

PMP Class Notes: Execution Process Group


Overview: The Execution Process Group

The execution process group - this is the doing of the work, following the plan to make deliverables.

Most of the test questions come in the nine series - 9.3, 9.4, 9.5. That's where we see questions on leadership, management, different organizational behavior concepts like the Tuckman ladder. After that, 10.2, 11.6 are fairly quick processes - just the doing of the plan. Not a lot of concepts there, but all of it is bookended by process 4.3, Direct and Manage Project Work at the top. That's what synchronizes all of execution to make deliverables.

4.3 - Direct and Manage Project Work

What this process is about: It takes in the plan, all components of it, to make deliverables. That's the goal - deliverables.

 **THREE CRITICAL DELIVERABLE TERMS** (Write these down!)

1. Deliverable - Raw deliverable, unchecked, untested
2. Verified Deliverable - When we test a deliverable and it passes our test (happens in quality process)
3. Accepted Deliverable - When the customer looks at it and says "yes, that's what I wanted" - This is the goal of the project!

Key Concepts:

Defects vs. Corrective vs. Preventive Action

- Defect - Any deliverable that does not pass testing, does not meet project requirements as we test them
- Corrective Action - Anything we do AFTER a defect has been detected
- Preventive Action - BEFORE the defect has occurred - we foresee the possibility and do something about it

Key Point: All good corrective action will have preventive measures - some element to make sure it doesn't happen ever again. The difference is corrective action happens AFTER the defect happened.

Inputs:

- All the plan, all the different documents - if we filled it out and it doesn't help us in execution, then what the heck are we doing? That's kind of a litmus test. If you don't use it in execution, you're doing it wrong.
- Change Log - has every change request including approved ones. We have to implement those into the doing of work.
- Approved Change Requests - not all are approved, but the ones that are get actioned

Outputs:

Work Performance Data Hierarchy ★ TESTED!

You will see questions on this. This is explained not only in PMBOK but also in MBA land and war college:

MBA Version:

- Data - being created by your team, your workers
- Information - created by management, finding linked data points and causality
- Reports - some information rolled up, through reports we gain understanding with C-suite

Military Version:

- Data - created by soldiers and sailors
- Information - military staff finds causality between data points
- Reports - rolled up by XO, gain understanding with commander

PMI Version:

- Work Performance Data - being created in this process (4.3) by the project team
- Work Performance Information - project management team and PM find connected data points and causality (happens in all monitor/control processes)

- Work Performance Reports - rolled up information for certain audience, usually not all information (happens in 4.5)

Issue Log

First time we see this! Issue log is for any ongoing problem. Often was on risk register, now tracking on issue log when risk occurs.

Military Example: "Every Humvee, every single Humvee has an issue log. Every time it breaks down, had maintenance done, we fill out issue logs."

Typical test questions: Interpersonal issue log - problem between Bob and Jill, you need to resolve it.

Change Requests

This is where the majority of change requests occur as we're doing the work. Could affect anything - as work unfolds, we speed up, slow down.

4.4 - Manage Project Knowledge

What this process is about: Finding lessons learned and best practice and writing it down. It's the writing it down part. Write it down in the lessons learned register.

Key Points:

- Agile projects: Use retrospectives to find lessons learned (that's usually what test questions are about)
- One big mistake as leader: You want to defend the project instead of just listening

Active Listening Example:

"Someone gives you a lesson learned. Instead of just writing it down, you say 'Oh see, Bob, you weren't there. This is what really happened.' You're shooting yourself in the foot because all they hear is you telling them shut up. Then you get zero lessons learned from your meeting."

Better approach: "Okay, that's what you're saying, Bob. Is this, this, this? Yeah. Okay, thanks. I'm writing that down. Got any others?" That encourages more lessons learned.

Knowledge Types:

- Explicit Knowledge - measurable ("if we take this route, we'll save two hours")
- Tacit Knowledge - not measurable ("if we take this route, it's more scenic")

Outputs:

Lessons Learned Register vs. Repository

- Lessons Learned Register - Excel spreadsheet, one per project, filled out by PM
- Lessons Learned Repository - one per PMO, archives from all projects

Reality Check: "The problem here is usually drawn as a filing cabinet, but it doesn't actually look like a filing cabinet. It actually looks a little bit more like this [draws cone shape]. It's conical in nature. Because it's a trash can. The organization is taking your lessons learned and right in the trash can. That is the problem in every industry, every organization."

The secret sauce: Have ID numbers for risk, activities, work packages, requirements, customers, stakeholders so you can tie lessons learned to specific project elements.

8.2 - Manage Quality

This is one of the more confusing processes for students because of all the blah blah blah about quality terms. People assume it's where we're checking deliverables because we see "audits" as tool #5. But it's NOT checking deliverables!

What's Really Happening:

- 8.1 - Make the quality management plan (the book of quality)
- 8.3 - Bob over there actually checking deliverables with his micrometer
- 8.2 - Kilroy peering over the fence making sure the whole thing is going down according to plan

8.2 is oversight! Making sure there is a plan and it's being followed.

The Quality Audit Story 🔥

Perfect Real-World Example: "Usually the customer sends their Lean Six Sigma gurus as auditors. They say 'Mike, we want to see the quality management plan.' So they read through it. 'Okay, we need to see the J drive.' I'm like 'Oh, you're looking for the results of testing?' Like yeah.

If my plan said check every 1,000 units and operations made 10,000 units, there should be 10 forms filled out. First thing they do is count: 1, 2, 3, 4, 5, 6, 7, 9, 10. Perfect.

Then they check each form:

- 'Unit 1,000, signed by Francis, fails the test. According to your plan, Francis needed specialized training. Show us his certificates.'
- 'This was a defect. Show us the root cause analysis.'
- 'Unit 4001? Mike, did you realize you tested two units in a row? You changed your sampling methodology. Show us the approved change request.'

Notice they didn't care about the defects. It was the moment I didn't follow the plan - moment I had someone else do testing, moment we didn't follow sampling methodology. Even for a deliverable that passed testing!

The Wrong Chart Story:

Medical Example: "When we moved from Virginia to Colorado, pediatrician said our daughter had 'failure to thrive' - bottom 30th percentile. Specialist said 'Yeah, she's in bottom 30th percentile for a five-year-old. She's a two-year-old. It's the wrong chart. Had she put it on the right chart, she would have been in 90th percentile.'"

Sometimes it's the grading system that's the problem - that's why quality metrics are an input.

Tools & Techniques:

- Quality Audit - not checking deliverables, checking the plan and that it's being followed

- Design for X - organization has one X factor in mind during build (Apple's "design for recyclability")

Outputs:

- Quality Report - typically written by auditor saying "these are deficiencies I found and my suggested fixes"
- Change Requests - when testing things incorrectly or wrong thing

9.3 - Acquire Resources

What this process is about: Fighting for the resources you need to complete the project - team members, facilities. As PM, you're doing this the moment you hear about the project, trying to get perfect team together.

Key Points:

- Sometimes pre-assigned team shoved down your throat on project charter
- Other times backfilling when people leave
- Even with pre-assigned team, Bob might quit, Jeff gets hired by competitors, Janice is out sick

Tools & Techniques:

Multi-Criteria Decision Analysis

Military Example: "In the Army, there's Tour of Duty website to pull National Guard and Reservists onto active duty. You get like a thousand applicants, we have scoring table based on what we're looking for. Pretty rare in private sector though."

Pre-assigned Teams vs. Negotiation

- Pre-assigned teams - much more common
- Negotiation - "I negotiate with Miguel all the time to get resources I want. Usually very lopsided negotiation, but that's reality."

Virtual Teams

"We're on one right now. Whenever using virtual team, there tends to be more conflict because of fog of war - people don't know what others are doing, assume they're doing nothing."

Test answer for virtual team conflict: Add transparency with information radiators (fancy term for dashboard)."

Outputs:

- Project Team Assigned - you asked for 10 technicians, now you get Joey, Sally, Slappy, and Samsonite (really old reference)
- Resource Calendar - onboard the resource, show Janice her tasks

Great Example: "Janice is like 'I thought I was going to do that, that, that.' Why? 'Last project that's what I did.' Wait, you have experience doing those things? You have certificates? Well, well, well, Janice. You realize she has more functionality than you knew."

- Change Requests - "When you don't get resources needed, my favorite change request is to cancel the project. 'Didn't give me resource I need, got to cancel project.' Then you get all kinds of people's heads turning."

Agile Terms:

- Pairing - not new, "pretty sure they talked about benefits of pairing at the Agogi in Sparta, circa 300 BC. Don't tell me it was invented by agile movement."
- Myers-Briggs Testing - "You can game it. Times it's used would be mission to Mars - turns out if you put Homo sapiens sapiens in capsule for eight months, good chance only one returns because that one ate the others."
- Fishbowl Window ★ Shows up way too often on exam!

Fishbowl Window Example: "In mall in Osaka, Japan, big 90-foot screen. When you look into it, you're looking into Perth, Australia. When you pass by, people in Perth can see you. You can wave at somebody from across the world. 'Oh, good day, mate.' That's fishbowl window."

9.4 - Develop Team

What this process is about: Building up the team. Don't confuse with 9.5 Manage Team!

- 9.4 Develop Team - the COLLECTIVE (training the team, team building, evaluation of team)
- 9.5 Manage Team - the INDIVIDUAL level (training individual, coach/teach/mentor individual, resolve problems between individuals)

Co-location and Team Identity:

Team Tiger Story: "When I'm onboarding Janice: 'Hey Janice, welcome to Team Tiger. We used to be Team America, but we got in trouble for that song from South Park guys. Francis added the roar part.

'Team Tiger meets in parking lot every day at 0730.' 'But facility doesn't open until eight.' 'I know, Janice, that's why you get an hour of overtime every day. Team Tiger, you make more money.' 'Where's the meeting?' 'In our parking spots.' 'We have our own parking spots?' 'Yeah, those are the good spots, that's our team.'

What I really want to see: When I walk up to tailgate meeting, I want to see my crew kicking people out. 'Yeah, you can't park here. Team Tiger parking spots.' Because we're special, we're different, we're Team Tiger."

The secret: "The team is fake. The leader makes it feel real."

Leadership vs. Management:

Parenting Example:

- Leadership (9-year-old): "If Obi-Wan Kenobi was in this vehicle, would he follow the laws or break them? He'd follow laws, he's a Jedi. Don't you think we should buckle seatbelts and be more like Jedi? Common goals, leadership."
- Management (3-year-old): "Leadership's out the window. You want the cookie? Buckle your seatbelt and I'll give you cookie."

"Effective leader knows when to turn it on and turn it off."

The 70-30 Rule:

"70% of team will innately follow appointed leader. 30% will question. Patton said 'Out of every 10 soldiers, seven will follow appointed leader, two think they should be in charge, last one doesn't want to be there at all.'"

Usurpers - smaller group within naysayers who think they should be in charge, trying to flip your followers into their followers.

Recognition and Reward Strategy:

Wrong Way (Individual Reward): "Bob stayed late Friday, project's ahead of schedule. 'Bob, this is what right looks like. Long weekend on me, gift certificates to Netflix and Papa John's.' Naysayers in back: 'See, I told you Mike and Bob best friends, brown noser. I stayed late too, where's my day off?'"

Right Way (Team Reward): "'Thank you all. Project's ahead of schedule because of your hard work. Bob staying late Friday is one example of many things you're doing. Long weekend on me, everybody. Grab your gift certificates.' Now naysayers take their pizza and shut up."

Tuckman Ladder ★ Heavily Tested!

1. Forming - figuring out who else is on team
2. Storming - jockeying for social position, who's alpha/beta/gamma ("we're still pack of wolves")
3. Norming - figured it out, start doing work
4. Performing - doing work at high level
5. Adjourning - team disbands

Key Points:

- Goal: get to performing quickly, maintain it long as possible
- Team building gets us through forming/storming
- Training gets us from norming to performing
- Moment we lose team member and add new one, whole team goes back to forming

When does team building occur? Early in Tuckman ladder, NOT necessarily early in project!

Leadership Concepts:

Servant Leadership

"Wasn't written by Agilists, not new. First written 1977, published at Gonzaga University seminary school by Jesuit priest. It's about Jesus Christ. Using your power to better lives of others is how to gain followers."

Emotional Intelligence:

Personal Skills:

- Self-awareness - "I'm cold, I'm wet, I'm going to say wrong thing right now. I'm tired, shouldn't answer this email."
- Self-regulation - "You ordered catered lunch, it's late, everyone's hungry. You come up eating bagel as you walk in. That's not a good look. Wait until everyone else had food first."

Social Skills:

- Empathy - the "it factor," the Jedi stuff. Allows leader to know when to turn it on/off.

Active Listening (Three Types):

1. Reflective - "So what you're saying is this, this, this"
2. Attentive - taking notes, eye contact, nodding
3. Following - "yeah, yeah, yeah" (cultural - "in Asia they don't say yeah, they say 'uh, uh, uh'")

9.5 - Manage Team

This is where we really dive into organizational behavior - mainly conflict resolution. That's where the test questions are.

Conflict Resolution Strategies ★ CRITICAL EXAM

CONTENT!

Important: Students try to memorize just one word (withdraw, smooth, force, compromise, collaborate). DON'T! On exam, answer A will be "withdraw/avoid," answer B will be "withdraw/accommodate." Memorize the full terms!

The Remote Control Story:

"Dad's on couch, two kids arguing over remote control, Sunday morning..."

1. Withdraw/Avoid - "What are you kids arguing over? [Takes remote, turns TV off] There, two kids can't get along, no one gets TV. Everyone loses. Purpose: next time you have problem, figure it out between yourselves because you won't like how dad solves it."
2. Smooth/Accommodate - "You want playoffs 3-6, you want Olympics 3-6. Oh wait, only one TV. Who wants ice cream? [Come back at 6:15] Oh you missed your sports, but you liked ice cream, didn't you? Everyone loses, but focus on something both enjoy to keep peace."
3. Force/Direct - "Playoffs? Broncos vs. Cheatriots... I mean Patriots? Olympics? Give me that remote. It's football season! [Kiddo runs off crying] Win/lose. You just created a naysayer."
4. Compromise/Reconcile - "First half Olympics so you see American skater, then flip to football for Manning's game-winning touchdown. Both parties give something up for somewhat of a win."
5. Collaborate/Problem Solve - "Picture in picture, put on noise-canceling headsets, everyone enjoy your game. True win-win, think outside the box."

Key: Any strategy could be right for given situation, but be careful with force/direct - you create naysayers.

Motivational Theories:

Background Story:

"Prevailing idea since dawn of time was people born into leadership - kept aristocracy in power. 'Pharaoh's the pharaoh because he's son of sun god Ra. Cut me, I bleed sunlight.' After WWI killed all leaders in trenches, need to create leaders. Ohio State and Michigan Agricultural: if we put finger on what causes motivation, we can teach leadership."

Key Theories:

Expectancy Theory - transactional relationship, follower loans power to leader for something in exchange

McClellan (Theory of Needs) - "My personal favorite." Every follower has own prioritization of needs based on what's going on in their life. Eventually whittles down to three: affiliation, achievement, power.

Maslow's Hierarchy  Know the five levels in order!

1. Physiological - breathing, water, air
2. Safety
3. Social
4. Esteem
5. Self-actualization

"There are test questions where you put these in order. Be careful studying this - you'll find 'millennial hierarchy of needs' with WiFi and battery life more base than breathing. That's a joke, not on test."

Herzberg - Hygiene Theory, then Two Factor Theory (hygiene factors and motivators)

Ouchi Theory Z - Employment for life, career progression path.

"Most major organizations use this. Military uses this - 'Today you're E1, one day you might make four-star general.'"

Outputs:

- Issue Log Updates - interpersonal disputes

Military Example: "Soldiers have problems, NCOs counsel them. 'You did what to who? Seriously?' Figure out resolution, write it down, track it. When change of command, tell next commander 'these two can't be in same room.'"

Private Sector: "HR handles this, writes it down, doesn't tell anybody. When things get tight, start looking at who's causing issues, get rid of toxic employees first."

10.2 - Manage Communications

Super simple: Put your pen on the E, drag it to the M. Done. Communication. That's all it is - the team communicating with one another.

Key Points:

- Project manager communicates, but vast majority happens amongst team members
- Some communication saved, some destroyed
- Should follow communication management plan
- In 10.3, we check if they're doing it correctly

Tools & Techniques:

- Project Reporting - rolling up information and sending it out
- Most communication tools we've covered already

Outputs:

- Project Communication - some saved (all vendor communication), some deleted
- Updates to plans/documents - when you figure out behind schedule, update tracker

11.6 - Implement Risk Response

What this process is about: The doing of the risk strategy, whatever it is.

Key Points:

- Happens once trigger event occurs
- Risk owner realizes risk about to occur, enacts contingency plan
- Some risks are non-event risk (no trigger event)

Specialized Risk Terms (All tested):

- Risk workshop
- Secondary risk
- Residual risk
- Non-event risk
- Overall project risk

Tools & Techniques:

- Influencing - "Your actions as leader reflected in actions of team. If you want them calm and collected, you have to be calm and collected. Don't be surprised if they freak out when you freak out."

Outputs:

- Change Requests - strategy either working or not, sometimes requires change request

Don't overthink this process - just doing the risk strategy. Know the technical terms: trigger event, contingency plan, fallback plan, risk owner, non-event risk.

12.2 - Conduct Procurements

What this process is about: Actually buying something, doing it the right way according to procurement management plan.

Three Distinct Components:

1. Collect proposals
2. Select vendor
3. Award contract

With procurement office: They do all three, you're just aware. You're not leading here.

Tools & Techniques:

Bidder's Conference

Purpose: Reduce bias, avoid redundant communication

Live Conference Problems:

- Vendors mess with each other
- "Hey there's Jim, used to work for us. Text him, see what they're doing."
- Vendors collude or ask erroneous questions to mislead

Virtual Conference: One inbox, everyone gets same Q&A, no one knows who asked what questions.

"Test questions typically about old school live in-person bidder's conference."

Outputs:

- Selected seller, agreement/contract
- Risk register updates - because whenever we transfer risk (contractors handle it), that's risk strategy

13.3 - Manage Stakeholder Engagement

What this process is about: Just doing the stakeholder engagement plan, whatever it is.

For me: "Running town hall meetings, communicating with protesters, updating webpage so they have information."

Key Points:

- Change log as input - external stakeholders don't have access to project data, don't know what's changed
- Farmer example: "When talking to farmers, want to make sure they know what time we'll be on their land. Farmers tend to own guns. They don't have access to my change log."

Tools & Techniques:

- Ground Rules - "Important that leader lives the ground rules. Can't skirt them. Moment you don't, they're all fake, including safety stuff."

Outputs:

- Change Requests - typically affect communication or schedule

That concludes execution process group! Next up: monitoring and controlling.



Exam Strategy for Execution:

Most Heavily Tested:

1. Conflict resolution strategies - know the remote control story!
2. Tuckman ladder - when does team building occur?
3. Maslow's hierarchy - five levels in order
4. Work performance data/information/reports - data → information → reports
5. Three deliverable types - deliverable → verified → accepted
6. Quality audit - checking the plan, not the deliverables
7. Fishbowl window - virtual team connection

Key Phrases to Remember:

- "The team is fake, the leader makes it feel real"

- "Everyone loses" vs "Win/lose" vs "Win/win"
- "Don't be surprised if they freak out when you freak out"
- "We're still a pack of wolves"
- "Team building gets us through forming/storming, training gets us to performing"

Common Traps:

- Don't memorize just one word for conflict strategies
- Quality audit \neq checking deliverables
- Develop team (collective) \neq Manage team (individual)
- Work performance data \neq information \neq reports
- Team building happens early in Tuckman ladder, not necessarily early in project