Dimension	Sub-Dimension	Code	Description
Behavior Pattern	When	Initial hint request	Seek help right after reading the program description
		During solution creation	Seek help during the process of building a possible write-code solution
		During solution evaluation	Seek help after generating a write-code solution but get errors when testing it
	How - to solve Parsons problems	Solve	Drag corresponding Parsons blocks to get a correct solution
		Move blocks but not solve	Move some blocks but don't check to get a correct solution
		Scan	Scan Parsons blocks to find the needed information but never move
	How - to finish write-code problems after solving Parsons problems	Direct copy	Empty the write-box and copy Parsons solutions line by line
		Side-by-side	Finish writing code with Parsons hint as a reference on the screen
		Independent work	Finish writing code without Parsons hint
	How - the relationship of the code in write-code problems and Parsons solution	Follow Parsons solution	Inherit Parsons solution to reconstruct their code
		Apply Parsons solution to their own code	Apply what they had learned from Parsons solutions to refine their existing code
Underlying reason	Why - Motivation	Get the direction	Clueless about their current status and what to know where to go
		Syntax Reminder	Forget how to use specific operators or syntax to achieve the solution
		Debug	Want to correct errors in their buggy code
Helpfulness	Usefulness	Solution optimization	Parsons problem provides a better way to solve the write-code problem
		Speed up	Parsons problem makes it faster to solve the write-code problem
		Learn syntax	Memorize and understand specific Python usage better
		Understand a correct solution	Understand how Parsons solution works to solve the problem
		Reduce difficulty	Limit the solution space to reduce the question difficulty
		Think more	Not only generate a solution but also think deeper such as why it is correct

		Avoid use (help-me button/Parsons)	Not use Parsons problems at all or reluctant to use help-me button
		Think differently	Parsons shows a different solution from student's
		Less autonomy	Highly rely on Parsons solution to solve the write code problem
		Comprehension of parsons code	Have difficulty explaining and supporting Parsons correct solutions
	Challenges	Makes it harder (distractor)	Add difficulty to Parsons problems that are hard enough
		User Interface suggestion	
Design Suggestions		Mechanism suggestion	