INSTRUCTIONAL SYSTEMS DESIGN

SONJA HOWELL

Introduction

Instructional design is used in various fields, not only the usual arena of k-12 education as people may think about and requires a combination of unique professional qualifications. International Board of Standards for Training Performance and Instruction (2014).

It plays an important role in assessment as the first step to find the problem, what it effects, who and how it affects them. Rothwell (2016) Planning includes creating consistent instruction for staff, even the new hires and possibly across the entire organization, if possible. The goal is to design a curriculum specifically to lessen the gap between desired and actual outcomes creating and achieving learning objectives and standards put in place during the actions implemented by the administration and instructional designer through the process.

HUMAN PERFORMANCE

Summary of Needs Assessment Concepts

A needs assessment is to make sure the correct instruction, training or possibly a different need would satisfy the desired outcomes. When an outcome is not being met a systematic assessment approach will identify the needs. The steps that are involved in conducting a human performance needs assessment begin with reviewing individual's performances, work-group performances, and organizational performances. The factors of job context, motivation, knowledge, skills, attitudes, abilities, aptitude structure, leadership, cohesiveness, roles, norms, status, environment, structure, technology, strategy and culture are all aspects of the assessment and are important to outlining and creating a design in order to accomplish adjustments.

The System Being Assessed

The organization Ortiz Cleaning Services, Inc. in the business sector will be assessed in

this project. The system is compiled of a family who wants to help mostly young males who most likely did not have an intact family while in their youth leaving them struggling as a child not learning skills needed in the competitive world. The mission is to grow the organization and train these young men and women in soft skills as well as teach them a respectable trade. The company is two years old currently and will like to move towards non-profit 501(c)3 status. The plan is to hire the staff and make the company known for helping train staff and move them out into the workforce better than when they came in.

There are two key strategic and operational goals of the organization. The first one being to train staff for 3 years and provide a stable reference. While doing so, the goal is to provide help the staff assistance for GDE completion and driver's license. The second goal is to provide janitorial services as well as floor finishing with integrity that does not compare, well over the average competency.

Currently there are discrepancies between what is wanted and what should be? There are human performance issues or problems in this organization that we are already aware of and would like to resolve through educational programming.

The Comprehensive Model of Human Performance in Organizations is used to assist in determining key factors that could be influenced.

Individual Performance areas in need of assessment are as follows, motivation, knowledge, skills, attitude, and possibly aptitude. Work-group performance issues may involve; leadership especially in the communication area, cohesiveness, status, and what staff believe are the norms. In the organization performance fields; the outside environments for each staff and the emergency situations that may arise from the current COVID 19 epidemic, strategy and the cash-cow contract they work with instead of infusing many different contractors and finally the culture needing to pull together for everyone to know what the common goals are.

Currently there are a lot of where the company should be and where it is. During the epidemic, the company went from 16 locations to 1. A lot of staff are now gone and they require to build themselves back up quickly to continue, but not as they were before, better.

The key stakeholders are the President, Vice President and Director as well as the board members who will help define objectives and select methods throughout the process. I am able to use this company in which I am the director of, without disclosing staff names.

Factors Affecting Performance

The main factors leading to the needs for assessment affecting human performance is environmental, attitudes, possibly aptitude and culture.

After considering the factors identified in **Table 1.1 Factors Affecting Performance** (Rothwell, 2016) the following factors that apply to the Ortiz Company's assessment needs more in depth.

Individual Performance. Motivation is down. People do want to perform due to high conflict. There is a lot of stress from personal conflicts. One staff wants to leave the company as move to a different city but cannot because employment is not available at this time. Some staff do not have the knowledge in the finance section of their responsibilities and after two years, they are still confused. New staff need to be trained completely and the turnaround is high. Many staff do not have the soft skills required in the service field. The attitude of some staff is more than unprofessional and yelling does occur, and aptitude could be an issue, if it's not aptitude, it may be because they don't want change or at lease they don't see the benefit.

Job context is not an issue. Everyone has the tools they need and are trained well. Abilities has been proven competent.

Work Group Performance. Issues here may involve; leadership especially in the communication area due to lack of sharing consistently. Decisions are made and not shared with

everyone and does not include all of the shareholders when made. The budget is not reviewed by everyone and different budgets are not separated correctly, due to the persons doing the budget not knowing how, but claiming they do. A younger staff claims she can learn and text because she is a multitasker. There is nothing cohesiveness about this organization at this time. The lack of finances and contracts has pulled everyone away from "All for one, one for all", to all for themselves. Status is a mix of a mess. Everyone is a no it all. Some staff are favoring each other and becoming "clicky", What staff believe are the norms are not being agreed upon depending upon the clicks. One click says each budget should have a certain percentage pulled for a paycheck and the other set says a different percentage. A lot of comments of, "Well you knew we always" as the other states, "No, that percentage was while we were in emergency mode only."

The areas where the company is well in this section are in structure, but not consistently. More so than not. Luckily the staff know their roles yet forget a small percentage of the time for some tasks. The staff are overworked and tires. More staff might eliminate this.

Organizational Performance. The difficulty of losing many contracts and one time due to the environment in which we live today where so many of our staff have been let go, there are more issues loaded on top of the staff that were already in survivor mode. We made a promise to the mission to employ and train for three years. Unfortunate, that goal was cut short for us. Strategy is an issue each time we add a contractor, the administration decides they don't approve of the addition instead of reviewing all that is needed prior to the contract being signed. A lot of frustration and time wasted. We learned during the order for only essential businesses performing, that we needed more contracts to supplement our staff and incomes. Not having a competitive strategy hurt the growth of the company by ¾ of the efforts completed. The culture did have weekly office meetings and even monthly meetings but were eliminated due to staff

being so tired and overworked because of the contract cuts. The company is now down to a

skeleton crew. There are no staff to train and go through the program.

Data Collection

The data sources and methods of data collection will be the mission statement and board

books as well as the strategic plans and annual reports.

Ortiz was able to stay afloat, but lost contract and employees that will not return due to

the epidemic hurting the mission to grow services. The board meetings were put on hold.

Strategic plans were put in ruins. The annual report predictions were cut by over half. All of the

goals will need to be reviewed and recreated.

1. Goal: Growth with different contracts

    Actual: Got smaller and only have one contractor

2. Mission: To help as many people as possible gain and retain employment.

    Actual: We helped as many people as possible due to circumstances

3. Strategic Plan: Gain one large contract per year for Janitorial Services.

    Increase charge for refinishing services.

    Actual: Still only one contract (lost 2)

4. Annual report predictions: Over $250,000

    Actual: $180,000

Table 1. Data Resources List

Goal: To reconvene and make the company what it was before Covid 19, but larger and better.
Concern: How to repair the crew that is left from the pain we just went through.

What is Known		Data to Gather	
The company will not survive if we continue without repair, including the budget. Largest key might be the culture factor.		Opinions from current small amount of staff of what worked well before, what did not and their suggestions for change.	
Facts	Sources	Facts	Sources
1. Stress from COVID 19	Word of mouth	6. Financial goals are not agreed upon by everyone	Annual Report
2. Finances are important to everyone	Observation	7. Procedures are not followed and altered by the norms	Safety procedures and task procedures
3. Some staff want to leave	Staff		
4. Attitudes must change	Staff		
5. Procedure and policies are not taking place	Databases are behind and communication is not happening	8. Employment sequence is not followed	Employee chart

Source: Altschuld, J. W. & Eastmond, J. (2010). Some initial phase 1 needs assessment activities. In Needs Assessment kit 2: Needs assessment phase I: Getting started (pp. 37-68). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781452230573.n3

Needs Assessment from a Systems Approach:

This needs assessment from a systems approach is the first step in analysis and represents the first three steps of conducting a needs assessment. These steps are shown in Figure 2.1 A Model of Steps in the Instructional Design Process (Rothwell, 2016).

With this process, we should be able to identify perceptions and needs of administration, understand the learning or performance issues, explain causes of issues, identify possible solutions, complete a report for improvement. (Rothwell, 2016). Instructional designers now must take Characteristics of the learners also known as the characteristics of Learners, Work

setting. The work environment or culture and Job/task performance Skill or knowledge

deficiencies into consideration when assessing performances. (Rothwell, 2016)

Data Analysis Report for Ortiz Cleaning Services Inc.

      Characteristics of the learners needs to be known by asking, "Who is the intended

learner". (Rothwell, 2016 pg. 62) What stages of life are they in, what life problems do they have

and what beliefs are they holding onto also determine staff characteristics.

1. Early adulthood 18-30

2. Middle adulthood 30-65

3. Later adulthood 65 and over

Career stages could also influence characters, apprentice, colleague, mentor, and sponsor.

(Rothwell, 2016. pg 70)

      The company is comprised of two of the life stages, early adulthood, and middle

adulthood with all four career stages.

      Work setting. The work environment or culture. Questions to ask could be: (1) What

business are we in, and how does instruction contribute to that? (2) How is the work divided up,

and how does division of labor affect instruction? (3) Do all needed tasks have incentives, and

what incentives exist for participating in—and applying—instruction? (4) Does the organization

possess coordinating technologies, and does the instruction being designed also possess

coordinating technologies? (5) How is conflict among people and technologies managed, and

how is such conflict addressed in instruction? (6) How are these issues kept in balance in the

organization, and what part does instruction play in maintaining that balance? (Rothwell, 2016.

Pg. 79)

The Ortiz Cleaning Services, Inc. is in the janitorial services business, with a high turn around, each new staff needs training often as the tasks change every day even when most of the tasks are repeated routinely, daily. There are 5 main positions/responsibilities that may alter depending on who is scheduled to work. 3 of the positions are cross trained. The janitorial services tasks and floor refinishing responsibilities are trained on the job. Office tasks are trained as needed or required. All tasks have the incentive of monetary gain and advancement, yet there are no other incentives. All technology is provided. The clock-in system was updated so each staff may have their own individual clock-in application downloaded to their phones with GPS to halt the need to babysit when and if they clocked in as well as missed punches just as teachers used the concept of having each student have interactive responses systems by all learners at the same time. Gagne. (1987) This cut down some, but we still must babysit the clock-ins each night. There are missing punches at least one night every other week.

Sometimes a piece of machinery goes down, but it's repaired within a week and we have replacements. Sometimes we are out of propane, which is replaced every Wednesday. Conflict is ignored with staff and seen as drama that is passed from one person to the next griping about tasks not done as good as other's completing them instead of teaching relevance of importance. Example: If one staff cleans carpets as requested by a customer, another Ortiz staff may complain that the same person who took on the task of cleaning carpets skipped another from buffing enough of the store. Other employees may call administration secretly and begin a frustrating conversation trapping them into arguments and only shares the moment when the trapped employee explodes. This seems to be acceptable as well as other comparative stories. Once large barrier is the language barrier of English and Spanish. Some are able to translate, yet they only share what they want to, leading to mistrust. The issues are ignored, there is no instruction and forgot as soon as everyone clocks out and then discussed over dinner. One staff

decided she would like to work one less day a week due to illness, her pay was cut but no one told her. She assumed she would get paid the same.

Job/task performance Skill or knowledge deficiencies should be measured, and instruction provided using Job Performance Aids that (1) Can be accessed and used in real time (employed during actual performance of the task); (2) Provides signals to the performer when to perform the task or increments of the task (stimuli); (3) Provides sufficient direction on how to perform each task (responses); and (4) Reduces the quantity and/or time the information may be recalled (reduces access of memory) (Rothwell, 2016. Pg. 176)

Ortiz task performance is not measured but recognized to put the right person in the right places even if emergencies happen most are cross trained. During training and on the job anyone will be told how well they are doing, but nothing is documented. Staff are trained well in a routine, cross trained and directed differently with signals if need be. As the employee gains experience, and if they can retain or interested in continuing the position, they mostly gain knowledge and grow. Some staff are stuck only knowing what they know and do not want to grow. Some do not even want to work with us yet are stuck in the job not able to move.

I find the need to determine or pre-identify staff's interest in growth and learning prior to attempting to train. I predict the instruction will not be beneficial no matter how well the training is performed if they do not care just as other studies show personal characteristics can determine effectiveness of instruction. Celestin and Yunfei (2018) found that a teacher's personal characteristics (learning readiness, personal transfer efficacy, motivation to transfer, personal capacity and perceived content validity) at the pre-training stage are significant predictors of transfer effort performance expectancy at the post-training stage. (Celestin and Yunfei 2018 pg. 256) This study can help training practitioners and managers to enhance learner characteristics prior to training with a view to increasing training transfer, teacher's personal characteristics at

the pre-training stage are predictors of transfer effort performance expectancy. This suggests a need for teachers' professional development in cloud computing to plan beyond the training design and content. Instead, prepare teachers before training in terms of how cloud computing will affect their teaching performance, what to expect from cloud computing and what are the prerequisite requirements for learning cloud computing. (Celestin and Yunfei 2018 pg. 270)A work model could be given to the staff, new hires/learner, giving the learner an opportunity to perform that work (independently). Gagne. (1987) Our contractor has a list which is barely ever used. The list is a checklist, yet it is not defined for the 3 positions for janitor services. The contracts state specifically and were signed by each staff, but the daughter signed the contracts for the parents, and no one took them seriously or even used the tasks lists that I created. It was ignored and laughed at. This same daughter has chosen if and when she choses to pay back her advanced loans from the company and if she has to do the tasks assigned to her with the comment that she remembers everything and can learn and text at the same time. Later she says I never showed her or never gave her direction. Learners need to practice, at first slowly and with errors, the tasks that masters perform with skill and effectiveness. Learners need to have feedback on their performances so that they can correct them as rapidly as possible. For this reason, the existence of an apprentice system persisted during the Middle Ages in the guilds and continues to this day in any number of fields. Gagne. (1987) If redirection is never given, responsibility was never taken, the staff will never learn.

Definition of Key Terms:

Individual Performance, the performance of each individual person

Work Group Performance, the measurement of the performance of the culture

Organizational Performance, performance of organization

Characteristics of the learners, also known as the characteristics of Learners

Work setting, The work environment or culture

Job/task performance, Skill, or knowledge deficiencies

Instructional Content

Goals are sometimes conceived as objectives reflecting human performance, and sometimes as learning outcomes implying the acquired capabilities for those performances. In either sense, the goals which are projected to result from learning are presumed to be the starting point of the process of instructional design. (Gagné and Merrill, 1990, p2). The goal of instruction for the Ortiz Cleaning Services, Inc. is the beginning of this process of making the company a self-reliant leader of its sector.

The main staff of the company came directly from the workforce thrown into leading positions after their employer cut staff three years ago and opened production to contract opportunities only. These workers continue to respond like employees and do not know how to perform like leaders of their own company. Their capabilities after 3 years are yet to be determined but are expected to have already acquired great leadership skills with no experience or training.

Making a sequence of events or a process evident to other people by "showing" constitutes the enterprise called manifesting. (Gagné and Merrill, 1990, p7). Manifesting or showing by example so the learners may learn how to perform by observing has not worked. Just the opposite has happened. The person they were planned to observe fell backwards into employee mode and began to respond less professional.

The new plan of instruction will be using the discovering schema. The discovering schema includes a number of intellectual skills (concepts, rules), as well as verbal scenarios

relating familiar entities to the goal of the enterprise (Gagné and Merrill, 1990, p7). The enterprise scenario of this schema is one that relates each component of knowledge and skill to the goal, and thus to the enterprise that embodies this goal. (Gagné and Merrill, 1990, p8). Prior to linking the discovering schema to the goal and the idea of transferring learning method patterns to the work environment, the path to the goal did not seem practical. This prior plan would have to include many details to stop what I would call petty behavior and calling out multiple small manipulative actions as negative behavior. The steps from analysis to outcome would have been vast and overwhelming with grand results of discipline for each individual nonproductive action. This sort of reprimanding is not in my nature as an instructor nor is it a mature path of instruction, leaving the goal unachievable.

It is this declarative knowledge that relates particular singular objectives that compose the expected behavior to the purposive activity that is the enterprise. (Gagné and Merrill, 1990, p8). This plan of instruction will assist in grouping certain performance activities to objectives, instruction with higher level learning outcomes linking them to the direct goal and finally exact outcomes.

Instructional Constraints

Current instructional constraints begin with the knowledge that administration/partners may not have the same goals, to grow or stay as they are. This can be solved with a vote.

The next constraint is the time constraint. Contracts are completed during third shift and all persons are very tired wanting to go home. Instruction may fall short just as meetings do. In order to satisfy the importance, meetings, training, salary paychecks dates and times can be concisely combined with breakfast immediately after work one day a month.

Administration is concerned only with immediate needs and personal financial gains not the longevity of the company. This can be solved by creating goals that are longstanding and measurable.

Finally, the toughest restraint is the language barrier. The change needed here is to find or create printed materials in concise written or pictorial forms in both the English and Spanish languages.

Learning Goals and Outcomes

The three objectives required to be a successful self-sufficient leader in their sector include a change of administrators from their current culture, move where they are now to critical thinking, practicing purposeful and self-regulatory judgment showing only intellectual behaviors during communications with contractors and staff.

Learning outcomes will include:

1. Company status: the staff no longer treated as employees only receiving contracts from one vendor that are available when and for the dollar amount given by this single company while being seen as respected professionals and competitors in the field with multiple contractors.

2. Operation changes: The outcomes will include a new path of production including a sales team to purposefully create a bottleneck protecting the administrators and staff from direct contact with the vendors allowing the process of bid wars and scheduling to be done in the office. The staff will no longer be "married" to a contract regional manager's agenda of another company, but to the best price for the job improving stability of the Ortiz company just as other like companies' practice.

3. Productivity changes: all activities will be meaningful and transparent.

The facts that income is down $20,000 in 2020 compared to 2019 due to the single contractor paying less for longer schedules and having less opportunities available during emergency situations is directly related to why the company needs to learn how to compete and bid for contracts and learn how to be seen as a leader in the industry, not just take what is offered or stay home. The pay being less per job and adding longer schedules has created an atmosphere that includes panic and instability, hence a distraction of less than normal integrity, less than perfect performance and working unbillable hours.

Terminal Performance Objectives. To determine the performance objectives as well as the subordinate and prerequisite skills and knowledge we will refer to Rothwell's Steps for converting results of task of content analysis into performance objectives Figure 8.1 for ways to classify tasks. First, instructional designers should establish purpose. Purpose means the primary reason for a planned instructional experience. There are typically four choices: (1) increasing learners' knowledge, (2) changing attitudes or feelings, (3) building skills, or (4) combining one or more of the other three choices. (Rothwell, 2016, p130)

The performance component of an objective describes how a learner will demonstrate proficiency. It is an activity or behavior to be learned during instruction and demonstrated afterward. (Rothwell, 2016, p135) Administrators will demonstrate proficiency taking the specific action of working through the new organizational procedures and not bypassing the steps.

Conditions may include essential or desirable situations in which performance is necessary. (Rothwell, 2016, p137) The administrators must have the new organization setup prior to being able to follow it. All assigned staff must be available during a set time of open hours for the processes to adhere to the new standards.

Performance Objectives:

1. Instructional purpose is to increase the learner's knowledge of leadership in business and change the attitude of the culture. Performance changes will determine the financial gain of the company as a whole. When the company grows with new common goals being achieved, the benefits will surpass prior years financial gains.

2. Learning tasks classifications will be to learn of comparable companies' organizational charts, goal processes, culture norms, bidding processes and professional soft skills.

3. Learning tasks analysis will be valued in weight of performance with practicum and transferred to the workplace once each person achieves satisfactory level comprehension levels. Modifications of the tasks may need to be made during the process as the analysis takes place.

Enabling Objectives. The objectives that will represent steps toward reaching the terminal and performance objectives will be determined considering the affective; levels of objectives in the affective domain, motor; levels of objectives in the psychomotor domain, and cognitive domains; levels of objectives in the cognitive domain (Rothwell and Kazanas, 2008, p178-80) exactly as they are to determine level of advancement of goals. Each of these domains reflect the lowest to highest measurements of understanding, competencies in actions. These objectives will be analyzed and compared prior to the instruction, during, immediately after and six months after training to insure continuous advancement of skills.

Measuring Success. Measuring the goals or objectives for these learner's opportunities will be determined by each individual meeting learner objectives compared to other organizational goals with standard generic companies' expectations of persons within the same positions.

1. The President of the company will follow the objectives of a president of comparing company.
2. The Vice President of the company will follow the objectives of a vice president of comparing company.
3. The Director of the company will follow the objectives of a president of comparing company.
4. The Office Manager of the company will follow the objectives of an office manager of comparing company.
5. The Project Staff of the company will follow the objectives of a project staff of comparing company.
6. The Janitorial Staff of the company will follow the objectives of a janitorial staff of comparing company.
7. Rolls may change at different times since each administrator plays two rolls within the company at any particular day as an administrator and as a worker. Defined rolls will be followed as needed.

Instructional Content

The content of instruction will be direct examples from other local comparative

organizations including: organizational charts, job descriptions, contracts, production paths,

organizational patterns, procedures, performance reviews, diagrams created to explain growth

projections and finally the creation of a practicum of contracts from the beginning stage to the

end stage of a project.

Instructional Sequencing

The sequencing that will work best for the context will need to be further determined

once the administrator's known abilities and prior knowledge are confirmed. Using the decision

tree found in Figure 8.5 (Rothwell, 2016, p140) has helped me also determine that the review of

motivation to learn should be researched also. I will determine sequencing more following

further assessment.

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Instructional Strategies and Tactics

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This section will describe how learning will best take place for the Ortiz Cleaning

Services Administration. The learning situations will include synchronous in person face-to-face

visual data sharing and discussion and asynchronous printouts prior to the lesson to be used for

review and something they can use to take notes and take with them for later use. The types of interactions will include lecture, reading, discussion, assessments, and activities. The staff will develop skills and competencies by reading, listening, interacting, practicing, ask/answer questions and getting feedback via conference call, webinar, e-mail, mobile device, web-placed courseware, instructor-led in person and online class, simulations and face to face council. The technologies that will best support these interactions will be the cellphone and laptop, projector, and screen. eLearning components being facilitated will include video tours of bank applications, quickbooks and online project management software. Blended learning, as its name implies, is a combination of technology- based and non-technology-based (instructor-led training) approaches to learning and performance. The concept encourages instructional designers to avoid the trap of believing that a single solution (e-learning) is always the best approach. (Rothwell, 2016)

The desired results for the training will be achieved by the staff learning the software and technology used mostly by simulation with video instruction and face-to-face collaboration. The learners can choose to learn material as it is relevant and not all at one time. The instructional strategies and tactics will maximize teaching and learning potentials while they learn to be independent and become leading business professionals. Mixed-methods research designs are likely to provide finer grained, more nuanced evidence-based understandings of the leadership roles and behaviors of principals who achieve and sustain educational outcomes in schools than single lens quantitative analyses, meta-analyses, or purely qualitative approaches. (Day, Gu, and Sammons, 2016). Any instructional strategy can achieve any performance objective. (Rothwell, 2016, p155) Instructional Strategies and Tactics (Rothwell, 2016) to help guide thinking and planning. A macro-instructional strategy is, on the one hand, an overall plan governing a discrete learning experience, such as a course or module. (Rothwell, 2016, p150) Macro-instructional strategies may be seen as the big picture. A micro-instructional strategy is a plan governing each

part of the learning experience, such as a unit or lesson within a course or module. (Rothwell, 2016, p151) An example would be smaller parts of the lesson, the little details that make up the whole.

Designing using instructional strategies (Jones, 2012) fostering critical thinking requires shifting from a teacher-centered classroom to a critical thinking--centered classroom. This involves relinquishing your role as the sole disseminator of knowledge and structuring lessons to allow for student inquiry, research, and collaboration. By providing students with inquiry-based, engaging, rigorous, real-world content and teaching them to monitor their own learning, we can create a generation of learners capable of solving the problems of the 21st century. So go ahead and ask your students, "What were you thinking?" Then, teach them how to answer.

Contextualizing instruction will be defined by relating the goals of instruction to the learner's needs. They will choose their own goals using graphs and diagrams of relevant content. Concepts will be cued during lesson content. Modeling appropriate behavior with flash cards with specific response phrases for specific situations with learning strategies for self-determining additional response options. Activating learner processing of instruction will happen when the learner relates questions to objectives and completes a fill in the blank type concept map as they complete the projects. Self-generated assessment during practice will allow learners to move forward or allow a repeat of materials. The lessons will be in the sequence of the job performances. While much attention has focused on using e-learning and blended learning in recent years, there is still room for less technologically dependent methods. (Rothwell, 2016, p149) In this instructional material, I believe the most effective will be role playing. I feel a mix of instructional types of content will be best, not just technology. Although technology is not always needed, self-assessments of skills and interests included instructors' beliefs that their technology skills were adequate, that technology was important for conducting their professional

work, that technology enhanced their self-image and was compatible with their work style, and that technology was easy to use. (Lattuca, Bergom, and Knight 2014).

To become competent professionals, students should work on both their strengths and weaknesses. Considering students' limited amount of time and energy to work on multiple subjects, it is important to know what determines their allocation of effort to their perceived relative strengths or weaknesses. (Silver, Kogut, & Huynh, 2019 Abstract). This is where finding the instructional type or style of instruction needs to be defined while looking at the learner's needs.

Project management for this instructional design project reminds us that Instructional design projects require more than project plans. They also require methods by which to foster daily, weekly, and ongoing collaboration and information sharing. (Rothwell, 2016, p339). I feel involving the staff who currently no more about the processes that will interweave with the goals will be valuable to the process. Allocating who knows what and who is best to contribute to the lesson's creations would be best organized using a project management tool. For example, I believe we should grow the company, but quickly reminded the technology used by staff cannot be used outside of the building. All equipment must stay in its current location. This is needed information and halted an entire direction of growth moving us into another direction. Collaboration is needed and I believe a tool to keep things organized, is required.

The absence of project management from instructional design curricula can be viewed as a consequence of the divergent perspectives of institutional subcultures. An institution's individual schools, colleges and departments—Business, Engineering, Education, etc—each have their own distinctive ideologies, cultural forms and other practices that reside within the larger culture, that create self-definitions and self-perceptions as well as perceptions of

relationships to other subcultures. (Van Rooij, 2010). If project management is key to other professionals, why wouldn't it be key for instructional designers?

Designing the Instructional Interventions

Instructional Strategies and Tactics

Each mini educational piece will move the staff towards learning how to become more professional. Eventually through roll playing and acting the role in real life, they will become more proficient. At the beginning, they yell, argue and throw fits, once repeated practice takes place, it will be natural to not be on the defense and the fighting will stop. A complaint will change into a request.

All grand instructional strategies are enacted through simple instructional tactics, just as any long-term strategy for winning a game is realized through many short-term plays or activities. (Rothwell, 2016, p151)

We are social creatures in relationship with each other. It's all about interactivity. (Bean, 2014, p98) Staff will just work on changing how they interact. Instead of yelling at each other, they will be practicing calm texts, emails or completing forms online.

The media will be small clips of videos, short documents or multi questions to complete documenting the process of each request from the contractor during instructor as they role play with a reward at the end of each simulation. We will help them see why they should pay attention and maybe they will. (Bean, 2014 p110) Hopefully we can get them hooked on good feelings instead of reacting from bad feelings. During the monthly meetings staff will report their interactions and the actions they have taken to be more professional and the instructional experience outcomes.

Noninstructional Interventions

Noninstructional interventions are also being planned as well instructional. Organizational redesign will be implemented. Organizational redesign and changing job responsibilities is the found solution to assist in human performance problems. Administrators are getting burned out talking to the contractors while they are already overworked and tired and contractors complain about the administrators. We also find there is an inefficient workflow, resulting in inefficient steps, unnecessary complexity and wasteful uses of resources or unusual requests from customers or suppliers. Rothwell, Benscoter, King and King, (2016)

Standards of Excellence

Subject matter experts will provide information regarding content prior to the intervention. Help to course-correct if needed during intervention. Support evaluation and needed edits to curriculum after the intervention. (Rothwell, 2016, p302)

A more organic approach is chosen for the Ortiz Cleaning Services Standard of Excellence. Administrators agree that positive outcomes in the organization would improve as they found a list of potential areas to generated standards around them by the subject matter experts asking questions while changes are taking place and after. Rothwell (2016)

- Will this save time and effort?

- Will it align with the organization's goals?

- Will this keep us looking professional?

The first standard would be to act professional at every moment. If they are not able to then they hand the problem off to someone else or use one of the phrases they have practiced.

The second standard is to think before they respond.

Next, have open hours for communications, not always being available 24/7. Most businesses have open hours. This is normal.

Do not allow drama. Walk away and do not satisfy the details. Ask questions, yet do not make the drama grow by participating. This will align the culture from top to bottom with the new professional way of thinking.

Build positive rapport and encouraging engagement with each other in a positive way and drop the negativity.

Finally, follow the new organization chart. Allow the instructional designers and processes to work for the subject matter experts.

Developing the Instructional Materials

(Larson, and Lockee. 2013, p223) state "Due to the illstructured nature of design, every project will have unique production and implementation elements that you must identify and carefully plan and execute." They listed existing materials, project management requirements, production tasks, accessibility, safety, privacy, quality, formative testing as items to include while guiding the implementation and continuously improving the instruction. Larson, and Lockee. (2013)

The Instructional design materials developed for the instructional intervention include the following: Free Microsoft financial templates including balance sheet, cash flow statement, income statement, equity statement and cost analysis. Used with permission from Microsoft. Planning with the end in mind Larson, and Lockee. (2013) will assist in translating all past, current, and future documents to the Google drive using Google Documents. These templates will be used as training resources modifying the previously used Microsoft financial templates for the Ortiz Cleaning Services, Inc. The new templates are recently updated with functions from the static version they had. The Ortiz financial data sheet will continue to be used as an overall collective database from the organization without the need of modification and may be found at https://docs.google.com/spreadsheets/d/1aJvfT2-WuzepD5qG0Rc7FH69jDl-

byK09IXEvfTIRBU/edit?usp=sharing Each of the Microsoft Templates have been converted to

Google documents. The U. S. Securities and Exchange Commission: Beginners' Guide to

Financial Statement found at https://www.sec.gov/reportspubs/investor

publications/investorpubsbegfinstmtguidehtm.html#:~:text=There%20are%20four%20main%20

financial,a%20fixed%20point%20in%20time. and Mindtools Article Cost-Benefit Analysis

Deciding, Quantitatively, Whether to Go Ahead, are free materials found on https://www.

mindtools.com/pages/article/newTED_08.htm. The project observation sheet was created

specifically for Ortiz in order to address objectives available resources do not cover. It is created

for the staff to observe the process, "Check back to verify your understanding and to gain

approval." prior to making changes in the flowchart. (Larson, and Lockee. (2013 p246) Each of

the contractors have a different path at this time and each have challenges. They may find they

all have the same problems. All of the documents may be found on the Ortiz Google Drive at

https://docs.google.com/spreadsheets/d/1Unx1V9Ly5SwqQ59ioeg55hp8ynfU6Gm1mgoei-

lLqbs/edit?usp=sharing

Cost Analysis

"The success of an instructional design and development project is often judged by how

well it stays within the original schedule and budget limits. Since schedule and budget overruns

frequently occur during production, you must closely monitor and manage this stage of the

process." (Larson, and Lockee. 2013, p249) There has been no literal cost for any of the

documents. Three hours were spent finding templates and creating or editing materials to use.

After thinking of the option of having staff create their own hand made flowchart, I decided it

would be best to make a template with a few questions for them to follow. If not, I was afraid

they would not understand and use more time trying to figure out what was needed from them.

Content	Materials Are In Ortiz Google Drive https://docs.google.com/spreadsheets/d/1 Unx1V9Ly5SwqQ59ioeg55hp8ynfU6Gm1mgoei- lLqbs/edit?usp=sharing
Existing Instructional Materials	Google Drive Link to Financial Workbooks Microsoft Templates - Balance Sheet - Cash Flow Statement - Income Statement - Equity Statement - Cost Analysis Used with permission from Microsoft.
Selecting Open Source Material	Reading materials on how and why. https://www.sec.gov/reportspubs/investor-publications/investorpubsbegfinstmtguidehtm.html#:~:text=There%20are%20four%20main%20financial,a%20fixed%20point%20in%20time. - Balance Sheet - Cash Flow Statement - Income Statement - Equity Statement https://www.mindtools.com/pages/article/newTED_08.htm - Cost Analysis
Original Material	- Project Observation Flow Chart located in Ortiz Google Drive

Designing the Assessments

The instructional intervention will require both summative and formative assessments. The goals of the project and the anticipated learning outcomes have the assessments aligned. Noninstructional plans will be assessed also. The formative assessment is during the design and implementation phases while the summative happens after the implementation. (Rothwell, 2016, ch. 13) "Good assessment depends more on hard thinking and good analysis than on empirical solutions." (Gagne, 1987, ch 13)

The formative product evaluation during the planning of the instructional materials will be done by observation of the staff during their tasks of bidding and scheduling projects. The process evaluation will be completed during the process of actual instruction and implementation evaluating the understanding of the materials. The purpose or process of validation of the evaluation is to first evaluate what to create for instruction, what the objectives are, who the audience is and what the subject is. The formative evaluations will help know what to alter in the instruction to help the learners, how the materials will help human performance and what finances will be needed to perform the instruction, so they will know the materials well enough to use correctly and what the learners will learn and finally how well the materials will meet the final objectives, how long the materials will take to learn.

The two purposes for the assessment components for the Ortiz family's business are to find what impact the instruction has had on the job and the organizational changes improving. The learners will access the assessments via survey link sent in an email with instructions on how to complete the survey. The administration overseeing the projects will be sent one survey while the office staff will be sent another over a period of 3 months. One survey will be formative during the creation of the instruction, one formative during instruction, one summative immediately following, and noninstructional one before and one after organizational changes.

Assessment

Gagne (1987) explains that assessing the design is the "the nuts and bolts of actual item writing and test assembly." The implementation for human performance changes for the Ortiz Cleaning Services, Inc. staff and will be separated into four separate assessments to match with the four unique objectives with titled assessment names; soft skills assessments, administration task training, work flow noninstruction alteration assessments and project staff assessments. The process is assumed to take three months to implement all steps in sequence.

Soft Skills Assessment

The objective to add more professionalism in the workplace will be designed by changes in the workplace through aa mix of work-flow changes and soft skill instruction. The assessments for the soft skill instruction piece will be completed by an outsource company, www.berkeassessment.com. This survey is usually used for human resources during hiring to find if the person is the perfect fit for the job. The survey will give results specifically created for soft skills and the learner's ability to communicate clearly, be empathetic, active listeners, adaptable, hard-working and responsible. Over the course of the instruction, the survey will show the difference between how they could be perceived pre-instruction and post instruction. A summative assessment will be given post instruction to find if the survey was perceived well by the staff. The soft skills assessment from berkassessment.com will assist in the next phase which is who would be the best persons in the position to do which job. This implementation of noninstruction altering the workflow and organizational chart will be assessed by observation pre alteration, interviews, and surveys. Once instruction is given for soft skills and results are received, the organization changes will be put in place.

Workflow Alteration Assessment

Time for practice, training of new tasks for office staff and annual tasks as well as financial documentation needs are completed with time to settle into new responsibilities, then the new organizational flow chart changes will begin. Preassessments will be created by surveys, observations and one-on-one interviews to document how processes actually work and what the desired outcome is and who people think are good for the jobs for each particular activity is. After assessments are complete on who's personality fits each job, organizational changes will take effect. Training for each task will begin.

Administration Task Training Assessment

Formative assessments will be made during the design of the trainings to ensure each training is fit to the objectives and exact processes needed, formative assessments will be given during the classes to ensure the learner is learning exactly what is needed. The summative assessment will show if the learner requires more instruction or if there may need to be more staff organizational changes. These assessments will be given directly through an emailed survey link and testing from direct supervisor as well as observations and reviews. The reviews and observations will determine if the staff feels the changes are working for them. Work-flow changes can be made even after this part of the process and a new staff begin the training to find the perfect fit.

Project Task Training Assessment

Simultaneously, the bidding process and scheduling responsibilities will be removed from the project time allowing them more time for project work and rest. One-on-one interview questions and assistance to help them communicate with office staff and ensure their wishes are followed during the transition will be assessed. The project staff do not use email and barely text. They do not patience for change or an invasion of their time, so face-to-face assessment is most likely the best option during the monthly meetings. The summative assessment will conclude by measuring their production and progress completing their assigned tasks and less interruptions with less frustrations from interruptions during the job that no longer includes scheduling and bidding responsibilities. The following chart explains the objectives and assessments with redundancies built in to validate and clarify needs for adjustments.

Assessment	Assessment Purpose or Objective	What to Assess	How to Assess	Implementation and Delivery Mechanism	Instructional and Noninstructional Objective Outcomes/ Identified Purpose
Formative product evaluation	1. Find what type of instruction is needed.	Compare the needs assessment to the actual tasks of scheduling, biding, and creating the lists	This assessment will be completed by observation during work tasks and surveys in true and false type style.	At this time, the observations will assist in the creation of the materials.	Implementation for human performance changes. 1. Noninstructional

	2. Find what impact the instruction has had on the job during implementation.	of tasks the office staff are required to learn and the gap between what is currently happening and outcome desired.			Organizational work-flow changes to allow project workers to work on projects only and not have to do scheduling and bidding.
Formative process evaluation	2. Find how or if the organizational changes are improving production aligning with financial goals.	During the instruction phase, staff will apply what they have learned.	Observation will continue to be the tactic as well as one-on-one discussions and surveys in true and false type style.	Alterations to the instruction may change at this time to benefit the instruction. Delivery of assessment through observation, surveys and interviews.	2. Instructional-teaching office staff bidding 3. Instructional-teaching office staff annual financial materials.
Summative product evaluation	4. Find what changes to instruction or what organizational changes would further benefit human performance.	Assess competency of new learned material and tasks after instruction.	Observation will continue to be the tactic as well as one-on-one discussions and surveys in true and false type style.	Stakeholders, learners and designers are informed of responses to further benefit instruction implementation. Delivery of assessment through observation, surveys and interviews.	4. Instructional-teaching soft skills to add personnel professionalism

Implementing and Evaluating Instructional Interventions

After introducing the effects of having the correct team members in the correct positions, staff learning soft skills and correct tasks being completed by those correct staff future implementations will be more structured. Once implementation has taken place the following questions will help determine the next steps that will be required. The next steps may come from knowing the answers to the following reflection questions. Initial staff reviews and interviews as well as asking anonymous survey questions will help collect the data for this insight. Along with the questions, predicted responses are documented. I see two possible set of questions for two separate outcomes.

Question Key
Q   Question
A   Answer
A1   Negative Outcomes
A2   Positive Outcomes A2
IA   Identified Adjustments IA

1. Q. Did staff see eye-to-eye with the organizational changes?

   A. Project staff will have a hard time letting go of their previous responsibilities

   of bidding and scheduling, because they don't trust others to do the job. Office

staff will be upset about additional responsibilities. Office staff will wonder why this benefits them and ask for more money to do more work.

IA. This type of staff may have other concerns with the position, or they have different goals that do not pertain to their employment.

A2. Staff were relieved to have more defined tasks and a more streamlined process.

IA. Continue asking their opinion of additional opportunities for growth.

2. Q. Are new staff needed to complete the tasks?

    A. Office staff may get annoyed with the changes and decide to leave the company or become harsh as they are family members and see all the instruction as not needed and drama.

    IA. Have someone new discuss the subject one on one. Possibly something else is wrong.

    A2. New staff are not needed because the current staff were happy and appreciative to make adjustments that benefit the whole.

    IA. Ask what else is needed to complete any additional tasks that may be new now after changes.

3. Q. Is more instruction needed for communication to complete tasks from new workflow?

    A. Yes. Office staff and project staff complaining about lack of communication.

    IA. Find a common way for communication.

    A2. Yes, the staff had to practice finding their own types of communication styles down, but after the three months, it worked out well.

    IA. Allow time and space for staff to mature and grow together.

4. Q. How did everyone take to the changes, negatively or positive?

A. Stop trying to change things. Just do your job and manage the company. This is a waste of time and money.

IA. Since this was a voted-on implementation needed and tactics, this staff may have underlying opinions they fear talking about. Having them discuss the changes with someone else. Maybe they have other plans that do not involve the company.

A2. Staff found the changes as requests they all wanted and needed as a team to grow into a professional business.

IA. Ask staff if they see more that can be improved on.

5. Q. How did everyone accept the instruction?

A. Stop trying to teach me things that I do not want to learn. Staff would agree at first, vote on the implementations and change their minds a few days later wanting to simply do as they've always done because they do not see themselves as more than low paid staff and do not see themselves as leaders of an organization.

IA. If the negative responses are from the same person or same group of people invite them to be involved in a small focus group for continued assessment. Sometimes adding the importance of feedback is enough to alter a person's perspective if they feel heard or involved. "The focus group is similar to the interview because it is typically conducted in-person or through virtual technologies." (Rothwell, 2016, pg 236)

IA. Add an additional survey on a regular basis via email and a time in the monthly meetings to discuss what staff suggest for progress. Include trainings that

may be repeatedly taken on the company's intranet portal as Bean (2014)

suggests.

6. Q. Did you find the technology easy to use?

    An assessment will need to be added about the technology. "We believe that

    evaluation of technology outcomes of technology-based instruction is different

    from that of instructional assessment, and that special attention to attributes of the

    assessment are required." Gagne (1987).

    A. I hate using technology

    IA. Provide paper copies of the same questions.

    A2. Technology worked well.

    IA. Ask this person to help others using the technology.

Summary

In final thought before ending the assessment section, Bean (2014) may have been correct when saying, "Sometimes that intuition is right on; sometimes it misses the mark completely.", (Bean, 2014, pg175). Not every project may be worth taking on. My intuition said to focus this eight week course on a different company, while my heart was hoping the company could benefit from implementing instructional and noninstructional assistance. Some companies may not want help. They may just want to have someone to do the work they want done and complain about what they do not like. This company may simply be that company not worth using efforts on. Working with them on instructional processes and noninstructional interventions has turned into them not wanting any action taken. Seven weeks of observations and surveys while implementing small processes to stabilize the income and everything went back to how it was and being told to leave it alone. Do not try to teach people who do not want to learn. This

comment was made by the president of the company about the other two administrators and one office staff. They changed their minds and will simply take the less income without any improvement. They wanted to say they were working on improvement but didn't want to actually do the work. My identified adjustments for this project as a whole is to discuss observations and ask what they would like to improve on again at another meeting and implement instruction where they decide it is needed more than discuss my own observations and where I see instruction is needed.

Implementing and Evaluating Instructional Interventions

"We must establish a compelling "value proposition" for ourselves individually, for our workplaces, and for our profession. Doing so will ensure that we not only embrace these and numerous unknown future trends, but also stay highly relevant and ahead of the curve." In order to continue our test to be relevant, reflection is needed to find what the next steps are. As an instructional designer reflects, they ask questions to improve for the next training and moving instruction further. The following five questions will guide careful reflection on the planned intervention and clearly identifies methods for collecting the future actual data needed to answer these questions.

Review Questions:

1. What was misunderstood in the trainings?

2. Were there material gaps that could have been covered the first time around?

3. Was the trainer the appropriate person?

4. Was the material linked to relevant learning opportunities?

5. Was the material presented in a timely fashion?

Data Collected

The actual data will be collected by asking the three focus groups, office, project and office and project mix focus groups through a mix of oral and multiple-choice questions, Very Well, Well, So/So Not Well and Poorly. Once the questionnaire is complete, participants will be questioned to add details to create adjustments for future interventions.

Answers:

1. The level of misunderstanding in the trainings was high. The misunderstandings in the training consisted of language. The instructor spoke English to Spanish speaking staff who understand English as a second language.

2. There were material gaps that could have been covered the first time around. Not all of the documents had training materials for completion to LARA and the State of Michigan. None of the staff knew exactly what was needed to be completed. Some of the documents were completed for the company for the first time. It was like a trial run.

3. The trainer was the perfect trainer, but she does not know Spanish.

4. The materials were relevant and taught as needed.

5. The material was presented during the annual board meeting in a timely fashion in a raw format.

Adjustments Needed

Future instructional intervention adjustments scheduled to be made to increase its Effectiveness once the training is actually implemented that will be most likely needed prior to implementing the training a second time.

Adjustments:

1. A Spanish speaking person from the first training will train the next set of learning staff.

2. After the first training, a more complete list of materials will be known.

3. The trainer from this year will be present next year to assist the Spanish speaking trainer next year.

4. The materials will continue to be linked to relevant learning opportunities.

5. The training results data from the training will continue to be presented in a timely fashion to administration and board members. Next year the materials will more graphically appealing. The template will be ready prior to the third quarter of the year and the data will look more professional.

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