Leveraging the Performance Analysis Quadrants Tool During Training Request Intake

Action Research Initiative

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Problem Statement

Problem

Typical training project intake

I've been designing instruction for 23 years now. I've designed curricula and courseware for most Federal Government agencies, all branches of the military, large businesses, small companies, and non-profit organizations.

The Federal Government and the military have detailed standards on how to initiate, investigate, and begin a training project – in my experience, few commercial businesses have such policies & procedures in place.

A typical training project at a mid-size or large company is initiated via a request for training made by a mid-level manager. This request will go through a basic intake process where:

- The solution is further defined,
- The project is prioritized,
- Deadlines are agreed upon, and
- Resources are assigned to develop and deliver the course.

Typically, by the time the project is assigned to the Instructional Designer(s) who will actually build the courseware, the project is non-negotiable. Example:

> *"Create a 2-hour Web-Based Course to teach the new abc function of system xyz. The Pilot is scheduled for June 1st, so you have four weeks to get this done."*

Flaws of this approach

The approach suffers from many flaws, including:

- Few of the requesting managers have the skillset needed to properly define root cause of performance problems, so look to training as a go to panacea.
  - Failure to accurately define the root cause of a performance problem makes it unlikely to stumble upon a complete solution that will solve the problem.
- Most managers conducting the intake also lack the skillset needed to properly define root cause of performance

problems, and are not properly armed with tools to suggest other causes, and thus other potential solutions.

- Most intake processes treat the instructional design team as "order takers" rather than "performance consultants" (i.e., if training is requested, training will be developed).
- Instructional Designers typically lack the political influence to push back and offer alternative solutions.
- When further analysis is recommended, requestors often reject the recommendation, including statements such as:
  - "There's no time to conduct an analysis."
  - "We can't wait until you finish your analysis before we start this project."
  - "We can't afford 'paralysis by analysis.'"
  - "We already did our own analysis and we came up with training."

Note: *Luckily, not all companies suffer the fate of this approach, but it is indeed common practice.*

Example

Let's work through a quick case to assess the impact of developing unnecessary training:

- Company X's training organization creates and delivers100 hours of training in a year (not an outrageous accomplishment for even a mid-size company).
- It is estimated that currently one in ten of their requests are mis-categorized as training problems, meaning that ten of the 100 hours should not have been created.
- One hour of internally developed WBT can take up to 5 weeks to create, so 10 hours of WBT equals 50 weeks of manpower.
  - That's one full-time employee right there, but that's the least expensive error.
- Company X has a target audience of 4,000 people who took that ten hours of extraneous training. Now we're talking **40,000** hours wasted. That's the equivalent of 20 full time employees or **$450,000** in lost productivity (based on an hourly wage of $11.25 per hour).
  - So not only has the company wasted nearly half a million dollars, they still haven't solved the problem!

Performance Analysis Quadrants (PAQ)

Intro

The bulk of my career has been spent identifying, defining, and refining standards and best practices for Instructional Design Teams, then coaching individuals and teams to those practices. During this journey, I've amassed a wide collection of tools and techniques that could improve individual and team performance, as well as design and implement production pathways to create high quality performance improvement interventions.

A tool I've found that could solve this problem is the Performance Analysis Quadrants (PAQ) Tool *(see Appendix C: Performance Analysis Quadrants (PAQ) Tool)*.

The PAQ

The Performance Analysis Quadrants (PAQ) Tool offers a simplified view of the root causes of performance problems. The PAQ divides performance problems causes into four quadrants:

- Selection (hiring the wrong people for the job)
- Motivation (not properly rewarding desired behavior or engaging the employee)
- Resources & Environment (preventing employees from performing the job through inadequate access to systems and tools or poor environmental issues)
- Training (not properly building the knowledge or skillset required for successful performance of the job)

The PAQ is so easy to comprehend that it can also be used as an educational tool to help business partners understand why at least a basic analysis is needed to determine root cause, and can also be leveraged to explain the results of that analysis.

Note: *The PAQ yields to a more precise solution than the Mager & Piper Flowchart. The PAQ is also much easier to apply and explain than Six Sigma's DMAIC (pronounced deh-may-ihk) methodology process (Define, Measure, Analyze, Improve, & Control). (See Appendix E: Examples of Six Sigma Calculations for a glimpse at some common DMAIC calculations.)*

The PAQ in intake

By incorporating the PAQ into the intake process and training the intake staff how to conduct a basic PAQ analysis, I have seen organizations renegotiate several training requests into complete solutions, resulting in:

- Nearly eliminating extraneous training development efforts and delivery time.
- Improving likelihood of success (i.e., actually solving the performance problem).
- Increased perception of the Training Department as a business partner (representatives invited to meetings earlier in the project, liaisons seen as performance consultants rather than order takers, etc.).
- Instructional Designers able to focus on projects that are legitimately training problems.

Client opportunity

One of my clients suffers from the flawed intake process presented earlier – 100% of their training requests are fulfilled by developing and delivering training solutions, many of which fail to solve the performance problem, yet tie-up resources who could be working to solve actual training problems.

I have already conducted a basic Analysis Workshop, where I introduced the PAQ Tool and ran through some basic case studies, ending with the attendees (most of whom perform intake) brainstorming how they could implement the PAQ into their currently active intakes.

Note: *I have previously worked with the PAQ Tool in an earlier CU Denver course. I redesigned the print job aid for IT6710: Creative Design Instruction Materials. I used this redesigned job aid in the workshop. An online version of this job aid is available at the following website:*
http://www.RockyMountainAlchemy.com/paq/PAQ-home.html

Purpose of this inquiry

The purpose of this inquiry is to:

- Determine how better communication between the requestor and the performance consultant during training project intake can benefit the project, as well as the development team.

- Determine how the PAQ tool can be leveraged to improve communication during intake and beyond.

Research Questions

Intro

The following research questions will guide the overall scope and approach to this action research initiative.

Question 1: What do requestors need to understand?

Background

Most managers either have expertise in the area they are managing or expertise in management itself, but rarely have an in-depth background in Human Performance Technology (HPT), performance consulting, or training. As a result, it's common for requesting managers to request training as a solution to every performance problem.

Question

What do managers (non-HPT specialists) need to know and understand about training and performance in order to make good intake decisions?

Question 2: Additional benefits of better communication during intake?

Background

"Order taking" is characterized by mostly unidirectional communication (i.e., the requestor describing the situation and clarifying their request). Working through the PAQ with the requestor should have additional benefits beyond creating a more accurate and complete solution (e.g., better expectation setting).

Question

What benefits can accrue from better communication undertaken at point of intake for:

a: the design team?

b: project ROI/success?

Question 3: Strategies & techniques for leveraging PAQ during intake?

Background

The PAQ Tool itself is fairly conceptual. As performance consultants use the tool, they should be discovering strategies that work and some that fail.

Question

How can the PAQ tool best be used at intake to achieve those benefits?

Question 4: Sharing the tool and approach?

Background

Although the PAQ Tool is published on a very popular site for Performance Consultants and Instructional Designers (http://www.nwlink.com/~donclark/), it is still not an industry standard.

Question

How can the tool and this approach to intake be shared with the field (e.g., my own consulting and workshops, journal article, conference presentation)?

Method

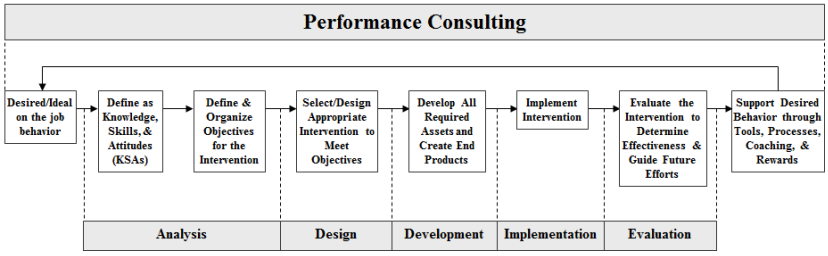
Participants

Strategic Directors

The primary participants for this inquiry are the Strategic Directors within one of my client organizations. The Strategic Directors are responsible for conducting training project intakes and handing the projects off to the Instructional Design and/or Training Delivery teams.

Until recently, this group approached intake more as "order takers," as previously described (i.e., the client asks for training, training is created and delivered as the sole solution). This group attended my one-day Analysis Workshop, which introduces the PAQ Tool and the underlying concepts of root cause analysis (i.e., understanding what's causing the problem before prescribing a solution) and alignment (i.e., ensuring each phase of the intervention, from defining the desired on the job behavior through supporting that behavior after the intervention, is driven from the results of the previous effort).

Note: *The following diagram illustrates how alignment works in the design of an intervention, and helps differentiate Instructional Systems Design (aka, ADDIE) from Performance Consulting:*



Peer practitioners

Another group reached out to for anecdotal data is industry peers who participate in the Organizational Development & Training Forum and Instructional Systems Design Professional groups in LinkedIn (a professional networking site).

Note: *These groups have active discussions and offer a rich environment for discussions on project intake and the benefits of communication.*

Political implications

The only sensitive nature to my inquiry is that the Strategic Directors may feel either embarrassed or intimidated to share negative stories or to confess they are not incorporating the strategies from the workshop, so they were given an opportunity to share these more risky stories anonymously through a survey (or in direct communication with me via email).

As for the LinkedIn groups, the culture of the groups I have selected has been quite open about sharing successes as well as failures.

Data Collection & Analysis

Literature review

My first step was to flesh out my background research on the PAQ Tool itself through some key books (e.g. "First Things Fast" by Allison Rossett – this book presents a similar breakdown of root cause and supports the need to perform root cause analysis early on in a performance improvement request), as well as research articles in the Performance Improvement and Training research periodicals.

Note: *I used the Skyline Catalog to find articles related to root cause analysis, project intake, performance problems, client communication, etc.*

The intent of this research was not to support the idea of performing analysis (that has been well established as a principle of good design), but rather to explore the importance of communication between the requestor and the development team, with special focus on the intake phase.

Note: *There is a great deal of content on the importance of conducting root cause analysis, but, as expected, there is a gap in the specific area of communication during the intake process.*

Data collection

I had planned to reach out to the Strategic Directors through a focus group conducted via teleconference, however an internal business emergency prevented this level of access.

Instead of the planned focus group, I reached out to this audience with a survey created and hosted in Zoomerang; their director sent an email request to complete the survey with an embedded link to the survey. *(See Appendix A: Zoomerang Questionnaire to see the splash page and survey.)*

I reached out to the LinkedIn groups simply by initiating a discussion thread asking fellow practitioners to share their stories and insights related to intake communication, as well as root cause analysis and the PAQ Tool. *(See Appendix B: LinkedIn Discussions for a list of the groups queried and the initiating question used.)*

Data sources

The following table illustrates the primary and backup data sources for each of my research questions:

Research Question	Primary Data Source	Backup Data Source
1. What do managers (non-specialists) need to know and understand about training and performance in order to make good intake decisions?	Strategic Directors & LinkedIn groups	Literature Review
2. What benefits can accrue from better communication undertaken at point of intake for: a: the design team? b: project ROI/success?	Strategic Directors & LinkedIn groups	Literature Review
3. How can the PAQ tool best be used at intake to achieve those benefits?	Strategic Directors & LinkedIn groups	Don Clark (creator of Big Dog and Little Dog which includes the foundation of the PAQ Tool) Literature Review
4. How can the tool and this approach to intake be shared with the field (my own consulting and workshops; journal article or conference presentation?)	LinkedIn groups & clients	Professional organization review (i.e., finding similar issues and examining how they are shared) Input from Brent Wilson, who has great experience publishing and presenting in the field

Data analysis

All the data collected through the literature review, survey, and discussion threads is qualitative. The literature review findings are presented as they relate to the research questions, then the responses and stories from the survey and discussion threads is presented in a prescriptive narrative using a basic intake timeline (i.e., at this step, do this).

Schedule

The schedule for this initiative was as follows:

Dates	Activities:
9/26/11-10/2/11	• Begin Literature Review • Finalize focus group questions • Finalize survey follow-up questions • Create focus group invitation • Schedule focus group and send invitation • Initiate LinkedIn discussion threads
10/3/11-10/9/11	• Conduct focus group with Strategic Directors • Participate in discussion threads • Continue Literature Review
10/10/11-10/16/11	• Develop draft framework • Categorize stories and identify emerging trends and themes as they relate to the research questions
10/17/11-10/23/11	• Present draft findings to the LinkedIn groups and request additional input, as needed
10/24/11-11/13/11	• Prepare final report

Checks for rigor

My overall schedule was designed to collect my data and provide my interpretation of that data into a prescriptive "do this / avoid that" set of strategies. I plan to leverage peer reviews with my fellow researchers (i.e., my discussion team), as well as Organizational Development and Instructional Design practitioners who participate in the corresponding LinkedIn groups – this should create "investigator triangulation," where more than one person is involved in the interpretation and analysis.

Note: *Ideally, a longitudinal study could be conducted to add design frame triangulation. The heart of this study would be testing the success of the emergent strategies, as well as exploring the impact of the PAQ Tool and related communication during the intake process. While there is not sufficient time in this phase of the initiative,*

it may be possible to include such additional efforts as part of the strategy to publish or present the findings of this study (i.e., when bringing it to the field).

Findings Part 1: Literature Review

Approach

Methodology

I included the following strategies in my literature review:

- Text book search and review.
  - I explored books on performance consulting and root cause analysis. This turned up very little that directly helped with my specific research questions. Most of these books focus on the skills of the consultant and provide a surprisingly little on the communication between a consultant and the client.
  - Client communication can be summed up as, "build rapport and trust," with little prescriptive information on how to do this.
- Google searches.
  - A variety of Google searches yielded, again, surprisingly scant information on my specific questions. A key frustration is that using the words "client communication" will pull in thousands of discussions of health care, where "client" is another word for patient – the same problem occurs when the word "intake" is used in the search. Even trying to filter out "psychology," "clinical," "health care," "patient," etc. did little to help narrow the results to a useable field.
- Skyline article search.
  - Searches for "performance consulting" and "project kickoff" tended to yield the best-fitting results, and ended up being where the bulk of my research time was spent.

The resources listed in the References section of this document provided the clearest content leveraged in this literature review. Still, there is a logical leap required to make the assumptions and conclusions in this review:

- The communication required in a training project would be similar to that required in a performance improvement intervention, and the resulting benefits of "good" communication would also be similar.
- The PAQ would provide a framework to accomplish the required communication to meet the requirements of "good communication."

What Do Decision Makers Need to Know?

What do performance consultants need to know?

My search for what decision makers, business owners, and clients need to know kept landing me at what performance consultants need to know.

Judith Hale (1998) lists the foundational skills a performance consultant needs as:

- Expertise in analysis and measurement
- Provide expert advice and facilitate client commitment to taking responsibility for supporting performance
- Play multiple roles
- Remain free of solution bias
- Focus on outcomes

ASTD has presented two sets of competencies for HRD practitioners:

- Four Cluster Model (McLagan, 1989)
- Three Cluster Model (Noe, 2008)

These are presented in the tables below:

Four Cluster Model (McLagan, 1989)

Interpersonal Competencies	Business Competencies	Technical Competencies	Intellectual Competencies
• Coaching skills • Feedback skills • Group process skills • Negotiation skills • Presentation skills • Questioning • Relationship building skills • Writing skills	• Business understanding • Cost-benefit analysis • Delegation skills • Industry understanding • Organizational behavior understanding • Organizational development theories and techniques understanding	• Adult learning understanding • Career development understanding • Computer competence • Competency identification skills • Electronic systems skills • Objectives preparation skills • Performance observation • Subject matter understanding	• Data reduction skills • Information search skills • Intellectual versatility • Model-building skill • Observing skill • Visioning skill

Interpersonal Competencies	Business Competencies	Technical Competencies	Intellectual Competencies
	• Project management • Organizational understanding	• Training and development theories and techniques • Research skills	

Three Cluster Model (Noe, 2008)

Business Competencies	Interpersonal Competencies	Personal Competencies
• Analyzing needs and proposing solutions • Applying business acumen • Driving results • Planning and implementing assignments • Thinking strategically	• Building trust • Communicating effectively • Influencing stakeholders • Leveraging diversity • Networking and partnering	• Demonstrating adaptability • Modeling personal development

These models share a strong overlap, but do not address what is required on the other side of the table.

What do decision makers, business owners, and clients need to know?

Hale (1998) talks about the client in her Defining the Request phase of a project:

> *Do I want to work with these people? Some people are too busy, distracted, or uncommitted to be involved at the level necessary. Lack of involvement is a red flag, because it reduces the chances that my findings and recommendations will be accepted.*
>
> *What is the client's level of sophistication? Unsophisticated clients increase my costs (by taking more of my time), and I may or may not be able to pass those increased costs on to the client. Unsophisticated clients require more coaching and direction. This, in turn, requires a greater time commitment by the consultant, whether or not the consultant charges the client for it.*

While Hale indicates client involvement is critical to success and that less sophisticate clients will require more coaching, she doesn't go the extra mile to define what level of involvement

(or commitment) is necessary, nor does she define "sophistication" or what the client needs to know.

Some help from a basic sales strategy

Unable to find a clear prescription for what clients need to know, I'm at least left to understand that clients must have involvement and ownership of the solution in order for the intervention to succeed, and that the performance consultant must develop trust.

The "good news," perhaps, comes from some of the basics of marketing – this is probably not a cold call – you're at the table because the client has a problem they believe you can help them solve (Hayden, 2011). Hayden's overall marketing strategy can be described as:

- Get in the door to solve the "presenting problem."
- Build rapport and trust.
- Educate the client to convert the presenting problem (i.e., the perceived problem) to the actual problem (i.e., what will solve the root cause).

Hayden closes, "if you market something (the client) don't yet know they want, you may never get to have that conversation."

Closing thoughts

Although I was unable to find a specific prescriptive guide to what clients need to know, I think we surmise that the performance consultant has the advantage during intake that:

1) The client is aware there is a problem, and
2) The client believes the consultant can help solve that problem.

So even when the initial request was for training, the performance consultant should be able to establish rapport and trust, then educate the client (as needed) on the importance of root cause analysis. Using the terminology of the PAQ to create a common lexicon, the client would need to understand basics on Selection, Motivation, Resources and Environment, and Training. Applying Hale (1998), the less "sophisticated" the client is, the more time it will take to accomplish this.

If it will take too much energy to educate the client to achieve the required level of buy-in, maybe it's time to revisit Hale's question during her intake, "Do I want to work with these people?"

What Are the Benefits of Better Communication During Project Intake?

Performance Analysis for Training (PAT) model

The PAT model is based on three elements that influence the results of a performance analysis: the organization's characteristics, the decision maker's characteristics, and the analyst's characteristics (Kunneman and Sleezer, 2000). This model calls for providing the organization's decision maker(s) with accurate and sufficient information – information useful for prioritizing, designing, developing, implementing, and evaluating training interventions.

Note: *We should be able to make the leap to say this same communication approach should transfer to other performance improvement solutions, as well.*

The specific content to be provided to the client is not defined within the PAT model, however the final two steps of Phase 1 (Organization Analysis) are:

- Report the findings to the decision makers.
- Decision makers acknowledge, prioritize, and determine the training opportunities/needs.

Kunneman and Sleezer (2000) prescribe including the following content to provide to decision makers:

- Explain why the performance analysis for training was done.
- Describe how the information was gathered.
- Identify the stated need.
- Include the findings of the performance analysis for training.
- Identify training and non-training solutions.
- Identify the most appropriate training solutions.
- Specify the expected costs and benefits of the solutions.
- Specify the significance of the findings so that the client's "so what" question is answered.

Putting PAT to the test

The Kunneman and Sleezer article presents findings of a case study which put the PAT model to the test. Question 1 of the study was, "Will using the PAT model in an organization implementing ISO-9000 produce the following results: a)

involve the organization decision maker(s) in the training process, b) provide the organization decision maker(s) with accurate and sufficient information for making determinations about the contributions that training should make to the performance needs of the organization, and c) provide the organization decision maker(s) with information useful for designing, developing, implementing, and evaluating training?

The primary case study presented in the investigation included additional content points beyond those called for in the PAT model:

- Brainstorming potential challenges to collecting data (e.g., time limitations, employee access) and strategies to overcome these challenges.
- Establishing expectations for information required by the analyst.

In that case study, the sharing of information (analyst to decision maker) resulted in:

- Full consensus on the means to accomplish remaining analysis work.
- Agreement the multiple final outcomes could ensue from the next phase of the analysis.
- Stakeholder concurrence with the findings and buy-in with the recommended interventions.
- Commitment to provide resources needed to implement recommended interventions.
- Decision makers stated they had been involved in planning the analysis and contributed to the project's success.
- Decision makers pointed out the analyst would be useful as a future resource for performance analysis and training.

Closing thoughts

The communication during intake and analysis phase of the PAT model yield solid implications for project intake to a performance improvement project (the PAT model even calls for presenting non-training implications discovered during the analysis; the main difference is that PAT then only focuses on the training interventions discovered through the analysis).

Providing the client team with information needed to prioritize, design, develop, implement, and evaluate intervention the

intervention contributes to:

- Increased involvement (and sense of involvement) of the decision maker and stake holders.
- Increased buy-in to the findings, and recommended solutions (training and non-training).
- Increased changes of funding and resources committed to implementing the solution.
- Increased trust in the analyst / performance consultant.

In other words, improved communication during the intake process should improve the likelihood of success in a performance improvement intervention.

How Can the PAQ Tool Best Be Used During Intake?

Our findings at this point

It's not enough to be an expert and discover the root cause of a problem; the performance consultant must build rapport and trust with the organization's decision makers and stake holders (at least those involved with the project in question).

During the intake process (including at least the initial analysis), the performance consultant is charged with presenting enough information to the decision maker and stake holders to help them prioritize, design, develop, implement, and evaluate an intervention.

Leveraging the PAQ

The simple structure of the PAQ Tool provides an excellent framework to discuss both training and non-training root causes for performance problems, as well as potential solutions corresponding to each of the four quadrants of the PAQ (selection, motivation, resources and environment, and training).

The amount of "education" provided in each area should be gauged based on the baseline knowledge (what Hale refers to as "sophistication") of the decision makers and stakeholders.

Again, findings of any analysis should include enough information to help the decision makers prioritize, design, develop, implement, and evaluate an intervention.

Findings Part 2: Practitioner Input

Approach

Methodology

After completing my Literature Review, I moved forward with data collection. My data collection methodology included the following:

- Discussions initiated in key groups on LinkedIn

Note: *This resulted in some private emails in addition to limited discussion on the boards.*

Note: *The groups I selected and the initiating question appear in Appendix B.*

- A questionnaire posted to Zoomerang with invitations sent to the Strategic Directors (people responsible for conducting training project intakes and handing the projects off to the Instructional Design and/or Training Delivery teams) within a major health insurance company

Note: *I had also planned to conduct a focus group with the Strategic Directors, but they were unavailable due to an emergency.*

Note: *The Zoomerang questionnaire appears in Appendix A.*

Prescriptive Project Intake

Intro

The findings are presented in a prescriptive narrative, applying the results to a basic intake scenario:

1. An internal client discovers a performance problem in their department.
2. The internal client contacts the training team's manager to make a training request.
3. The training manager (or intake specialist) conducts the project intake.
4. The client and training manager agree on a basic timeline for the front end analysis.

Project intake

The following table provides guidance for the communication between the performance consultant in charge of conducting a project intake and the requestor. Events and guidance appear on the left and information from the Literature Review, corresponding quotes from the questionnaire, discussions, and private emails appear on the right.

Scenario / Guidance	Corresponding Findings
A manager is reviewing performance reports and notices that the employees are not meeting the set performance standards.	
The manager (who will be referred to as the client from this point on) believes that training is needed to improve performance and bring it to the desired level.	"There are many reasons training may requested: legal or regulatory requirements, new systems, poor performance, or new employees. Sadly many requests for training are generated just because someone in management believes training is needed." – email. "Many of our requestors are way back at square one, they request a 1 hour ILT because they cannot conceptualize including us in the problem and then letting us analyze to reach a solution." – Zoomerang "More training isn't always the solution." – Zoomerang "Actually, most performance problems are caused by issues that training won't solve. More common causes include inadequate tools, resources, procedures, support, incentives, selection, etc. (see the attached Stolovich & Keeps article). – email *(Note: Attached article was Stolovich and Keeps, 2002.)*

Scenario / Guidance	Corresponding Findings
The client reaches out to the Training Manager, who assigns one of the performance consultants to run the intake process.	
This is the first time the performance consultant has met with the client, so the performance consultant sends out a meeting invite with a high-level agenda for the meeting.	
The agenda includes time to discuss the request background (e.g., what led the client to believe there is a performance gap, who is the target audience for the intervention, what led the client to classify this as a training need).	
During this phase of the meeting, the performance consultant will gauge the "sophistication" of the client, i.e., how knowledgeable is the client on root causes of performance problems, and will determine how much education is needed.	"Unsophisticated clients require more coaching and direction. This, in turn, requires a greater time commitment by the consultant." – Lit Review "The amount of 'education' provided in each area should be gauged based on the baseline knowledge (what Hale refers to as 'sophistication') of the decision makers and stakeholders." – Lit Review
During the meeting, the performance consultant determines the client is not well educated on performance improvement. As is common, the client believes that all performance problems can be solved through training.	"(Use intake to communicate) the root cause- how long, which audience, frequency, measured?, reports? time frames resource allocation." – Zoomerang
The performance consultant pulls out a printed version of the Performance Analysis Quadrants (PAQ) Tool. They will use the PAQ to explain the importance of performing a basic root cause analysis in order to determine the true root cause of the performance problem.	"Using the terminology of the PAQ to create a common lexicon, the client would need to understand basics on Selection, Motivation, Resources and Environment, and Training." – Lit Review "(The PAQ Tool) has helped me many times – it gets everyone speaking the same language, and it reinforces the need to get on the same page from the very beginning." – Zoomerang "Well - the wording 'root cause' means six sigma to some people. And that sends people into an assumption about the topic being a bigger issue... There needs to be a great deal of language 'level setting'." – Zoomerang "(I haven't had a chance to use the PAQ Tool yet), however, just from what we did at the workshop, I know it will help me to offer better solutions which is important to me because that is a somewhat newer role I am undertaking." – Zoomerang "Training might be the solution – if the employees really don't know how to do something. But sometimes problems are caused by other factors, and training won't work." – Zoomerang

Scenario / Guidance	Corresponding Findings
The client pushes back and claims they don't have time to waste on analysis. This performance problem is costing the company a great deal of money and is putting the company at risk of losing clients, as well as profit.	"It is because of client impatience to get the job done (and our fear that if we do not get busy doing it, the client will go elsewhere) and it is not as immediately reinforcing as developing an intervention." - email "The client (needs) to understand that it is truly HPT that they want – not just 'training.'" – LinkedIn "It is also incumbent on the HPT professional, as well, to recognize that what may be needed is something that the client is not willing to accept." – LinkedIn "(The client must understand) steps that we take - ADDIE - come to us with a problem, not a solution." – Zoomerang "(The client must understand) we come in with no assumptions, only questions. just like six sigma approach, we validate everything before we determine a root cause, it could take some time, and the desired outcome may look a bit different that expected- but that the desired future state should be a little closer to reality." – Zoomerang "The understanding that not every request is a training need and that once we determine the root cause there could be additional actions that need to be taken to correct knowledge or motivation." – Zoomerang
The performance consultant continues educating the client that front end analysis, including root cause analysis, is the crucial first step to making sure the proper solution strategy is selected and created.	"Educate the client to convert the presenting problem (i.e., the perceived problem) to the actual problem (i.e., what will solve the root cause)." – Lit Review "Often times, those in the client role do not know what is really needed because they have not done and adequate front end needs analysis - not just of training, but the entire organization. An astute client and HPT professional will both recognize this." – LinkedIn "(The client) needs to understand the root of the problem in order to convey their needs appropriately - at the very least they need to be able to identify the true problem so that we can help identify the root of the need." – Zoomerang "Requestors are quick to want training when that might not be the answer to issues they are having." – Zoomerang "(You have to) get the managers on board. If your managers don't support your solution, you're doomed." - email
The performance consultant uses the PAQ tool to	"I have used the PAQ to frame conversations, i.e.

Scenario / Guidance	Corresponding Findings
talk about potential findings and determine if there is any baseline information the client can provide to "be on the lookout" for during analysis (e.g., new procedures, revised standards, grievances, morale, incentives, selection criteria).	training is not always the answer. This goes to larger strategic conversations I am having with the business." – Zoomerang "Tools are great and should lend themselves to the identification of performance gaps between what 'is' happening and what 'should be' happening. In terms of the instructional design team, they can lend themselves to understanding of what emphasis training can have or should have, IF training is one of the interventions that can close performance gaps. I've used tools that sound like PAQ (see my attached diagram)." – email *(Note: The attached tool is the Performance Gap Diagram – see Appendix D.)*
The client agrees to support an analysis. The performance consultant gathers the driving dates for the intervention (inspections, reporting, mandates, etc.), agree on the milestones for the analysis (observations, focus groups, surveys, etc.), and they work together to flesh out the project timeline for the front end analysis.	"The (client) must understand that our turnaround time is based on resource availability and prioritization." - Zoomerang
The performance consultant reviews the next steps and clarifies what the client can expect before, during, and after the analysis.	"It should be, as part of the negotiation (perhaps intake) what the client wants and the performance professional is willing to deliver. It may come down to the practice ethics of the performance professional." – LinkedIn "(The client must understand) estimated length of time before we can have students in a classroom/on a webex/in a WBT." – Zoomerang "(The client must understand) we don't have an unlimited supply of trainers growing in a field that we can pluck out any time a request is made." – Zoomerang "Expected outcomes are very important because they will help drive what direction we decide to go in. If we know the expected outcome, we can identify what is hindering us from getting there." – Zoomerang
They then schedule the meeting to present the findings. (The PAQ tool will be used to frame the findings, as well.)	"Findings of any analysis should include enough information to help the decision makers prioritize, design, develop, implement, and evaluate an intervention." – Lit Review
The performance consultant gives a copy of the PAQ Tool to the client and they close the meeting.	"After introducing the PAQ Tool (to our clients), I think we need to keep it at the forefront of what everyone is doing." – Zoomerang

Happy ending

The PAQ Tool is used to guide the development of the observation checklists, as well as the survey instrument.

During the observations, the performance consultant notices front line employees are hand writing notes in addition to their computer entries; in between each item processed, the employees transfer these notes into a spreadsheet. When the consultant asks about the notes, one of the performers explains, "Oh – there's a new requirement to track additional information for each item we process. There's no place in the computer system to track that, so we write down the information on a piece of paper along with the item's tracking number. After processing the item, we have to open a spreadsheet and enter that information. At the end of our shift, we send our spreadsheets in where all the information is added to the main database. It's pretty frustrating because it adds about 5 minutes to each item – I haven't met my performance goals since they started this."

During the focus group meetings, the performance consultant confirms there is no knowledge or skill gap. The cause for the performance gap is purely that the old system does not support the new requirement – this is a resources and environment problem, NOT a training problem.

The performance consultant presents the findings to the requestor and clarifies that this is not a training problem and that training will not solve this performance gap. The client was aware of the new requirement, but was not aware of the impact it was having on processing. The performance consultant recommends setting up a follow-up meeting to include the IT team who owns the system.

When the IT team is made aware of the requirement, they do some additional research to define what additional information is needed for each item. They add some new drop down items and a text field to capture the information and roll out the revised system.

The changes are fairly intuitive; the performance consultant recommends creating a five minute web-based training module to rollout the day of the change combined with a team meeting where team leaders will announce the revision, have employees complete the training, and then begin processing with the revised system.

	The system enhancement does have an impact on the original metrics, but changes the current 5 minute impact to a 45 second impact. The client and the performance consultant meet to discuss the project's success. Without "rubbing it in," the performance consultant takes the opportunity to point out that had they conducted training, it would have taken a couple of weeks to create the training, a week or so to get everyone through the training, and after all that the performance gap would still be there. In other words, the analysis did not *add* time to the project; it actually *saved* time, resources, and money.
Dénouement	The client agrees that in the future, they will come to the training team with the problem, not the solution. The first step on all future projects will be an analysis.

Discussion and Recommendations

Summary of Findings

Key findings

Some of the key benefits of better communication (shared language, mutual expectations, etc.) during the intake process include these points from the Zoomerang respondents:

- "Less time spent in meetings results in more time to move forward in project."
- "Clear instruction up front means less overhaul and revisions at the end of the project."
- "The design team will have a better picture of what is going on and the project has a better chance of reaching success in everyone's eyes."
- "The instructional design team will create training materials that better fit the training need."
- "The overall project benefits because there will be less confusion, better completion to target dates, and (more successful interventions)."
- "The project will likely be less stressful with the increased communication and understanding."
- "Setting realistic expectations up front will limit the number of surprises down the road."

The PAQ Tool can be leveraged during the intake process, as well as throughout the front end analysis, to help create shared language and expectations, and to explain complex performance and HPT concepts. In other words, the PAQ Tool can help achieve and support that better communication.

Limitations

When incorporating the findings of this inquiry, keep the following limitations in mind:

- The findings are based on a low number of survey and discussion group respondents.
- Of the low number of respondents, few of them had any more than basic experience using the PAQ.
- The focus of this inquiry was on project intake; there are strong implications on other phases of the project lifecycle.

- The prescriptive guidance does not include help for resolving or responding to heavy push-back from the client (e.g., how to handle a situation where the requestor flat out refuses to allow for analysis or rejects any solution other than training).

Recommendations

Action plan

I am recommending the following actions:

1. Post basic findings to the LinkedIn groups and send them to the participating Strategic Directors for their responses and feedback.
   - This will add investigator triangulation to the inquiry.
2. Recommend the Strategic Directors add a standard agenda item to their team meetings where they can share success and failure stories of client communication.
   - This will help create a culture of sharing best practices.
   - I can follow-up periodically to collect case studies and continue to flesh out the prescriptive strategies.
3. Add relevant findings and prescriptive strategies to my current version of the Analysis Workshop (where the PAQ Tool is currently introduced).
4. Expand this inquiry to include the remaining phases of the project lifecycle.

Reflections

My thoughts

This was my first formal experience with action research; my previous understanding of research was based on experimental design and "true" scientific method. I think my prior mindset has limited what I could have been doing in my career in terms of moving ideas forward.

Note: *Don't get me wrong; I've implemented many best practices and continued to refine them throughout my career, but my audience has always been local (i.e., my current team or my workshop participants).*

Reading the inquiries from my fellow classmates and the papers from previous students has provided a new perspective on how best practices can be proposed, implemented, and improved locally and across a greater number of my peers.

Still curious

I'm still left wondering how to expand this type of research to an even greater audience. I'd like to get a better sense of the journals or other publications include action research articles.

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Appendix A: Zoomerang Questionnaire

Questionnaire Intro

PAQ and Project Intake Communication

Hello!

It's been a while since we met to discuss analysis. I wanted to get your ideas about project intake communication and leveraging the PAQ.

Thanks for your time completing the survey!

Ken

Start Survey!

Questionnaire

PAQ and Project Intake Communication

1. We talked about what knowledge and skills the performance consultant needs in order to be successful... but what do your project requestors need to know or understand about training and performance in order to make good decisions?

2. What information about root cause and expectation setting should be communicated during project intake?

3. What benefits can you see from better communication undertaken at point of intake for:
   a) the Instructional Design Team
   b) overall project success?

4. If you've had a chance to use the PAQ (Performance Analysis Quadrants) tool, how did it help you achieve any of the above communication?

5. What changes, if any, do you recommend for improving the PAQ tool?

Submit

Appendix B: LinkedIn Discussions

Discussions

Groups

I posted the following initiating question to these groups on LinkedIn:

- Instructional Design Professional
- Interactive Media Corporation & Pearson Performance Solutions Alumni
- Linked:HR (#1 Human Resources Group)
- Organization Development & Training Forum

Initiating question

I'm taking a class and am exploring communication during project intake. Your input will help...

There's a great deal of literature on what the Training or HTP professional needs to know in order to be successful, but little is available on what the client / requestor needs to know, so...

- What do your project requestors need to know or understand about training and performance in order to make good intake decisions?
- What information about root cause and expectation setting should be communicated during intake?
- What benefits can accrue from better communication undertaken at point of intake for:
  - the Instructional Design team?
  - project ROI/success?

Have you ever used a tool like the PAQ (Performance Analysis Quadrants) to communicate with your client? If not, do you have a tool you use to help explain root cause?

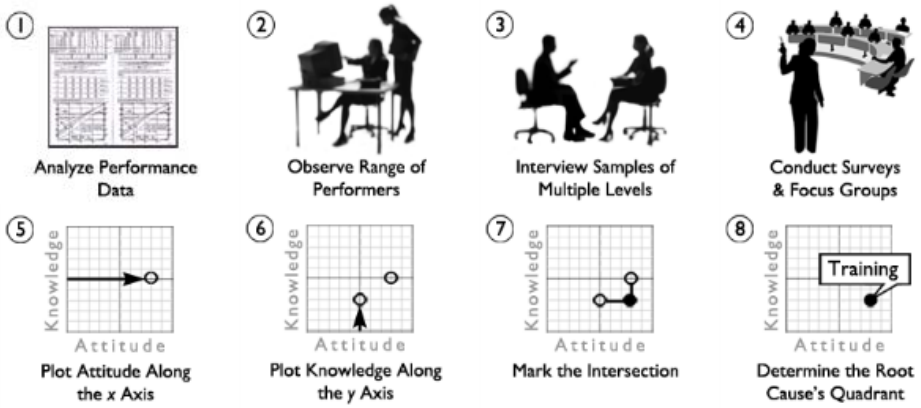
Any stories - successes or failures - will help.

Thanks!

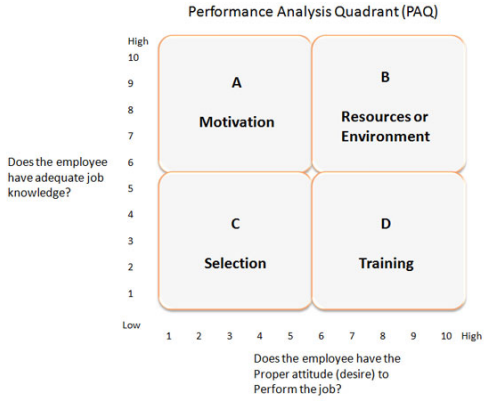
Appendix C: Performance Analysis Quadrants (PAQ) Tool

Performance Analysis Quadrants (PAQ)

Instructions



Quadrants

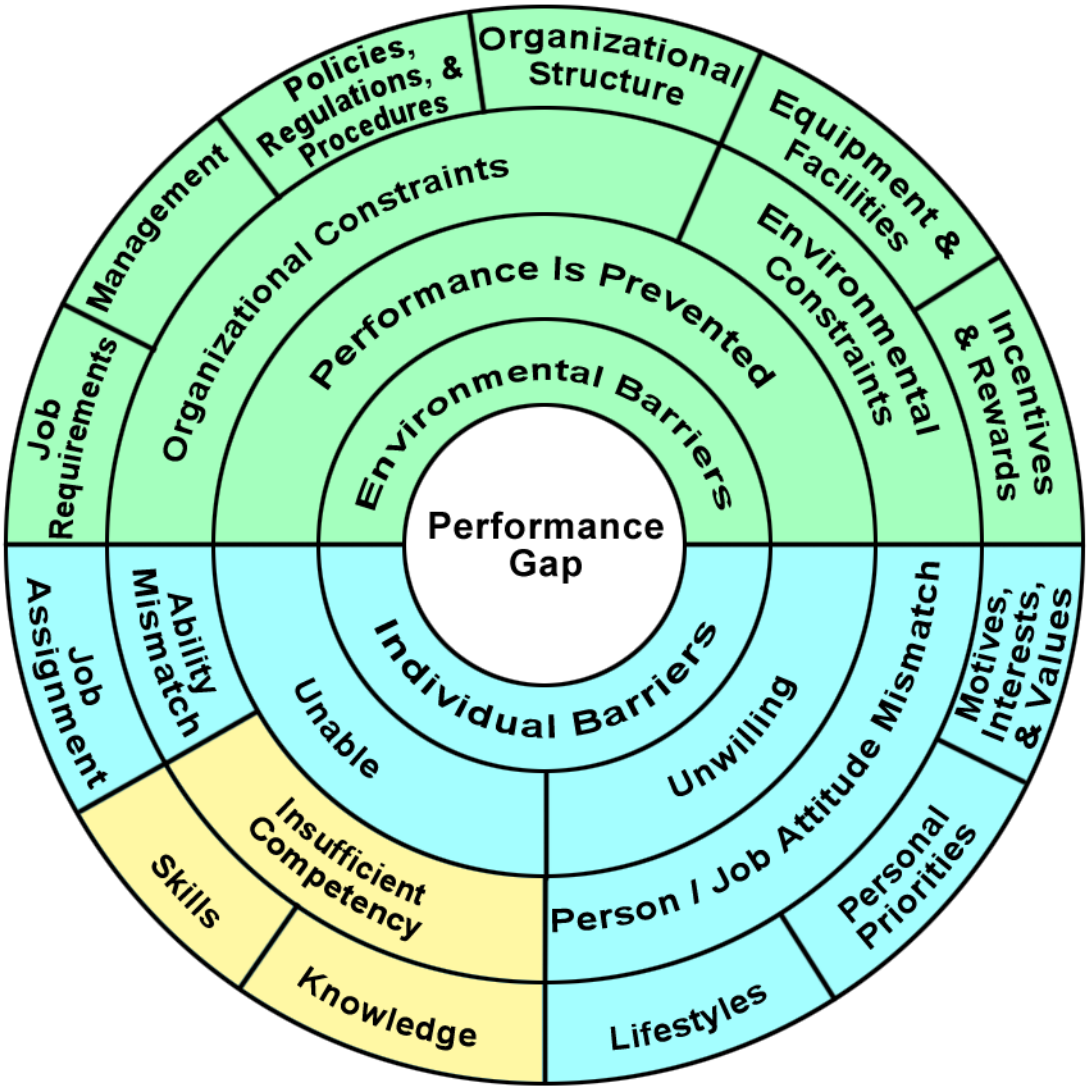


(Source: Clark 2011)

- Quadrant A (Motivation): If the employee has sufficient job knowledge but has an improper attitude, this may be classed as motivational problem. The consequences (rewards) of the person's behavior will have to be adjusted. This is not always bad as the employee just might not realize the consequence of his or her actions.
- Quadrant B (Resource/Process/Environment): If the employee has both job knowledge and a favorable attitude, but performance is unsatisfactory, then the problem may be out of control of the employee. i.e. lack of resources or time, task needs process improvement, the work station is not ergonomically designed, etc.
- Quadrant C (Selection): If the employee lacks both job knowledge and a favorable attitude, that person may be improperly placed in the position. This may imply a problem with employee selection or promotion, and suggest that a transfer or discharge be considered.
- Quadrant D (Training and or Coaching): If the employee desires to perform, but lacks the requisite job knowledge or skills, then additional training or coaching may be the answer.

Appendix D: Performance Gap Analysis Diagram

Performance Gap Analysis Diagram:



Source: Training Support Services Division 1997)

Note *Only the area in yellow (Insufficient Competency in either Skills or Knowledge) can be resolved through training.*

Appendix E: Examples of Six Sigma Calculations

Examples of Six Sigma Safety Calculations at Motorola

OSHA Recordable Injuries

Unit = Employee
Defect = Employee Recordable Injury or Illness
Opportunity for Error in a Unit = One per Workday Segment (250/year or 62.5 /quarter)

Sample Calculation
Given 1386 Employees and 113 Recordable Injuries and Illness in the year

Defects per Unit (DPU):

$$\text{DPU} = \frac{\text{total \# defects}}{\text{total \# units}} = \frac{\text{113 employees/year}}{\text{1386 employees}} = 0.082/\text{year}$$

Defects Parts per Million (PPM):

$$\frac{\text{DPU/year X 1,000,000}}{\text{opportunities for error in one unit}} = \frac{\text{0.082/year X 1,000,000}}{\text{250/year}} = 326 \text{ PPM/day}$$

326 PPM = 4.91 Sigma OSHA Recordable defects

Lost/Restricted Workdays

Unit = Productive Workday
Defect = Lost or Restricted Workday due to Injury or illness
Opportunities for Error in One Unit = One per Workday Segment (250/year or 62.5 /quarter)

Sample Calculation
Units = 346,500 Workdays/year (1386 Employees X 250 Workdays/year)
Lost/Restricted Workdays = 3218 Workdays/year

$$\text{DPU} = \frac{\text{total \# defects}}{\text{total \# units}} = \frac{\text{3218 lost/restricted Workdays/year}}{\text{346,500 workdays/year}} = 0.009287$$

Defects Parts per million (PPM):
DPU 0.009287 X 1,000,000

$$\frac{\text{DPU X 1,000,000}}{\text{opportunities for error in one unit}} = \frac{9287}{1} = 9287 \text{ PPM}$$

9287 PPM = 3.85 Sigma in Lost/Restricted Workday defects

(Source: O'Rourke 2002.)