

An In-Depth Look at the Moves of Fast Fish Learners for Workforce Development Practitioners: Overview of Workshop Materials

The materials accompanying this slideshow are archived from the first workshop of a series of three designed to introduce “Fast Fish Learning” to workforce practitioners and to take a deeper dive into the concepts. They begin with a brief overview. Participants engaged in working groups to consider the following documents/concepts below. There were two working sessions of ~45 minutes. Each was preceded by a brief introduction. The materials can also be used independently or as part of a small working group.

1. Reflecting upon the five components necessary for Fast Fish Learning (FFL) and considering in what ways you support FFL as Workforce Development Practitioners.

Using the document entitled, “Essential Features of Learning Designs for Supporting Fast Fish Learners/Workers: Considerations for Workforce Development Practitioners” as a guide, reflect upon the ways that you create learning designs that support Fast Fish Learning.

2. Analyzing the attitudes and moves that Fast Fish Learners engage in by applying them to two case studies.

Begin with the document entitled, “Attitudes and Moves for Fast Fish Learners/Workers.” Review it to understand the moves of Fast Fish Learners. Then use the information to analyze the case studies of Malek and Latisha from the documents, “Case Study #1: Malek’s Career Shift” and “Case Study #2: Latisha Studies to Become a Childcare Worker.” Finally, consider the document, “Ten Research Points for Developing Fast Fish Learners in the Workforce and Workforce Development.”



HARVARD
GRADUATE SCHOOL OF EDUCATION

 accenture

What Does it Take to Help People to Think, Learn,
and Perform Better in the Workplace?

Next Level Learning: Three Core Pedagogical Concepts



Cognitive Neuroscience Rationale Revealed: A Research Based Users' Manual to the Mind: *When learners understand the rationale behind learning and thinking moves, they are more likely to use the strategies and apply them flexibly as needed.*

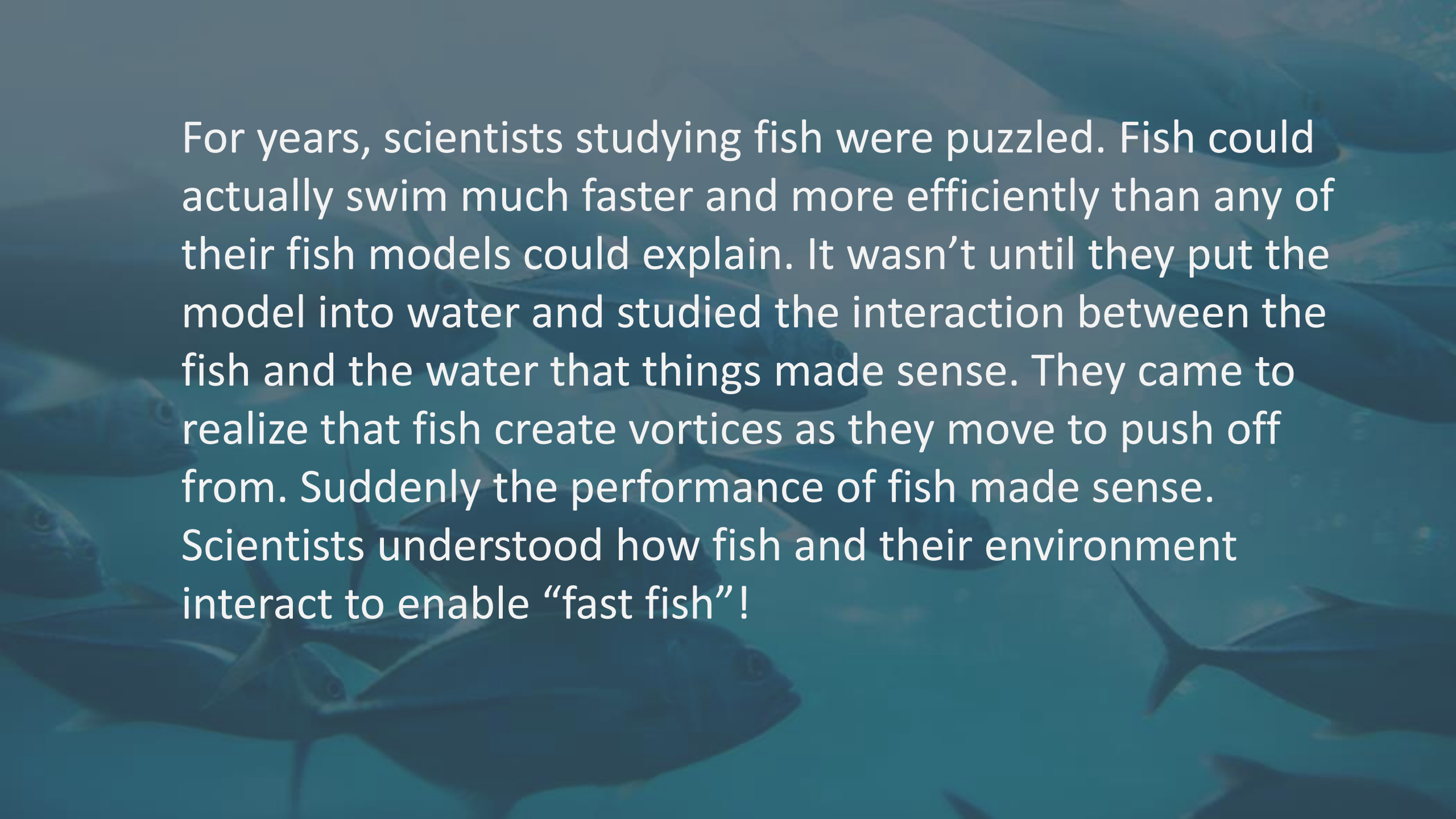


Generative Moves: Transfer to One's Own Situation: *Instead of teaching one approach that loses nuance and applicability as problem levels change, learners are invited into a process of generating specific, contextualized strategies as apply to their own circumstances.*




Contextualized Agency: Behaving Like Fast Fish: *Learning and performing effectively is accomplished by modifying our contexts to support our best work just as fish create vortices in water to push off from to swim their fastest.*

*I will use all of these in the design of our sessions.



For years, scientists studying fish were puzzled. Fish could actually swim much faster and more efficiently than any of their fish models could explain. It wasn't until they put the model into water and studied the interaction between the fish and the water that things made sense. They came to realize that fish create vortices as they move to push off from. Suddenly the performance of fish made sense. Scientists understood how fish and their environment interact to enable “fast fish”!

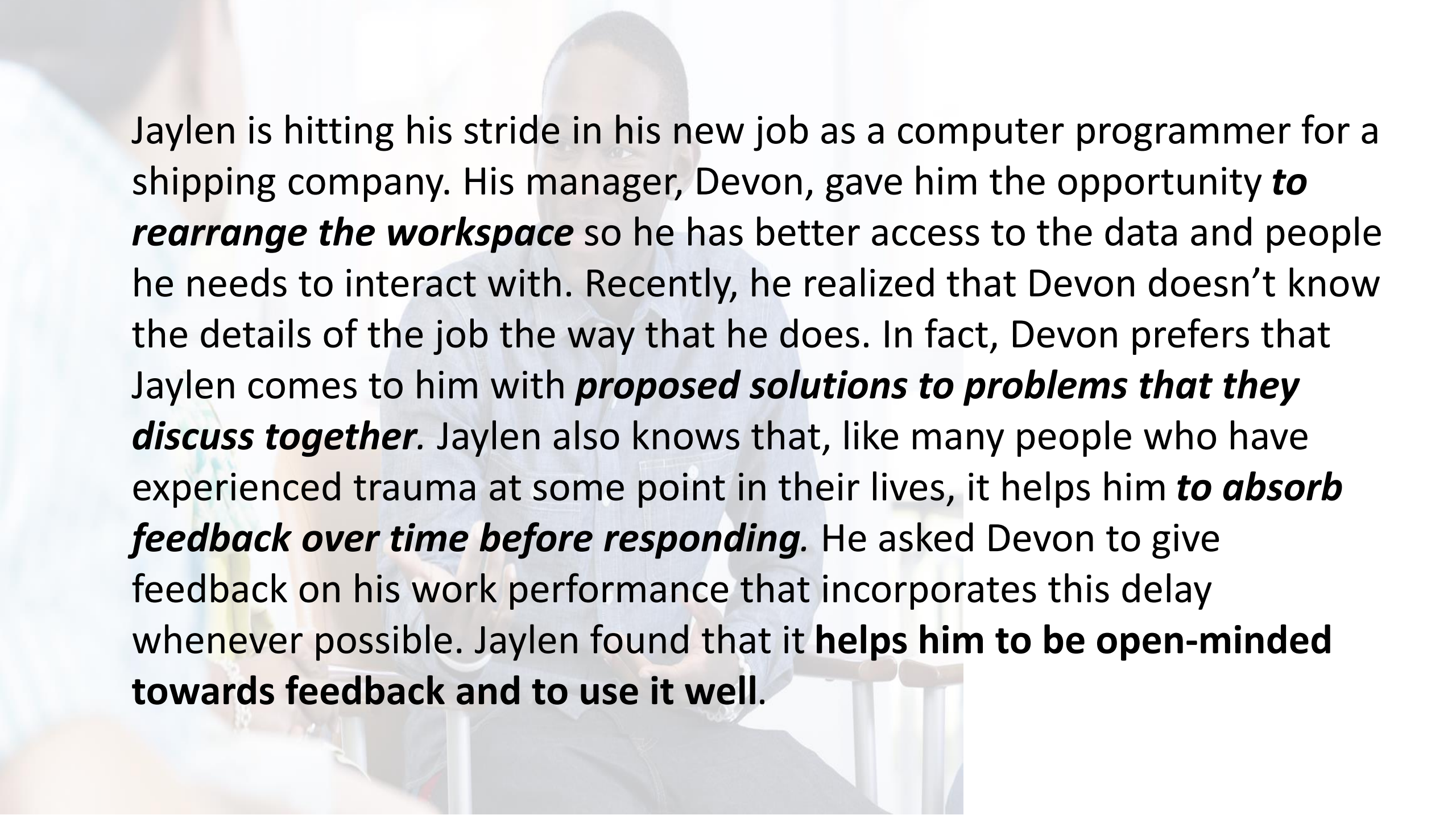


“Fast Fish-style” generative moves focus on modifications to the surrounding contexts that can improve thinking, learning, and performance.

Here’s what “Fast Fish” moves might sound like:

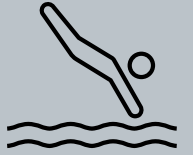
“I realize that, like many people who have experienced trauma at some point in their lives, it works better for me to absorb feedback over time before responding. I asked my manager to give feedback on my work performance that incorporates this delay whenever possible. This helps me to be open-minded towards feedback and to use it well.”

“I realized that moving my desk into a corner gave me control over when I needed to focus and when I was ready to be social. I had to navigate fewer sticky situations and got more work done.”



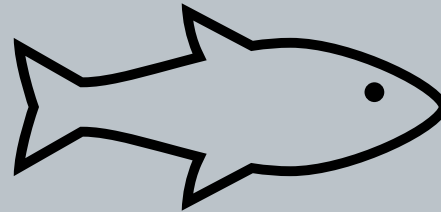
Jaylen is hitting his stride in his new job as a computer programmer for a shipping company. His manager, Devon, gave him the opportunity **to rearrange the workspace** so he has better access to the data and people he needs to interact with. Recently, he realized that Devon doesn't know the details of the job the way that he does. In fact, Devon prefers that Jaylen comes to him with **proposed solutions to problems that they discuss together**. Jaylen also knows that, like many people who have experienced trauma at some point in their lives, it helps him **to absorb feedback over time before responding**. He asked Devon to give feedback on his work performance that incorporates this delay whenever possible. Jaylen found that it **helps him to be open-minded towards feedback and to use it well**.

Five Essential Components for Fast Fish Learning



1

Reflective Learners/
Workers Who Have Agency

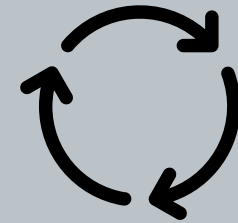


3



Modifiable Learning
and Work Contexts

4



Multiple/ Repeated
Opportunities for Engagement

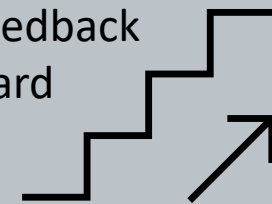
2



Contextualized Authentic Learning
and Work Performances

5

Meaningful Feedback
and Feedforward



Working Session One: What Are The Components of Fast Fish Learning And In What Ways Are You Supporting it?

Using the document entitled [“Essential Features of Learning Designs for Supporting Fast Fish Learners/Workers: Considerations for Workforce Development Practitioners”](#) as a guide, reflect upon the ways that you create learning designs that support Fast Fish Learning.








Essential Features of Learning Designs for Supporting Fast Fish Learners/Workers: Considerations for Workforce Development Practitioners





Essential Features of Learning Designs for Supporting Fast Fish Learners/Workers

As practitioners in Workforce Development, consider whether the instruction that you engage in supports the development of “Fast Fish Learners/Workers.” The table below considers the necessary features and characteristics of instructional architecture designed to do so. Consider the reflection questions focused on each feature. As you do, keep these more general questions in mind: 1) Are you modeling “Fast Fish Learning” in your own work?; 2) Are you creating the contexts for “Fast Fish Learning” in your sessions/classrooms?; and 3) Are you developing learners who will behave like fast fish to maximize their learning and performance once they are out in the workforce?

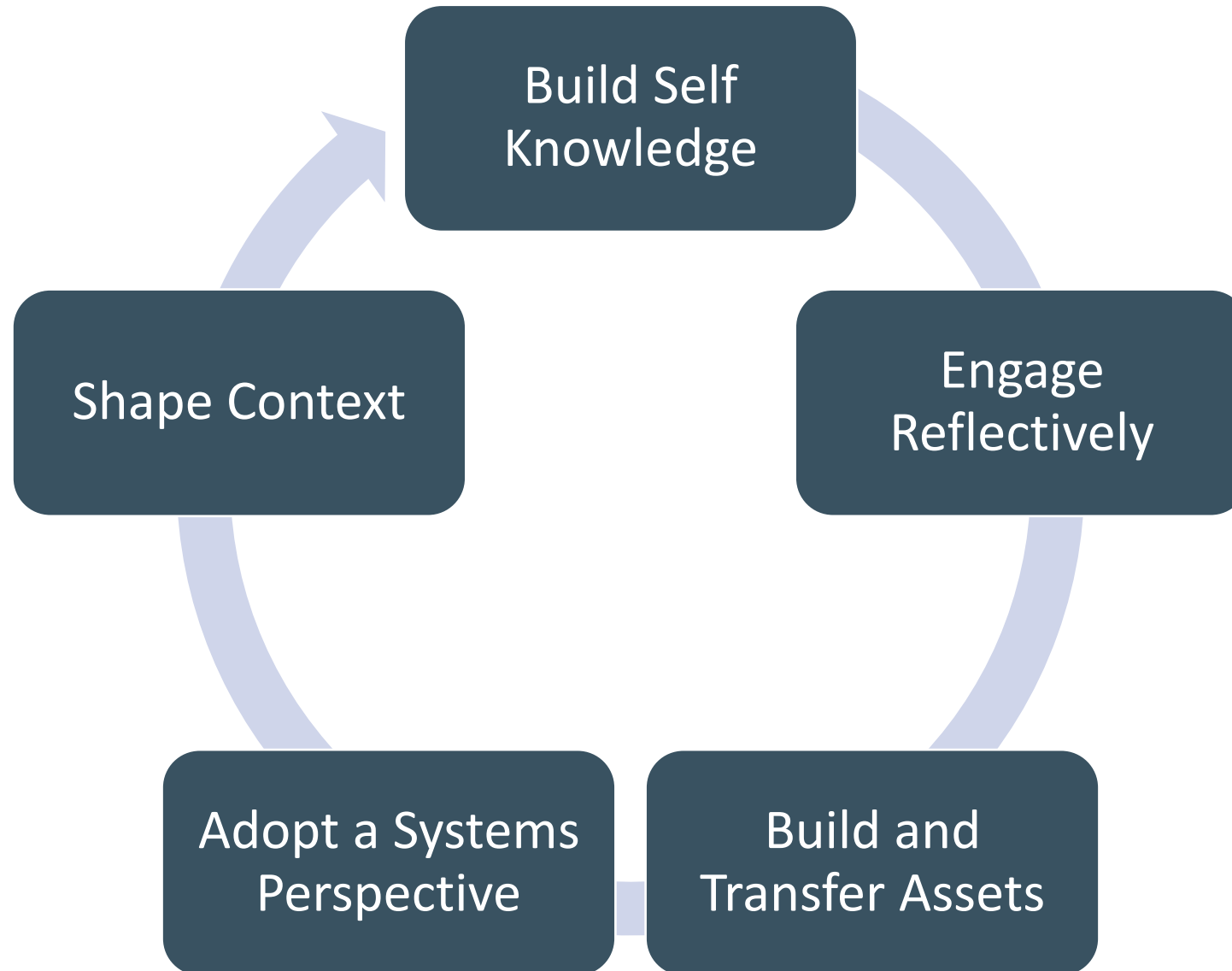
Essential Feature	Key Characteristics	Questions for Workforce Development Practitioners
1. Reflective Learners/Workers Who Have Agency 	<ul style="list-style-type: none"> -Reflects upon and seeks to know their embodied mind (including social, emotional, physical, and cognitive aspects). -Gathers information about the nature of how minds in general work and how their individual mind works. They develop a “User’s Manual to the Mind.” -Considers themselves as cultural beings. -Actively identifies ways to apply the information. -Views context as an aspect of the learning/ performance equated to be modified and seeks feasible/reasonable aspects of malleability. 	<ul style="list-style-type: none"> -In what ways am I... <ul style="list-style-type: none"> -providing opportunities for learners/workers to their minds—generally and individually? -encouraging a mastery stance—one that comes they can learn to think and perform better? -helping learners to identify ways to apply their seek malleability in workplace contexts? -creating awareness of cultural tendencies and that workers might bring to the workplace and reflect upon how these might interact with different contexts?
2. Contextualized Learning/Work Performances 	<ul style="list-style-type: none"> -Has opportunities to perform learning and work tasks in authentic contexts. -Has opportunities to engage in “the whole task” or “junior versions of the task.” -There are mentors who are engaged in the task and demonstrate more expert performances. 	<ul style="list-style-type: none"> -In what ways are the tasks/learning performances engage learners in authentic and contextualized? -In what instances do I engage learners in the “whole task”? -When I engage learners in “junior versions” of a task, how do I help them progress to the whole task? -What mentorship is embedded in these contexts?
3. Modifiable Learning/Work Context(s) 	<ul style="list-style-type: none"> -The social, emotional, physical, cognitive, and technological contexts have malleability. -Resources are available for modifying structures. -Supervisory support exists for allowing malleability that learners can “push off” from in order to improve performance. 	<ul style="list-style-type: none"> -In what ways... <ul style="list-style-type: none"> -are the learning contexts that I am creating malleable? (socially, emotionally, physically, cognitively, technologically?) -do I encourage malleability as a supervisor/teacher? -are the contexts that I am preparing learners for to enter malleable? What might be done to encourage malleability? -do I help learners/workers develop strategies for growing, even in non-malleable contexts?
4. Multiple Opportunities for Engagement 	<ul style="list-style-type: none"> -Repeated opportunities exist to engage with tasks—making it possible to learn from failures and “up one’s game.” -When “one-off” tasks are necessary, they are treated as opportunities to reflect upon what learning/assets from the task might transfer to new tasks. -The tasks are complex enough to provide levels for progress across repeat engagements. 	<ul style="list-style-type: none"> -How often do I offer multiple opportunities to learn a task? <ul style="list-style-type: none"> -In what ways... <ul style="list-style-type: none"> -do I encourage reflection and transfer forward when my students need to engage in a “one-off task”? -are the tasks that I offer learners “leveled” so that they can make progress in their performances across repeat engagements? -do the learning tasks that I design have a low floor (so that there are minimal barriers to entry) and a high ceiling (so that learners can reach for higher and higher levels)? How do I help learners to think about their learning paths forward from previous performance? <ul style="list-style-type: none"> -In what ways... <ul style="list-style-type: none"> -do I leverage feedback to support future performance? -do I help learners to see and reflect upon feedback that the task itself offers? -do I help learners to see and reflect upon feedback about the processes that they employ while learning or engaging in a work performance? -am I preparing learners to use feedback and task information to chart paths forward in the workplace?
5. Meaningful Feedback and Feed-forward 	<ul style="list-style-type: none"> -Information on past performances is leveraged for new performances. -Information is framed to support learning paths towards greater expertise. -Learners/Workers are encouraged to reflect on their immediate performance AND what they have learned about the nature of learning through their engagement in the task. -Time and attention are given to assess feedback from tasks themselves towards future performance. -Think-out-louds are conducted in order to gain information about the processes of learning. 	<ul style="list-style-type: none"> -In what ways... <ul style="list-style-type: none"> -do I leverage feedback to support future performance? -do I help learners to see and reflect upon feedback that the task itself offers? -do I help learners to see and reflect upon feedback about the processes that they employ while learning or engaging in a work performance? -am I preparing learners to use feedback and task information to chart paths forward in the workplace?

Next Level Lab, Harvard Graduate School of Education, 2.6.24

Notes:

Next Level Lab, Harvard Graduate School of Education, 2.6.24

Moves of Fast Fish Learners/Workers





Malek Shifts Careers as a Fast Fish Learner/Worker

As a learner and worker...

- I worked my way up to a night shift supervisor at a hotel.
- I can handle all kinds of problems but work best when I have one thing that I can really focus on and think about at a time. I know a lot about how things work.
- I dread feedback. It is often bad news. If I know feedback is coming, I am anxious and if it is bad, I just want to get away.
- Because of this, I know how to soften feedback for people who work for me—to help them take it in.
- I know how to make customers feel heard. I listen well.
- As a person of color, I often feel overlooked by supervisors.

What Fast Fish Moves is Malek making? What else can he do?

The new work context in food services...

- Has quiet moments and busy moments.
- Has a supervisor who works at a distance and comes to town periodically.
- Involves interacting with a diverse staff and supporting younger people coming into the business.
- Issues arise that often need someone to take initiative and approach thoughtfully; there is no immediate supervisor to guide what to do.
- Has tended to see a lot of turnover in the newest employees.
- Involves work with perishables so there has to be a responsible person who ultimately handles things.
- Involves learning the science of the various products and how to best maintain them.



Learning to be a Childcare Worker as a Fast Fish Learner/Worker: Latisha

As a learner and worker...

- I worked as a waitress in high school. I know how to work under pressure and keep my cool.
- As a waitperson, I juggled lots of needs at once.
- I thrive on social energy.
- I take initiative and seek input when I need it.
- I find it hard to work in very quiet spaces.
- If someone gives feedback in an abrupt way, I can be sensitive to it.
- I find it hard to engage in trainings that seem pointless or that don't connect to the tasks at hand.

What Fast Fish Moves is Latasha making?
What else can she do?

Studying to become a Childcare Worker...

- Involves learning a lot of rules and procedures.
- Being in the moment with the kids.
- Being able to juggle lots of needs at once.
- Learning from and with more experienced childcare workers.
- Dealing with different personalities and at least one person who is protective of the children's needs and thus hard on the staff.
- Trying to keep putting oneself out there for the kids even when one might feel triggered or not able to engage.

Working Session Two: What Are The Attitudes and Moves of Fast Fish Learners?

Begin with the document entitled [“Attitudes and Moves for Fast Fish Learners/Workers.”](#) Review it to understand the moves of Fast Fish Learners. Then use the information to analyze the case studies of Malek and Latisha from the documents [“Case Study #1: Malek’s Career Shift”](#) and [“Case Study #2: Latisha Studies to Become a Childcare Worker.”](#) Finally, consider the document [“Ten Research Points for Developing Fast Fish Learners in the Workforce and Workforce Development.”](#)



Attitudes and Moves for Fast Fish Learners/Workers



Case Study #1: Malek's Career Shift

Malek is in the process of making a career shift from working in a hotel to working in a food services program. After ten years working at a hotel where he worked his way up from the night shift supervisor to general manager, he has just taken on a new position in a food services program. He is to become the day-to-day manager in a program that prepares and sends food out to cafeterias located in industrial complexes. The job is closer to home and pays more but also requires Malek to begin anew after being in the same type of job for a decade. When asked about his persona as a worker, Malek shared the following:

- “I can handle all kinds of problems but work best when I have one thing that I can really focus on and think about at a time. I know a lot about how things work.”
- “I dread feedback. It is often bad news. If I know feedback is coming, I am anxious and if it is bad, I just want to get away.”
- “Because of this, I know how to soften feedback for people who work for me—to help them take it in.”
- “I know how to make customers feel heard. I listen well.”
- “As a person of color, I often feel overlooked by supervisors.”

Malek's new work context has the following characteristics. It has quiet moments and busy moments. His immediate supervisor is not located at the same facility as Malek. Instead, his supervisor works at a distance and comes to town periodically. Malek's job involves interacting with a diverse staff and supporting younger people coming into the business. Unfortunately, the facility has tended to see a lot of turnover in the newest employees. Issues arise that often need someone to take initiative and approach thoughtfully; there is no immediate supervisor Malek can consult with to guide him in what to do. As Malek reflects upon his new role he realizes that he feels confident about the customer service aspects and the need to be able to solve problems in the moment based upon similarities to the many instances over the past decade.

As far as the food products, because they are perishable, there has to be a responsible person who ultimately handles things. Further, there is a lot to be learned about the science of the various products and how to best maintain them.

The person whose job Malek is taking, Paul, is retiring in a month. Malek was able to pick his starting date so he decided to start sooner to give him some one-to-one time with the person who knows his job best. In watching his predecessor, he notices times when Paul is abrupt with certain employees. It seems that some of them are the newer employees as well as women who have been at the facility for a long time. At first, Malek found himself wondering why these employees were not able to perform as expected. But one night during some quiet reflection time, he realized the importance of not jumping to conclusions and of trying to consider the various perspectives in each of these situations. Perhaps understanding what each of these employees was trying to say might offer some important information in his own management decisions.

→What do you notice about Malek as far as engaging in the moves of a Fast Fish Learner? What do you notice Malek doing? What other actions related to being a Fast Fish Learner/Worker might you suggest to Malek?



Case Study #2: Latisha Studies to Become a Childcare Worker

Latisha finished high school last year and has just enrolled in a post-graduate program at her local technical high school to earn a certificate as a Childcare Provider. Even though she has never worked in childcare before, this certainly isn't her first job. All through high school, she worked at a job driver to help pay the family bills and to earn some spending money. She was actually quite a good waitress. Latisha shared the following aspects of her personality that help to explain why:

- “I know how to work under pressure and keep my cool.”
- “As a waitress, I juggled lots of needs at once.”
- “I thrive on social energy.”
- “I take initiative and seek input when I need it.”
- “I find it hard to work in very quiet spaces, so the busy environment of the diner was perfect for me.”

On the other hand, Latisha worries a bit about school. She shares, “If someone gives feedback in an abrupt way, I can be sensitive to it.” She also realizes that she isn't always that patient with formal instruction if she can't connect to it. She says, “I find it hard to engage in trainings that seem pointless or that don't connect to the tasks at hand.”

She also had experience with kids because she was often left to watch her younger siblings and cousins when her mom and aunt got called into work. They tended to look up to her and listened pretty well. Sometimes they had their friends over so it wasn't just kids that she was related to. In fact, the program seems to be going well. Latisha realizes, however, that it is about much more than the daily interactions with kids and enjoying an energetic environment. She is surprised at all the procedures and guidelines for running a safe and tight operation. She realizes that she finds it hard to listen during these parts of the training and that she tunes out and tunes out. As she considers the disengaged, resistant feeling in her body, she realizes that in her experience kids are pretty resilient and some of the procedures seem overly protective. But she decides that if she can't learn this information deeply, she isn't going to be able to run her own center someday and it is not optional to tune out as the information is presented. Instead, she needs to turn up her ears and find ways to work really hard at learning the information. Being a visual person, she decides to talk to her teacher about making a poster that she could put in the classroom to help remind everyone of the information.

She has been noticing that the head teacher in the program that she is assigned to, Shoba, has a title manner and is very encouraging to the children. This inspires a sense of calm because she is pretty sure that Shoba will be patient with her, too. The director of the program, Ronnie, is more challenging for her. Ronnie seems to know a lot about running a center but if an issue with the kids is not handled quickly and well, she can lose her cool with the assistant teachers. Latisha finds Ronnie's presence a bit triggering and realizes that, despite her own social energy, she shrinks back when Ronnie is around.

→What do you notice about Latisha as far as engaging in the moves of a Fast Fish Learner? What do you notice Latisha doing? What other actions related to being a Fast Fish Learner/Worker might you suggest to Latisha?



Ten Research Points for Developing Fast Fish Learners in the Workforce and Workforce Development

1. Active processing is key to deep learning and understanding. You can't “give knowledge” to someone else.
2. Productive struggle is one of the most meaningful ways to make learning robust and sticky.
3. Learners need to engage in unproductive struggle at times in order to learn to recognize it and to realize that they need to change course.
4. Reflection in the form of metacognition is one of the most important things that we can do to enhance learning. However, metacognition cannot timeshare with thinking. It requires a serial process of thinking then reflecting and so on or a full metacognitive pause for analyzing one's thinking.
5. Research shows that when learners know the rationale for specific learning moves, they are much more likely to apply them and to recall them over time.
6. There are general learning principles that apply to all minds, but all minds are not the same and equity in learning environments requires making space for their differences.
7. Learners who are introduced to Fast Fish Framing are more likely to report engaging in moves that fit with Fast Fish Learning.
8. Learners who are adept at transferring knowledge from one situation to another are often strong analogical reasoners. They can “get to the bones” of how things are similar.
9. The most effective learners understand that they have embodied minds. They are alert to and manage their feelings as a core part of thinking and learning. They assess when they are backing away because something is hard, frustrating, puzzling, etc. They have ways of stepping away from the problem and circling back with new emotional stamina, insights, or approaches.
10. Effective learners use their social network to support their learning. They use others' minds well.

