Case Study #1:
A Business Re-design

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Learning Problem:

The learning problem involves two components.

- The Learning Case: The Corporate Training Organization must transition employees from functional specialists, familiar with one aspect, sales, service or accounting, to that of generalists, able to identify and solve various problems.
- The Business Case: The Corporate Training Organization must reorganize to efficiently design, develop, and deliver an integrated learning plan that will create a work environment that supports the reengineered telephone service concept of a “one face to the customer, one-stop shopping” operation.

Proposed solution:

While designing a new training program and a changed learning environment, we considered the objectives of the company, employees, and customers. We knew—through personal experience, researching the CasePoint software, and viewing the video clips—that even the most well intended programs and guides can be misused or under used by employees. The ultimate choice of whether to use a program resides with the service provider. In this case, the service provider is the call center representative. In creating our design, we kept this in mind—the service provider chooses whether to use or not to use the system each and every time the phone rings.

The goal of our proposed solution is for employees to create mental models, learn sequences, and interact with one another to increase productivity, employee satisfaction, and ultimately improve customer satisfaction. We wanted to create a program and environment that would optimize Seville providers' performance. At the same time, these changes would incorporate the objectives of the company, employee, and customer to fully utilize available technologies.

Company objectives:

- Reduce company costs by increasing phone call solves to limit field service calls, which are more costly than phone solves.
- Create employee generalists rather than specialists
- Train employees for 15 weeks (shorter time than previous)
- Business to occur while training
Employee objectives:
• Prevent disgruntled customers (to increase customer satisfaction and retention of business)
• Feel successful by solving problems in all three specialties (sales, service, accounting)
• Receive rewards (monetary, promotion)
• Have ownership in their work
• Be informed of current company policy
• Have rapid access to a variety of materials and resources

Customer objectives:
• Have problem solved quickly, inexpensively, and easily
• Feel validated

Available Technologies:
• Phones
• Computer software and hardware
• White boards
• Bulletin boards
• Pens
• Paper
• Electronic or paper notebooks

Training:
In our design of the training environment, we must carefully consider the desires and constraints of the company, the employees, and the customers. The company has specified that training will occur in 15 weeks and there will be a transformation of specialists to generalists. The employees will need to be trained in areas other than those they are familiar with, to include sales, services, and accounting. These employees will then be expected to use what they have learned to help customers solve their problems. CasePoint is the technology that is currently being used by the company. Employees' actual use of CasePoint depends on their comfort level of navigating CasePoint.

Pre-test
We recommend that employees begin the training process with a pretest, in order to determine the strengths and weaknesses of each employee. The areas we will assess include sales, services, accounting, using CasePoint, and providing customer service. This pretest will help individualize training and target specific weaknesses. It is our intention that those individuals who demonstrate mastery will not require additional
training, saving the company money and the individual time. In addition, knowing employees' strengths and weaknesses will help the organization of the workspaces and teams.

Our training will progress from directed instruction to guided instruction then to independent practice. Those employees who demonstrate adequate expertise in an area can enter the instruction process at the independent practice stage, whereas a novice would need to begin with the directed instruction. The pretest should include a simulated call, with a common problem, in an area outside the expertise of the employee. This call should be recorded and reviewed with the employee before training begins.

**Curriculum:**
- sales
- services
- accounting
- using CasePoint
- customer relations
- troubleshooting multimedia issues (paper, media)

*Training platforms:*
The training will take place online, in conference rooms, and on the job, with a partner. The corporate classroom model is an effective way to instruct but also very slow (Whalen & Whalen, 1997). The material can be presented in multiple formats to accelerate the training process. Also, this multi-modal approach caters to all types of learners.

Ongoing assessment will be incorporated into all of these training platforms. Before employees go onto the floor and take calls themselves, they should be able to demonstrate skill improvement. A simulation will be performed at the beginning of the training, during, and after. The trainer will discuss these experiences with the employee and provide feedback. The trainer will electronically track the training schedule of the employee.

**Online Training:**
A series of modules will be created to encompass the curriculum. The format of the modules would provide directed, guided, and independent practice. Quick tests could be incorporated to check understanding. These modules will ideally be housed on a server. A benefit of housing the curriculum on the server is that changes can easily be made to the
curriculum. Based on the pretest results, the employees will be informed which modules need to be completed by a specified date. In developing online training, we are trying to reduce costly classroom teaching and employee training time.

Online training is easier to track. The employee and manager can view incomplete and complete modules. The online environment will also be more flexible for the employee, to start and finish as needed. This online environment will reduce schedule conflicts that occur during scheduled meeting times. With online training, the business demands can still be met because employees will be training at individually determined times.

Conference Room Training:
Conference Room Training provides human interaction, which indirectly builds social communication skills. These skills will transfer to their job requirement of interacting with customers. The workshops will be limited to the curriculum topics and to employees that needed work in that area. The information presented would augment the online curriculum. All employees must attend one workshop on implementation. This workshop will include the following topics: usability of new workspace, incentive plan, and general troubleshooting tips such as "What to do when CasePoint freezes?" or "What to do with an irate/incomprehensible/confused customer?"

Partner Training:
On the job training will provide employees an authentic learning experience. We will make use of the apprenticeship model by pairing employees of various specializations. However, this pairing may not always be possible depending on the set of skills at the different workplaces.

Training Schedule:

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<tr>
<th>Weeks 1-5</th>
<th>Curriculum</th>
<th>Training platform</th>
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<tbody>
<tr>
<td></td>
<td><strong>Directed Instruction</strong></td>
<td>• Pretest (to determine strengths and weaknesses).</td>
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<tr>
<td></td>
<td>• Individualized course of studies developed.</td>
<td>• Online</td>
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<td></td>
<td>• Content instruction</td>
<td>• Conference room</td>
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<td>Weeks 6-10</td>
<td><strong>Guided Instruction</strong></td>
<td>• on-the-floor</td>
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<td></td>
<td>• Role-play customer and call representative in</td>
<td>• Online</td>
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<td>• Conference room</td>
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simulations of difficult calls
• Training employee on floor with experienced partner who is taking phone calls. Trainee listens to conversation and inputs information onto CasePoint
• On-going assessment, training program monitored

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<tr>
<th>Weeks 11-15</th>
<th>Independent Instruction</th>
<th>on-the-floor Online Conference room Post-test</th>
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<tbody>
<tr>
<td>• Trainees work with partner. This time the partner is hands-off, trainee is hands-on. Training manager monitors progress and ensures trainee is following training plan.</td>
<td>• On-going assessment, training program assessed</td>
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Re-organization of the Corporate Training Organization:

The Corporate Training Organization is currently organized into functional divisions. These divisions are Requirements gathering, Curriculum Design, Curriculum Development, and Delivery of training materials to the employees. The current structure of labor is time-consuming, costly, and unrealistic given the parameters of this learning problem. Since our proposed solution involves integrating learning with actual work, it is necessary to re-organize the division of the Corporate Training Organization to suit.

We propose that a redistribution of responsibilities be implemented. To parallel the apprenticeship model and collaborative learning behaviors between fellow employees, we propose creating a team of training managers who are proficient in all functional divisions to serve as a pilot Training Corporate Organization. The five training managers will devise a needs assessment test to be completed by all employees within the pilot. While still in the requirements gathering phase, the training managers will survey current customers to better understand common problems, both technical and customer service related. After evaluating the data, the training team will be able to design a curriculum that meets the needs of both the employee and the customer. The content will include training on
customer relation skills and etiquette, CasePoint, sales, accounting, and service.

The delivery of our suggested curriculum will involve the solutions outlined throughout this proposal. The difference in this model is that the delivery of the content is continuous and integrated into daily work practices. One training team member will work closely with ten employees overseeing their entire training process. The training manager, who also works on the floor when time permits, will serve as an apprentice for ten employees. This manager will be responsible for coordinating these employees’ training schedule, monitoring to make sure designated modules are completed on time, conducting role-plays, actively giving feedback, modeling, observing, and evaluating. In this way, a training manager will come to learn very well the strengths and weaknesses of his/her ten employees and be able to individualize ongoing training.

The success of a training manager will depend on the skills and improvement of his/her ten employees. This recognition structure will provide incentive for training managers to thoroughly develop their group of employees. In this way, the employees will benefit by gaining a larger set of skills. The customer will benefit by receiving quality service and, in turn, the corporation will benefit by increased revenues.

**Design of Environment:**

To support a customer call center generalist, it is necessary to create a work environment that reflects and promotes these new skills. As evidenced from the video clip of Sheila, no immediate communication occurred between her and the colleague sitting beside her. This lack of immediate communication had several consequences. First, the customer was placed on hold for an uncomfortable amount of time. Secondly, Sheila had to leave her workspace to get an answer for a rather ordinary request.

A necessary skill of call center employees is to be able to successfully interact with customers. Call center employees must maintain the flow of conversation, the legitimacy and dignity of customers and problem solve on the spot. The goal of our environment design is to encourage the transfer of these interaction skills to fellow employees. The story of Trish and Carlos highlights how peer knowledge and interaction can be both beneficial and efficient. “Their story showed... how relatively new
employees could acquire the knowledge efficiently by learning from their peers" (Whalen & Whalen, 1997).

To encourage collaboration and reciprocal teaching, we propose the following physical arrangement of call center employee workspaces.

Four employees will be at each circular table. A circular table creates no divisions or separations, which promotes interaction. Each will have two computer screens, one with CasePoint continually active, the other with alternate resources, databases, information, and notepads. These electronic resources will be rapidly accessible thus limiting the amount of paper used. Call center employees will be able to adapt on-line documents, based on their preferences, to increase the speed of information retrieval. Electronic documents can quickly and easily be updated thus solving many problems similar to Sheila’s, not remembering the fee for after hour service.

Each call center employee will have a white erase board pullout section of their workspace. This space will allow them to write down quick notes and ideas while conversing with a customer. Given a white erase board’s lack of permanency, a call center employee will need to utilize the computer more to record information. This design feature coupled with a second computer screen (with flexible resources) will satisfy many of the call center employee’s reasons for continuous paper use. Paper use proved to be an obstacle for the company. There were problems with lost data.

The white erase board can also serve as a tool for reciprocal teaching and a medium for peer interaction. For instance, if a call center employee needed help understanding the appropriate steps to resolve a paper jam he/she could ask the colleague sitting at the table. The colleague could
then use his/her white erase board to visually depict the problem and the steps to solve the problem. This visual mapping of the procedures could help call center employees build mental models of common problems. As seen in the video clip of Carlos, he clearly had a mental model of the problem at hand and thus was able to efficiently remedy the problem.

In terms of designating workspaces, we propose an experiment be conducted with three types of users. On x number of tables we would position an expert with novices. On the same number of tables we would position all experts. Finally, on the same number of tables we would position all novices. By observing the interactions and productivity of each set of tables, we will be able to determine which combination proves most successful. One can speculate that on the expert/novice tables, an apprenticeship model will occur. The experts will impart a significant amount of knowledge to the novices, increasing their productivity. Or one can speculate that the novices will be intimidated and deter from actively asking questions of the experts. Certainly, there may not be enough experts or novices to accommodate our arrangement. Based on the findings we will designate positioning accordingly.

Not only are we proposing a re-design of call center employee workspaces but also a remodeling of the entire environment. Various models of copiers need to be available in the room so that call center employees can refer to the actual machine when talking to a customer or peer. Procedural diagrams need to be visible to reinforce mental models. Checking bulletin boards needs to be incorporated into a call center employee’s daily routine. To promote cross-team collaboration, we suggest weekly meetings in which teams share their most successful and most difficult calls. This open forum of communication will hopefully create a community of learners and problem-solvers. In this way, communication and interaction will improve, triggering an improvement of productivity, customer, and employee satisfaction.

Assessment:

To provide comprehensive assessment we will employ formative and summative evaluations.

Formative evaluations:
To determine the extent to which our tools are effective, we need to measure employee use of our tools. We will observe and survey employees on their work practices. If we find that our tools are not being
used in ways we anticipated, then during an iteration we will incorporate these findings.

To assess the effectiveness of the new curriculum and delivery, every six months we will conduct skill assessments of pilot employees. We will compare their skills to the pre-test results to measure how much progress has been made. We will also have employees evaluate their training managers to provide any positive and constructive feedback.

**Summative evaluations:**
After a designated amount of time, we will evaluate whether the objectives of the company, employee, and customer were achieved.

**Company:**
- Reduction of the number of field service calls would determine whether the design was effective. This could be determined by tracking the number of phone calls and service calls and comparing these results to previous records.
- Reduction of employee turnover. Hiring new employees is costly. This could be determined through comparison of before and after implementation of new design.
- Building business. Maintaining existing clients and obtaining new clients through references.

**Employee:**
- Feelings of competence and dignity (through surveys and observations).
- Actual help to customer (through customer feedback and reduction in service calls).
- Improved confidence in problem-solving skills.

**Customer:**
- customer satisfaction (ask customers, customer longevity)

To further encourage teamwork, we propose evaluating performance based on both team productivity and individual productivity. By including an evaluation of the team’s output, team members will be more motivated to educate and serve as apprentices for others. Assessing individual productivity will hold each team member accountable for contributing to the team. A team will include the four call center employees of each table. The team will be responsible for achieving a collective benchmark of ‘solves’ and will be recognized when accomplished.
**Conclusion:**

In this redesign, we promote changes that affect the organization and philosophies of the company. We focus on the interaction between the employee and customer within a workplace so that knowledge is to be constructed by both the customer and the employee. In this way, we are trying to create "successful" employees and customers. To do this, we are essentially asking management and administrators to consider and rethink how they define successful learning.

**References:**

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<th></th>
<th>Behaviorist</th>
<th>Cognitive</th>
<th>Situative</th>
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<tbody>
<tr>
<td><strong>Training</strong></td>
<td>• Repeated practice in multiple formats</td>
<td>• Apprenticeship model</td>
<td>• Real life situations</td>
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<tr>
<td></td>
<td>• Expert modeling</td>
<td>• Conceptual framework</td>
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<td></td>
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<td>(directed, guided, independent)</td>
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<tr>
<td></td>
<td></td>
<td>• Simulations</td>
<td></td>
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<tr>
<td><strong>Work environment</strong></td>
<td>• Utilizing CasePoint (sequential)</td>
<td>• Copiers available= authentic</td>
<td>• Physical lay-out promotes community interaction</td>
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<td></td>
<td></td>
<td>• Tools in workspace help employee’s create mental models</td>
<td>• Encourages apprenticeship model</td>
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<td></td>
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<td>• Weekly meetings promote collaboration</td>
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<td><strong>Evaluation</strong></td>
<td>• On-going feedback</td>
<td>• Assess individual number of solves</td>
<td>• Assess team’s collective number of solves</td>
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<td></td>
<td>• Rewards: monetary, promotion</td>
<td>• Simulations</td>
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