Task Analysis: Lesson Outline

Your name: Ryan Lang

Instructional Solution: IT Ticketing System Process

This project is an IT Ticketing System Process Design to better provide feedback, and input on issues reported by employees. Along with this we were tasked with cutting down the time it takes to solve an issue. This project I partnered up with the Operations team to take a look at the IT Ticketing System Process, and response division. The "problem" we were tasked with looking into was how the ticketing system was designed, responses to ticket requests, and how the ticketing was handled by the IT Department. We were not changing any of the job duties of the IT Employee, but rather changing what "person" or group would handle various tickets based on their immediacy of response. Since the company is ultimately an "umbrella" company, there are several "companies" that fall under one. We were tasked with bringing the various departments together as one, and be able to improve on the Ticketing Systems, feedback and response. The purpose of the project was to design a process that can be plug and play within each division of the company. The internet of the overall project is for the IT Department to be able to provide faster, more efficient feedback to employees who have technical, and mechanical issues with regards to their company equipment.

With regards to technical issues, it is important to understand that some issues are more difficult to solve than others. For example, a simple password reset or software update would be easier to solve than a component within the computer is not performing as it should, or the operating system had a critical failure which renders the device inoperable. With that in mind we set out to design a more appropriate Process for the system for IT to help solve these issues. The participants for the redesign of the system were a handful of the IT Managers within a few divisions of one side of the company. We took their input based on their current setup, and issues they face on a day to day basis to better help us design the system they will ultimately be using. The intended change we are looking to accomplish is a faster, more efficient IT Ticketing System Process, and better feedback for the employees, so they can better perform at their respective jobs.

Some of the changes, but very few were made were on the technical front, but most of the design is a process to rank the IT Tickets coming in so the tickets could get the respective IT Personal. We worked with the managers to discuss the design of their team, which members of the team may have specialty knowledge in certain areas of IT Solutions. Having this understanding we could separate some of the team into groups, allowing those with more advanced, or specialty knowledge on one or another area of IT to better support the Tickets coming in, and ultimately speeding up response times. In reference to the above mentioned, the target learners would be the IT Department within the various divisions of the company. Being that each division of the "umbrella" company has their own IT department, it would be introduced to each division's department separately.

The characteristics of the learners for this program are those with an IT background, looking to advance and further their IT Career. Whether they have a Degree from a University or just IT Certifications in the field, this would pertain to all of them; as well as those IT Employees of all ages, being able to better support their fellow employees is something they all strive to achieve. Some of the typical learning style for IT is a hands on approach as much of what this Program offers is done from hands on experience.

This Program is designed to be a Process to better the effectiveness of the IT department when handling IT Tickets, solving other problems within their area of expertise; as well as, meeting the needs of their superiors. They want to make sure that the response time on tickets is no longer than 1.5 Days. If they were for example at 2.5 Days, they are behind schedule and not performing as they

should. This was the main portion of what I was tased to design when looking for a process to speed this up. After speaking with some of the Directors, and COO's of the various divisions we learned what they were looking to achieve from a redesign of the IT Ticketing System. Based on some experience I had working a previous position I held, I have worked with other IT Departments and spoken in depth with them regarding their systems. Efficiency, and effectiveness were always two characteristics that stuck out as part of what various IT

## **Learning Tasks**

The main task we were looking to achieve with this redesign of this program was to have the IT Department learn a newer more effective and efficient Ticketing System Process. We were not looking to change the technical system in which each department is using, but rather a "process" that each department can use to better handle tickets as they come in, and be able to provide a better user experience for the employees.

## In Depth Analysis of Chart

When looking at this idea from an external perspective, we are NOT changing the IT Tickets, what the IT Employees do, but HOW they go about solving a particular issue. Simple issues are solved rather quickly, those are for example, password resets, these do not take long to solve from a technical standpoint, and we did not change how they do that. For instance, if there is a team of 5 IT Members - We did not have each member of the team receiving tickets from an "equal perspective," but rather we sent ALL password resets (Simple Problem) to one or two members of the team. Another member of the team would work on Hardware Failure (Complex Tickets) as these are typically fewer, but take more energy, time and resources to solve the problem.

Being that the main task was to speed up response times and effectiveness of the response times we wanted to design a process in which a small team of IT Employee (Team of 5), could quickly and effectively solve the issues that came in on a daily basis. For example we will use the above mentioned 1.5 Days as the ideal time to solve the tickets. In this example the team was at 2.5/2.75 days out. Which the parent company deemed as too far out and employees could not preform their daily tasks if they were 2.5 days behind. Task and objectives below on how the team was to better handle the tickets.

- OBJECTIVE 1 Manager is to "Round-Robin" (Simple) incoming IT Tickets to teams/individuals assigned to type of IT Ticket solution.
  - TASK 1 Team/Individual to analyze incoming ticket and decide best way to "reply."
    - SUBTASK 1 (i.e.) Password Reset. In order to complete this task the IT Manager would "remote" in using the proprietary software that allows the Manager to "See" what the employee sees. He would show the employee how to go through the steps to rest his/her password.
- OBJECTIVE 2 Manager is to "Round-Robin" (Complex) incoming IT Tickets to teams/individuals assigned to type of IT Ticket solution.
  - SUBTASK 1 (i.e.) Hardware Failure in Laptop If computer will not turn on, employee will get a phone call from IT Manager. The IT Manager will "walk" an employee through a few ways to test and see if the machine can be reset. (Take Battery Out/Hidden Factory Reset Button) If this fails move on to ST2.
    - SUB TASK 2 Manager will order a new computer which will be sent to the Employee's house or office depending on where the employee is working out of.

- SUB TASK 3 (After New Computer Arrives) Once the Employee receives the new Lap the employee would call the IT Manager assigned to the IT Ticket. The IT Manager would walk the Employee through the steps to set up his/her new laptop.
- SUB TASK 4 Once setup is finished, the IT Manager will answer any
  questions about the new Laptop and how the employee can work as they did
  similar to their old machine.

## Sequence of Lesson Outline

For my instruction solution it is using a few combinations of the strategies for sequencing. More specifically it is using two main sequences being - Topical Sequencing and Sequencing on Intellectual Skills. This two fit in line most with the desired outcome, and the most logical solution to make sure the learners are most successful. Topical fits in here because we are specifically targeting the various tasks that will come in for the IT Ticketing System.

Along with this there is Cognitive Sequencing in this instructional process. As we are utilizing the current IT Department and their employees that are already working with the IT Ticketing Systems, which we are looking to overhaul the process in which the employees are utilizing.

Spiral Sequencing strategy does not apply much here since it focuses more so on learning a topic and task pair, and so on and so forth. This is not the best practice for this particular instruction as we are not moving from task to task while learning a topic. Since there is an overall process we are looking to achieve it follows more along the Topical Sequence, and we can better align with the overall organization we are looking to achieve.