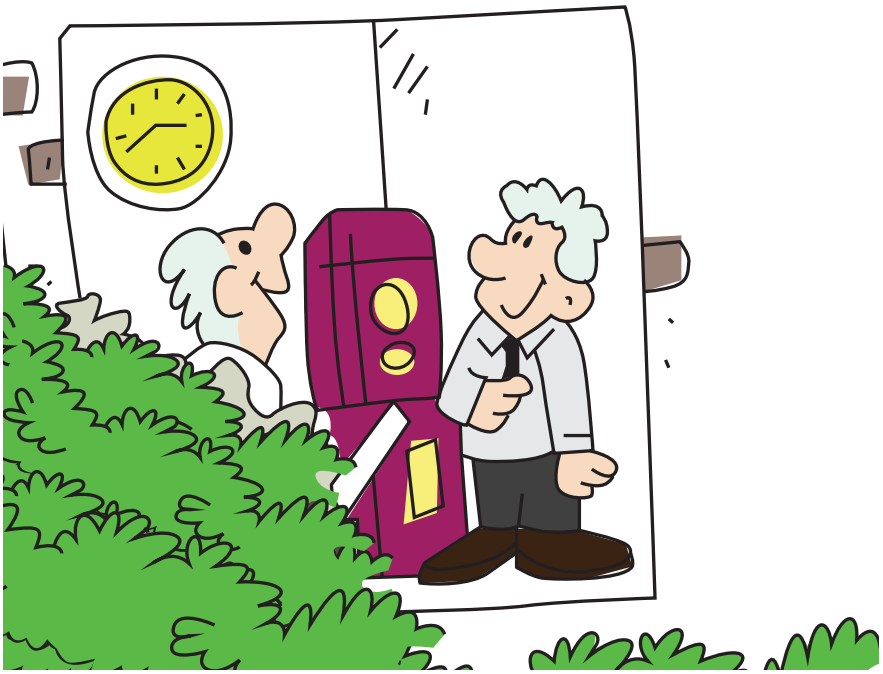
Workflow Learning

"DID IT WORK?"

Conversations Matter in Workflow Learning



Vignettes Learning

"Hey, what happened to that instrument problem? What did you try? Did it work?" "I'll cover you. No worries."

Often, when visiting various client organizations, I often pick up bits and pieces of conversations between co-workers. These conversations sometimes seem like Tweets or verbal Emojis and often sound like some hidden code known only to the workers.

These conversations had me thinking:

- How do workers think, work, and learn in the workflow?
- What do workers actually think and do?
- How can I summarize my discoveries into a repeatable method?

To gain insight, I captured some of the common conversations and mapped them into a process.

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Workflow Learning Author

"Conversations are the forms of language, and language is our way of communicating our thoughts and behaviors. Conversations tell us what workers think and do while at work. "

Mapping Conversations to the Workflow Diagnostic Process

Thinking Process	1. Diagnosing Problems	2. Finding Answers and Solutions	3. Trial and Error and Testing	4. Metrics and Feedback
Conversations	"What's wrong with it?" "Where did it start?" "How bad is it?" "What are the impacts?" "What happens if this is or isn't fixed?" "Is it even worth fixing?"	"Ask Ben, he worked on this before." "What do I already know about this?" "I recall this to be the case." "Is it the same as the other time?" "Check the logs and the suppliers."	"What happened?" "Did you try my suggestion?" "What did you discover?" "What did you try differently?" "How many times did you test it?" "How did you test it?" "Try it again but do it slightly differently."	"Did it work?" "Is there still a problem?" "Did you compare it to other similar batches?" "I wonder if this affects the downstream or upstream parts?" "What does the data say?"

Fig. 1 Mapping Conversations into Actions shows sample conversations and where they fall within the thinking processes of the Workflow Diagnostic Process.

In an earlier article, "Figure it Out!" - A Practical Framework for Workflow Learning, I shared a diagnostic thinking framework for Workflow Learning. See the illustration below.

Workflow Diagnostic Process

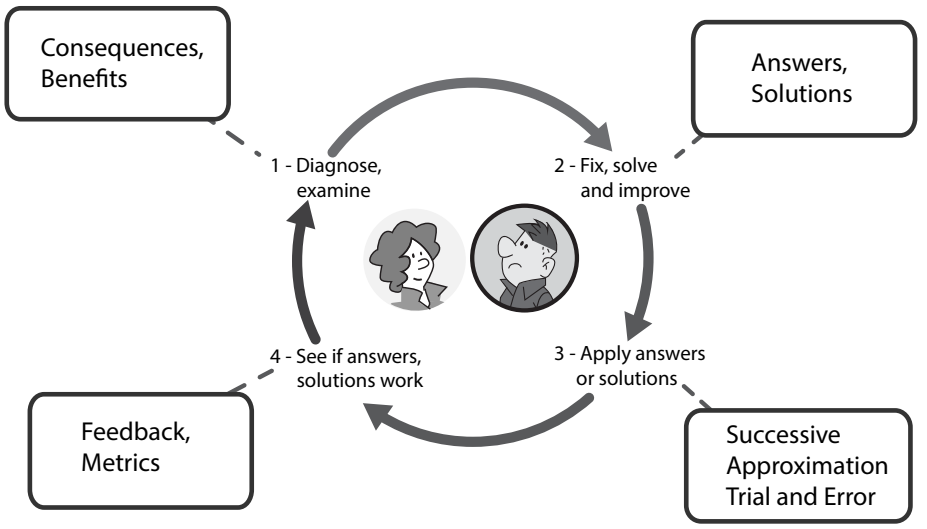


Fig. 2 Workflow Diagnostic Process.

As you can see, conversations follow patterns within the framework. I developed the framework from what was reflected in the conversations.

The following thoughts revolve around what Michael Corballis suggests about conversations. "Conversations are the forms of language, and language is our way of communicating our thoughts and behaviors. Conversations tell us what workers think and do while at work."

How do workers work, think and learn?

Conversations tell us that workers think, work and learn all at the same time. The flow of conversations are natural and organic within the worker's environment. At the center of these conversations are work issues. The conversations address real-world impacts on results in the workplace. Learning is highly significant at these times because it is critical thinking within a real-world context.

"When workers have conversations about real work issues and problems, the quality of conversations becomes deeper. "

What do workers actually think and do?

Borrowing from the works of Jane Bozarth and others, I develop a mental model to help answer the question, "What do workers actually think and do?"

Workflow Learning Characteristics and Quality of Conversations

Quality of Conversations	Low	Moderate	High
Characteristics / Conversations			
Focus on work issues - direct work issues and impacts "What are impacts?" "What happens if this is or is not fixed?"			
Learning from others - trusting others for reliable answers "Ask Ben, he worked on this before." "I recall this to be the case." "Check the logs or suppliers."			
Sharing of work - share one's solutions, methods, materials "Is it the same as what you did before?" "Was there a similar incident?" "Try it again but do it slightly differently."			
Experimental - continuous testing and discoveries, discover hidden aspects "What did you discover?" "How many times did you test it?" "What did you try differently?"			
Big picture thinking - going beyond one's silo; gaining deeper knowledge "Ask Ben, he worked on this before." "Try it again but do it slightly differently." "I wonder if this affects the downstream or upstream parts?"			

Fig. 3 - Workflow Learning Characteristics and Quality of Conversations shows the relationship of the conversations to Workflow Learning characteristics. The Quality of Conversations may be rated low, moderate or high based on the intensity and frequency and the impacts of solutions to work conditions.

"Conversations bring Workflow Learning to life."

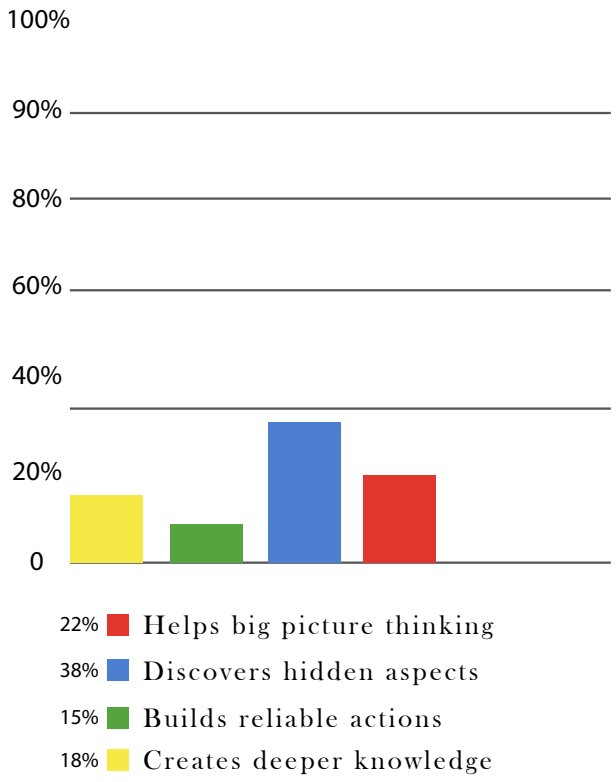
By transposing conversations into Workflow Learning Characteristics and rating them, we're able to observe how workers simultaneously think, work and learn.

A significant discovery for me is this: When workers have conversations about real work issues and problems, the quality of conversations becomes deeper. The more artificial the work scenarios are, the quality of conversations becomes lower.

Real Work Issues Trigger Deeper Conversations

From my workshops, I compared two data sets on what happens to the quality of conversations based on artificial work vs real work issues.

Artificial Work Issues



* Sampling of 200 participants

Fig. 4 Shows how participants respond to an exercise where work issues are made up by an instructional designer.

"Workflow Learning works in conditions where real work issues are being fixed, solved and improved by workers."

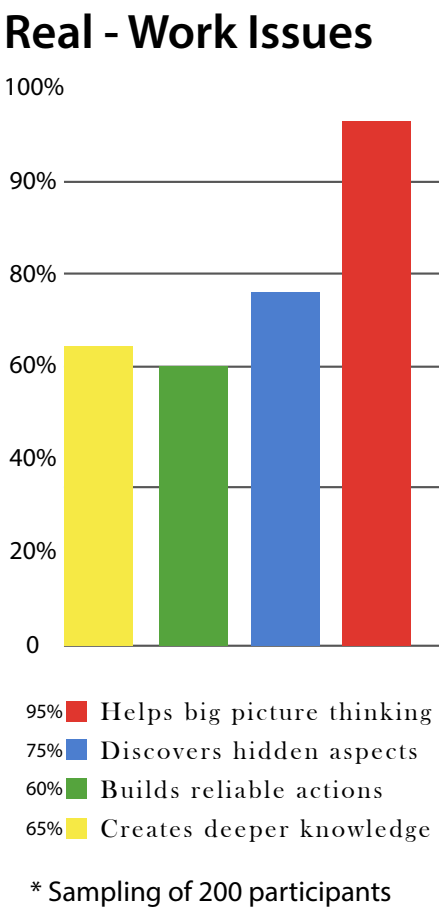


Fig. 5 Shows how participants respond to an exercise when participants selected their own work situations. These situations represented current concerns of the participants.

The survey data confirms what experts tell us: work is one of the best places to learn. Of greater significance is that Workflow Learning works in conditions where real work issues are being fixed, solved and improved by workers.

How can I summarize my discoveries into a repeatable method?

To continue my study of Workflow Learning, I follow these principles and practices:

- Allow workers and workshop participants to select real-world work issues

- Let them go through the thinking process as outlined in the Workflow Diagnostic Model
- Use their conversations and self-rating as a reflection process with the goal of adding depth and maturity to their conversations and critical thinking skills
- Collect data on workers' experience within the Workflow Diagnostic Process

Conclusion

Conversations bring Workflow Learning to life. Digital collaboration and learning technologies accelerate the conversations between workers. Conversations contain layers of stories and experience-sharing which make them even more engaging. Conversations set the context for Workflow Learning. Observing conversations is a window into how workers progress through the Diagnostic Workflow Process.

Resources

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