**
Situative: Students will start the apprenticeship process through observing experts at work.
Cognitive: Students will be developing successive approximations of increasingly mature performance (Gott, 1988-89).
Behaviorism: Reinforcement and practice.
Situative: Students will participate in the practices and discourse of practitioners and move from playing more marginal to more central roles as they improve. Students will develop their own “adapted” practices and discourse within their community (team). (Participation in practices and discourse of community of practitioners, support for development of practitioner identity. Greeno et al, 1995)

**Activity:**
For the first two days, the teams will spend their time at the account information center observing how current practitioners perform their duties. The trainees will be equipped with headsets so they can hear what customers and Telereps say, but will not themselves be able to participate in the conversation. At the end of the first two days, the experts in each team will share with their buddies the “adapted” documents—cheat sheets, post-it notes, price sheets, etc.—that they developed and used most often in doing their job, explaining how and when each one is used, and why the information is useful.

For the rest of the two weeks, the teams will gain real experience by answering live customer calls. The non-experts will take turns answering the phone, while the other experts will provide assistance and scaffold the novices’ learning. The experts will provide feedback and suggestions at the end of each class. At the end of each day, trainees will reflect on their learning, discussing their confidence in taking orders and suggesting supplies. Trainees will also comment on areas for improvement or refinement.
At the end of the two weeks, then the entire team will work on creating its own new “adapted”
documents based on the expert’s documents and the experience gained through their
apprenticeship. The teams will also be asked to develop their own practices for working together,
helping each other, answering each other’s questions and solving their problems together.

MODULE 2: SUPPLY ORDERING AND SELLING
WEEK 5
Conceptual and Procedural Understanding of Ordering and Selling Process
The purpose of this training is to teach the team members the concepts and procedures they
need in order to be able to confidently handle supply ordering and also understand techniques to
do push selling during customer calls.

Learning about machine parts and supplies

*Design Principles:*
- Cognitive: Trainees will interact with the physical environment to examine the supplies required
  for each machine.
- Situative: Trainees will construct their own understanding of which supplies are necessary for
  proper machine usage.
- Behaviorism: Trainees will practice accessing supply information for each copier model and
  receive appropriate reinforcement.

*Presentation:*
Each product family will be explored in more detail. An actual model will be brought to the
classroom and team members will be given simple schemas of the machine and its parts
(including labels). The instructors will show and name the different parts of the machine, open it
to reveal the inner parts as well, and explain what each part is for. She will demonstrate, step-by-
step, how to do common tasks such as change the toner, reset the machine, load the paper, etc.

*Practice:*
The teams will then be taken to a laboratory housing models from as many product families as
possible. The teams will rotate from one machine to another until all teams have had a chance to
work with every machine. For each machine there will be a checklist of things the team has to do:
list the model’s features, name the parts pointed to by an arrow on the picture, find the auger,
change the toner, load paper, etc. The expert will be responsible for making sure that all tasks are
performed correctly and will check them off the list as they are completed. Once they complete
their lists, trainees will be introduced on how to access supply information based on copier model.
Trainees will also examine suggested or average replacement times. The trainees will then be
presented with scenarios giving the machine and a supply order history for different companies.
Trainees will need to make suggestions on what supplies to order and why those would be
beneficial for the company to order at this time. Team discussions at the end of the day will focus on the trainees’ suggestions and justifications.

**Conceptual Understanding of Supply Ordering and Selling**

*Design Principles:*

Situative: Trainees will begin to participate in the discourse of supply ordering through discussion of example calls. They will also be exposed to foundational techniques of marketing and selling of products and understand methods for pushing them out during customer calls.

Cognitive: Trainees will be placed in an interactive environment in order to construct a conceptual understanding of supply ordering and selling.

*Activity:*

To increase motivation and present the call service agents with the big picture of supply ordering and selling, trainees will start by watching videos of example calls. Some calls will be an unsuccessful supply ordering and/or selling calls; the other parts of the video will consist of successful ordering and/or selling calls. Trainees will then be asked to discuss with their groups their impressions of the videos and hypothesize on the apparent differences between successful and unsuccessful supply ordering and selling calls. Groups should also determine a list of information, tools, or resources they believe they need to effectively complete a supply order call, and successful methods for marketing and selling during customer calls. In this way, the students will begin to formulate a conceptual map of the ordering and selling processes.

**Procedural Understanding of Supply Ordering**

*Design Principles:*

Behaviorism: Information and procedures will be presented systematically in a component-to-composite order.

Cognitive: Trainees will gain further information to assimilate into their cognitive map of supply ordering and selling.

*Activity:*

The supply ordering and selling procedures, along with paperwork, will be presented systematically. Each step in the ordering process will be introduced, followed by methods for selling during customer calls. After each step, trainees will practice the step whether on the computer or on paper. Instructors will give trainees immediate feedback on their work. After practice, the next step will be presented. When all steps have been practiced, the whole process will be displayed in a flowchart. All members will be supplied with a handout showing the ordering flowchart and once again in a marketing/sales flowchart as well.
**Database use training**

Since the trainees will already have learned how to use the database in module 1, and have used it during their apprenticeship, the instructors will merely demonstrate how using the database to place a supply order is different from using it to obtain account information. Several videos will be shown of Telereps using the database to place a supply order.

**Use of documents training**

The same model as the one used in the previous module will be employed. For authenticity, practice will be based on the types of tasks that Telereps handling supply orders perform, such as finding the part number of a toner for a particular photocopier, looking up the price of a supply or its standard delivery time, etc. Appropriate documentation and methods gathered from the sales team will be involved in the training for selling in customer calls.

**WEEK 6 & 7**

**Apprenticeship: Observing and participating in current practices**

The apprenticeship model for this module will be identical to the model used in the previous, the exception being that it will take place in the Supply Order call center.

**MODULE 3: CUSTOMER SERVICE**

**WEEK 8**

**Conceptual and Procedural Understanding of Customer Service**

The purpose of this part is to teach the team members the concepts and procedures they need in order to be able to perform their duties as customer service representatives. During all sessions the six-team members will sit together around a round table.

**Learning about common problems**

**Design Principles:**

Behaviorist: Whenever procedures are taught, they are broken down into sequences of component skills that the trainees can learn one by one. These are later drilled under the supervision of an expert who gives direct and clear feedback on the trainee’s performance. (Sequences of component-to-composite skills, individualization, clear feedback)

Cognitive: specific strategies are taught so the trainees know when to apply which procedures and skills. (Explicit emphasis on strategic knowledge. Gott, 1988-89)

Situative: Knowledge is tied to its intended use (solving copier problems). Practice involves solving real-world problems with newly acquired knowledge. (Authentic learning. Greeno et al, 1995)
**Presentation:**

Instructors will talk about the problems that occur most commonly for each model. Two things will be emphasized: the problems that customers most experience and call in about (and the mistakes they most commonly make), and the problems that can be solved over the telephone. To demonstrate what these problems look like, the instructor will make some photocopies on several copiers that are not working properly and show them to all participants. Strategies will be given for determining whether a problem is hardware or software based, and if the hardware problem can be fixed over the phone. For all problems that can be solved over the phone, the instructors will give a step-by-step walkthrough of the solution (procedures will be broken down into component skills that will be taught one by one in sequence. At each fork in the decision tree, strategies will be taught for deciding which option to choose).

**Practice:**

Several machines that are not functioning correctly will be set-up in the laboratory. In every case, the problem is something that can be fixed over the phone, but the participants will not be told. Each team will work on fixing one machine. In addition, each team will have an experienced technician to guide their work. If they reach an impasse he will give them hints and help them along. After they finish he will give them direct feedback on their performance. Afterwards, he will share his personal experiences and expertise with them about diagnosing problems, fixing machines, interacting with people, etc.

**Learning about the tools**

The company provides its customer service representatives with several tools that are meant to support them in effectively and efficiently fulfilling their duties. These include the CasePoint expert system; a database containing customer information, the products they own and service request information; and many documents, both paper-based and on-line, which contain information about procedures, prices, etc. The customer service representatives must be trained in the use of these support tools in order to be able to utilize them effectively.

**Database use training**

Since the trainees will already have learned how to use the database in module 1, and used it during their apprenticeships in modules 1 and 2, the instructors will merely explain how customer service representatives (CSRs) use the database. Several videos will be shown of CSRs using the database while responding to customer service requests.

**CasePoint use training**

**Design Principles:**

Cognitive: the instructor begins by explaining overall concepts. Once those have been understood, she moves on to more concrete concepts and procedures. (Explicit attention to

Situative: the trainees practice their learning through solving real-world problems in a setting that models the situation in which they would use it (through role-play). (Situated learning. Greeno et al, 1995)

Cognitive: the more experienced team members act as coaches to their fellow team members. (Scaffolding and fading. Greeno et al 1995)

**Presentation:**
The instructor will begin by explaining what case-based reasoning is and how CasePoint uses it to find solutions to the customers' problems. She will explain what the CSR’s role is in working with CasePoint and how he will have to interact with the system and the customer to fully take advantage of its capabilities. She will also explain about CasePoint’s shortcomings: what it cannot do and how it or the user can make mistakes. Using a projector to show the computer screen, she will introduce the system’s interface and explain the purpose and function of different menus, windows, button, text fields, etc. The she will show three examples of using CasePoint to find the solution to a problem. She will also show a few examples of its shortcomings. All trainees will receive a sheet containing most of the information presented during the class, including screen shots and labels that explain how the interface works and what different portions of the program are for; a few step-by-step examples of using CasePoint to solve a customer’s problems, including how to ask the customer a relevant question; and a few examples of CasePoint making a mistaken diagnosis.

**Practice:**
Each team is will be assigned two computers and divided into two groups of three. Each one of the groups will have one of the customer service experts. The experts will receive a sheet containing the description of several problems and their solutions. The non-experts will take turns within their group role-playing a CSR serving a customer while the experts play the customer calling in to report a problem with his machine. The persons playing the CSR must interact with the “customer” and use CasePoint to successfully diagnose the problem and determine a solution. As well as role-playing the customer, the experts will also be coaches, aiding their teammates when they get stuck, giving them feedback on their actions and evaluating their performance at the end of each role-play. When the group has finished all the scenarios that are on the sheet, the experts will continue the practice using invented scenarios based on their own experiences.
Use of documents training

*Design Principles:*
Use of documents training

The same model as the one used in the previous module will be employed. During practice, the trainees will be assigned the types of tasks that CSR regularly perform, such determining normal hours for technicians or finding how much it costs for a technician to work after hours.

**Learning about current practices**

An important part of training customer service representatives (CSRs) is having them learn about the practice of current CSRs in action. This will help them learn those practices and participate in them in the future.

*Design Principles:*

Situative: the trainees observe and analyze current practices of real practitioners. Through reflection they are made to think of how they would adopt and improve on these practices. (Focus on practices of communities of practitioners. Greeno et al, 1995)

Behaviorist: the trainees are given exercises to practice the component skills they have to learn. Experienced members of each group act as trainers, giving individualized attention and feedback. (Sequences of skills, drills, individualization, clear feedback)

Situative: practice focuses on solving real-world problems and using knowledge in a setting that simulates the setting in which it will eventually be used (through role-play). (Situated learning. Greeno et al, 1995; Gott, 1988-89)

**Presentation:**

To introduce the participants to current practices of customer service representatives, the instructors will show the videos taken during the design study conducted by the Institute of Research on Learning (IRL) team. The videos will show examples of the use of all the tools the trainees will have learned about, as well as CSR-customer interaction. The examples will range from good to poor performance. After each video the instructor will analyze the practices of the CSR shown, pointing out both good decisions and bad ones made. Afterwards, each team will discuss how they would improve on the practices they had witnessed. The experts of the team will play the role of “reality barometer”, critiquing ideas or statements that are not implementable or realistic and always explaining why.

At the end of the session, every participant will receive a sheet listing the best step-by-step procedure of handling customer service calls.

**Practice:**

Drills – in their teams, the participants will do drill to perfect their skills of answering the telephone, introducing themselves, getting the customer to identify themselves, obtaining the serial number and a description of the problem. To master these first steps, the drills will go no
further. The expert will play the role of customer and tutor. She will “call” each buddy one by one and interact with him, acting as a customer would. She will also give immediate feedback on every step.

Role-play simulations – once the basic skills have been perfected, the teams will participate in role-plays that go beyond the drills. On a sheet of paper, the team will receive descriptions of some real-life scenarios. In each simulation, the buddies will have to actually complete one scenario, ending it by either solving the problem or deciding that a technician has to go on-site or the problem is software based. The four non-expert buddies will take turns playing customer or CSR. The “CSR” will have access to same tools that real CSRs use—the database, CasePoint, all documents—and will be encouraged to use them as much as she can. Each scenario will be more complex than the previous. The experts will take turns playing the coach, giving feedback, demonstrating how to do it better or how to do it incorrectly, raising issues and making their buddies think. They may also invent scenarios from their own experiences to challenge their buddies.

WEEKS 9 & 10
Apprenticeship: Observing and participating in current practices
The apprenticeship model for this module will be identical to the model used in the previous, the exception being that it will take place in the Customer Service call center.

WEEK 11
Reflection: Gathering employee feedback and providing time for review and reflection
Week 11 is dedicated to reflecting upon the previous 10 weeks of camp, classes, training and exposure in which the operators have been involved. Reflection will be an important part in determining the success of the program. A formative evaluation will help leaders understand where the system fell short and where it succeeded. The newly acquired expertise of the pilot training group will serve as foundational material for the upcoming training systems.

Lists of questions, creative strategies and techniques that arose during the training should be journaled and reviewed. Frequently asked question sheets should be posted in all cubicle and team areas. Key members of these teams can be made responsible for mastering different aspects of the material and become point-of-contact members who can be approached to answer questions on their respective expert sections. This adaptive learning will integrate various operator perspectives and allow them to come up with their own successful tools for integration, allowing other operators to take advantage of the ideas to develop a one-team, winning environment.
WEEKS 12 – 14

Putting it to practice: Using the new system in real-world situations

**Design Principles:**

Situative: Knowledge is tied to its intended use (handling customer calls and dealing with real-time problems). Practice involves solving real-world problems with newly acquired knowledge. (Authentic learning. Greeno et al, 1995)

Cognitive: team members (mentors) act as coaches to their fellow team members. (Scaffolding and fading. Greeno et al 1995)

By week 12, operators have learned the skills necessary to work successfully in the new system. This will be the beginning of a four-week schedule to put their new knowledge to use with real-time customer situations. Employee operators will work in supervised positions so that any questions may be answered immediately without customer call interruption. They will work closely in the six-person teams that were formed during the camps and intensive training periods.

This apprenticeship by trainers and collaborative working environment will further integrate new learning techniques as well as enhance retention of methods and procedures learned during the previous 11 weeks. The mentors will be on hand at all times, overseeing the employees and providing immediate feedback or coaching in times of need.

By week 13, these employee operators should begin to develop some comfort with the system and their new team environment. They must continue to work closely with their mentors as they develop their skills while sharing information across their team environment to ensure collaborative success.

Regular meetings should be held to address issues that may continue to arise during these supervised workweeks. The meetings should also promote team-building refreshers and day-to-day shared experiences so that the teammates continue to be productive in working with their assigned team members and better understand the variations of customer calls that other members have handled.

Training apprentices should begin to taper off in week 14. These mentors should be able to utilize more time adjusting the new training procedures and looking at developing the next round of training while still making themselves available to the pilot group of employees. The employees should be comfortable enough with the system to work amongst themselves and should be well-integrated into their assigned teams that they can begin to alleviate problems and handle customer calls by using their own knowledge and team insight to address all problems.
Training apprentices make themselves available on an as-needed basis, but should be focusing on monitoring the employee operators from a distance to determine success rates and effectiveness, rather than full-time coaching. They need to understand how these operators work on their own, without the security of an apprentice at their side. This will truly provide the evaluation needed for success rates of the new program. Information and analysis gained by the mentors in this week will be critical in understanding how successful the 15-week Case Point training turned out. In closely reviewing feedback, interaction and other data gathered, the mentors will turn to the training team to develop the most effective training program to be scaled across the rest of the company.

WEEK 15

Going out on your own: Employee operators are self-sufficient

*Design Principles:*

Situative: Knowledge is tied to its intended use (handling customer calls and dealing with real-time problems). Practice involves solving real-world problems with newly acquired knowledge. (Authentic learning, Greeno et al, 1995)

Employee operators should be ready to proceed on their own and be fully prepared for integration into the new program. They have been working with customers in a supervised environment for the past three weeks and should be comfortable with the system. Any inadequacies with the program or its success should have been addressed by the training apprentices and moderators in the last three weeks so that they system could have been essentially perfected by this final week. This pilot group of operators will be the new ‘experts’ on this system and will be responsible for assisting in further training that will be scaled across the rest of the company. The prior 15 weeks should serve as a model for the new training system but will be compressed into short training systems to be utilized for the rest of the company.

The employees should still focus on providing feedback, comments and experiences throughout their time at the company so that they will continue to foster the appropriate and effective learning environment. At some point, we can expect that the system will require another training overhaul and with all the information gathered from the pilot training group, quick and easy implementation will result.

*Assessment:*

We intend to use pre- and post-tests to determine whether the employees are learning the skills necessary to perform tasks in the three successive content areas: account information, supply ordering and selling and customer service. Employees will already have basic skills in one of the three areas, so we will begin our pilot program with a test of their prior
knowledge in that subject, and their basic knowledge in the other areas.

After the first 10 weeks, we will test employees on the use of Case Point, giving them problems to solve with authentic language that callers might use, including words such as “smudge,” “fade” and “line.” We will also conduct mock-up calls before they actually take to the phones, to ensure the level of quality service we want representatives to attain. Once they begin working the phones, we will conduct random spot-observations, offering constructive feedback for improvement.

That will give us a chance to revise our teaching, if necessary, and clarify problems as they occur, rather than waiting until the program is complete. We will observe interaction within groups, ensuring that all members are involved and contributing to the whole. We will collect minutes from group meetings, to make sure the groups are operating as cohesive units and are progressing in their learning.

We also want to determine whether the employee operators have formed a cognitive model of how major copiers operate. Therefore, we will ask them to label copier parts during a post-test, identify missing steps in solutions to routine copier problems and complete a multiple-choice test on facts from all three subject areas.

Additionally, we will need to look closely at the assessment of participation in practices. It will be important to evaluate whether group members are working together successfully and efficiently or whether team dynamics might have hindered the progress. Likewise, after extensive training on CasePoint documents and database, operators should find this information helpful. If they don’t, it will be critical to understand where our training failed. For example, using post-its and “adapted” documents, will an employee operator walk over and use the model copiers? Do they turn to teammates and group members for help? Are they assisting others and re-grouping regularly to assess the status of their team success? In evaluating these situations, we will have an understanding as to how well the situative learning components are working in our proposed system.

This assessment will be an on-going process, allowing the training operation to keep tabs on employees’ growth and add workshops later if necessary.
Corporate Training:
The role of the corporate training organization will change dramatically as a result of our redesign. Training officers currently introduce information at the beginning of an employee operator's career at Xerox and then withdraw, returning only for key workshops ordered by administrators.

The new learning environment will turn the trainers into continuing coaches, encouraging learning and checking on the learning process repeatedly. But they will no longer work only as lecturers and monitors, as operators create their own learning structures, asking and answering each other's questions.

The changes will also require CTO officers to become proficient in all three subject areas, where they were previously able to specialize. They will also need to learn to teach very differently, facilitating conversation and enthusiasm among employees.

Finally, corporate trainers will be responsible for a new kind of assessment, one that requires their involvement in observation, rather than simply grading paper-based tests. They will need to reorganize their time, focusing on the process of learning rather than rushing employees through surface knowledge they are likely to forget.

In the future, the following steps will be followed in the design and delivery of new learning workshops. The same team of people should be involved in all these steps.

1. Study current practices using videos, surveys, etc.
2. Involve employees in analysis of data.
3. Design with the employees methods for teaching new practices in the future.
4. Develop a prototype and test with an experimental group.
5. Assess the results if the prototype, again involving employees.
6. Refine the design and the material as appropriate.
7. Train all employees that need training with final design and material using trained employees as mentors.