



# **Focused authoring for building GIFT tutors in specialized domains: a case study of psychomotor skills training**

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**GIFTSym 5**

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# The Problem



- Army's vision for 21st Century Soldier Competencies (ALM)
- Psychomotor skills foundational to full-spectrum capabilities
  - Adaptability & initiative
  - Comprehensive fitness
  - Tactical & technical competencies.
- Training is costly, limited access and tools
- Need affordable, scalable psychomotor training
- Need tool performance support for psychomotor domain and GIFT ITS authoring

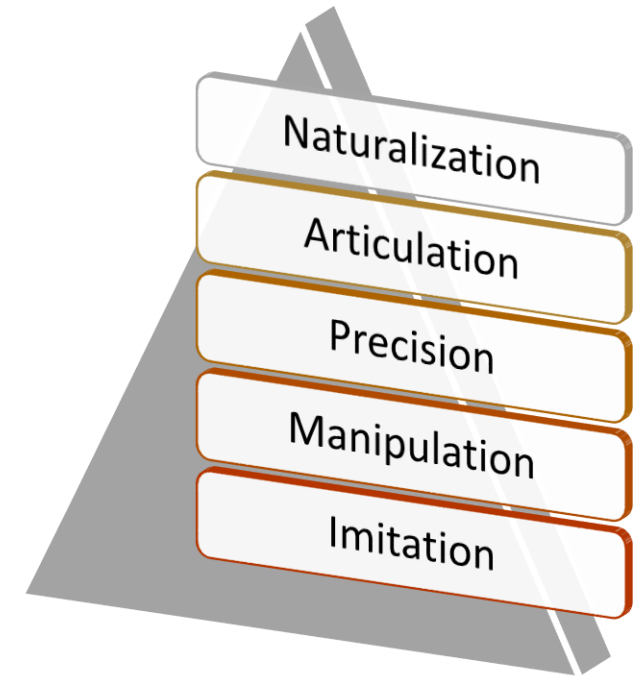
# Challenges of Intelligent Tutoring



- Army embracing intelligent tutoring for scalable, replicable training
  - Making Soldiers full-spectrum capable through the use of psychomotor ITS
  - Marksmanship (e.g., Goldberg, Amburn, Brawner & Westphal, 2014)
  - Tactical Combat Casualty Care (e.g., Goldberg & Cannon-Bowers, 2015).
- Still costly, time-consuming; Must be affordable, replicable, reusable process
- Solution? ITS Authoring Tools
  - Getting better but limited in scale, utility, usability, instructional value

# How Are Psychomotor Skills Different?

- “Psychomotor” is not a homogenous label
  - Simpler, manual tasks (polishing boots)
  - More procedural tasks (loading artillery, performing a precision drill routine)
  - Highly complex psychomotor tasks (landing a CH-47, emergency cricothyrotomy)
- Existing frameworks include:
  - Simpson (1972) -- Seven major categories of psychomotor behaviors.
  - Harrow (1972) – Six functional categories
  - Dave (1970): Imitation; Manipulation; Precision; Articulation; and Naturalization
- Our synthesis of a taxonomy of military-relevant psychomotor skills
  - Training-relevant characteristics that influence how an authoring tool would be composed.
  - E.g. learning objectives, sequencing, instructional strategies, remediations, and assessments.



**Psychomotor Domain**  
Based on Dave (1970)

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# Psychomotor Skill Acquisition

Level	Definition	Example
Observing	Active mental attending of a physical event.	The learner watches a more experienced person. Other mental activity, such as reading may be a part of the observation process.
Imitating	Attempted copying of a physical behavior.	The first steps in learning a skill. The learner is observed and given direction and feedback on performance. Movement is not automatic or smooth.
Practicing	Trying a specific physical activity over and over.	The skill is repeated over and over. The entire sequence is performed repeatedly. Movement is moving towards becoming automatic and smooth.
Adapting	Fine tuning. Making minor adjustments in the physical activity in order to perfect it.	The skill is perfected. A mentor or a coach is often needed to provide an outside perspective on how to improve or adjust as needed for the situation.

Generalized/Combined Phases of Psychomotor Domain Learning

# Authoring Tool Sweet-Spot

- ITS Authoring Tools: General-Purpose/Special Purpose Tradeoffs
  - General-purpose tools provide great deal of leeway
  - Tools focused on a specific *kind* of ITS can be more powerful
- PSTAAT: Authoring tool to encapsulate knowledge to guide authoring
  - *Instructional design* knowledge tailored to iteratively teach/practice/assess skills
  - *Psychomotor Domain* knowledge for guiding design decisions and feedback
  - *GIFT ITS* knowledge for authoring, configuration, and sensor application
- Goal: AI-supported authoring for militarily-relevant psychomotor tasks
  - Embody (and help authors adhere to) assumptions about the authored product
  - Enforce rudimentary instructional principles to achieve intended outcomes
  - Provide “sidekick” and “planner” guidance with user-centered performance support
  - Streamline ITS development by leveraging templates and semi-automation

# Core to Our Approach: An Exemplar ITS

- Suitable ITS Exemplar:

  - **Advanced Marksmanship Trainer**

    - Exemplar serves as envisioned product of authoring process facilitated by PSTAAT
    - “What would a tool need to look like to have enabled the development of this ITS?”

- Benefits

  - target outcome to frame the design of the authoring tool
  - illustration for the ITS author to refer to during development
  - incrementally adapt existing ITS (“guided case adaptation” Bell, 2003)



# Generalized Intelligent Framework for Tutoring

- Government-owned suite of open-source ITS tools, ongoing at ARL
- Includes an authoring process with graphical interface for creating lessons

The image displays three overlapping screenshots from the GIFT Cloud interface. The top-left screenshot shows the 'Course Creator' tab in a web browser, with a red circle around the 'Course Creator' link in the navigation bar. Below the navigation bar, a grid of course cards is visible, including 'COIN Auto Tutor Session Example', 'Excavator Training (demonstration version)', 'Hello World', 'Hemorrhage Control', 'Logic Puzzle Tutorial', and 'Marksmans'. The top-right screenshot shows a flowchart for 'How to Land' with steps: 'Course Start' (black circle), 'Information as Text Intro Screen', 'Information from Web Overview of landing', 'AutoTutor Conversation Intro', 'Conversation Tree Preparing for approach', and 'Adaptive Courseflow Assessing landing configuration and setup'. A dashed box highlights the 'Adaptive Courseflow' step. The bottom-right screenshot shows the 'GIFT Gateway Module Setup' window with instructions: '1 Find & Run the GIFT Gateway Module File', '2 Click "Run"', and '3 Follow the Remaining Steps'. A 'Run' button is circled in red. To the right of the flowchart is a sidebar with 'Concepts to cover' (Setting up the approach, Configuring for landing, Reducing airspeed, Levelling off), 'Rule Phase' (Add Content, Show Content Files, Show message on completion), 'Example Phase' (Add Content, Show Content Files, Show message on completion), and 'Check on Learning Phase (Recall) Course Question Bank' (New Course Question Bank, No Survey Defined, Number of questions to show per concept).



# PSTAAT in GIFT

- Utilize GIFT *Course Creator*
- Create a PSTAAT *course object* to be integrated w/GIFT authoring

The screenshot displays the GIFT Course Creator interface. The top navigation bar includes 'Take a Course', 'Learner Profile', 'Course Creator', and 'My Research'. The main window is titled 'PSTAAT Example Course'. On the left, the 'Course Properties' panel shows a list of 'Course Objects' including PowerPoint, Virtual Battle Space, TC3, DE Testbed, ARES, Example Application, Survey/Test, and AutoTutor Conversation. The 'Psychomotor Activity' object is highlighted with an orange box. Below this list is a 'Media' section with a description for 'Psychomotor Activity'. The central area shows a course flow diagram with a 'Course Start' node leading to an 'Information as Text' node (Example Guidance), which then leads to a 'Psychomotor Activity' node (Marksmanship EST). A dashed box with a plus sign indicates a connection point. On the right, a configuration panel for 'Marksmanship EST' is open. It includes a 'Concepts to cover' section with checkboxes for Breathing, Trigger Squeeze, Barrel Movement, and Sight Picture. Below this is a 'Psychomotor Domain Instructional Approach' dropdown set to 'Dave'. The 'Initiation Phase' is marked 'not started' and has 'Set Profile' and 'Add Responses' buttons. The 'Naturalization Phase' is also marked 'not started'. At the bottom of the panel are 'Save Changes' and 'Cancel' buttons. A 'PSTAAT Agent says:' section at the bottom right contains a lightbulb icon and the text: 'Great, now you can set the profile for the initiation phase. You can choose an existing one or create a new profile.'

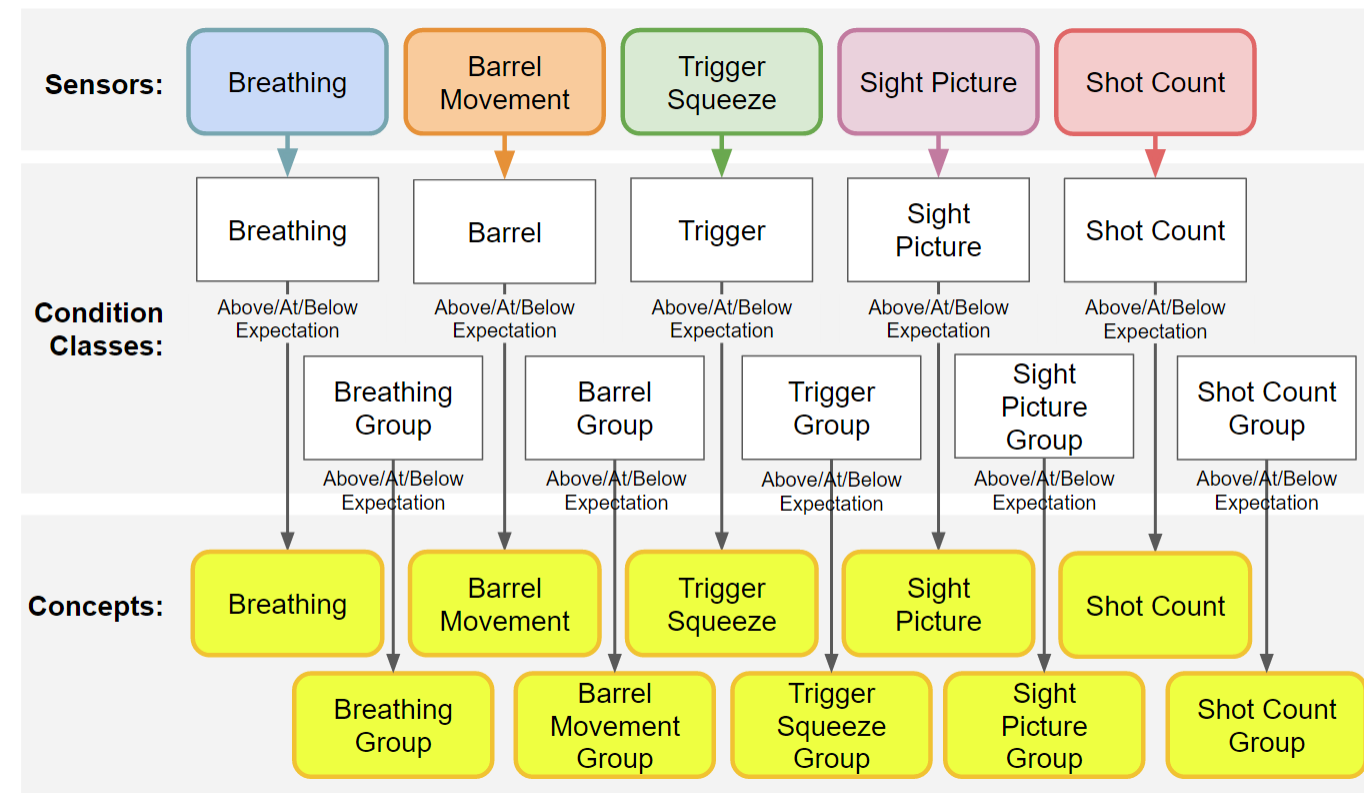
# Psychomotor: Making sense of sensors

- Utilize existing and envisioned sensor devices integrated w/GIFT
  - BioHarness
  - Emotiv
  - Kinect
  - Mouse
  - Multisense
  - OS3D
  - Qsensor
  - SineWave

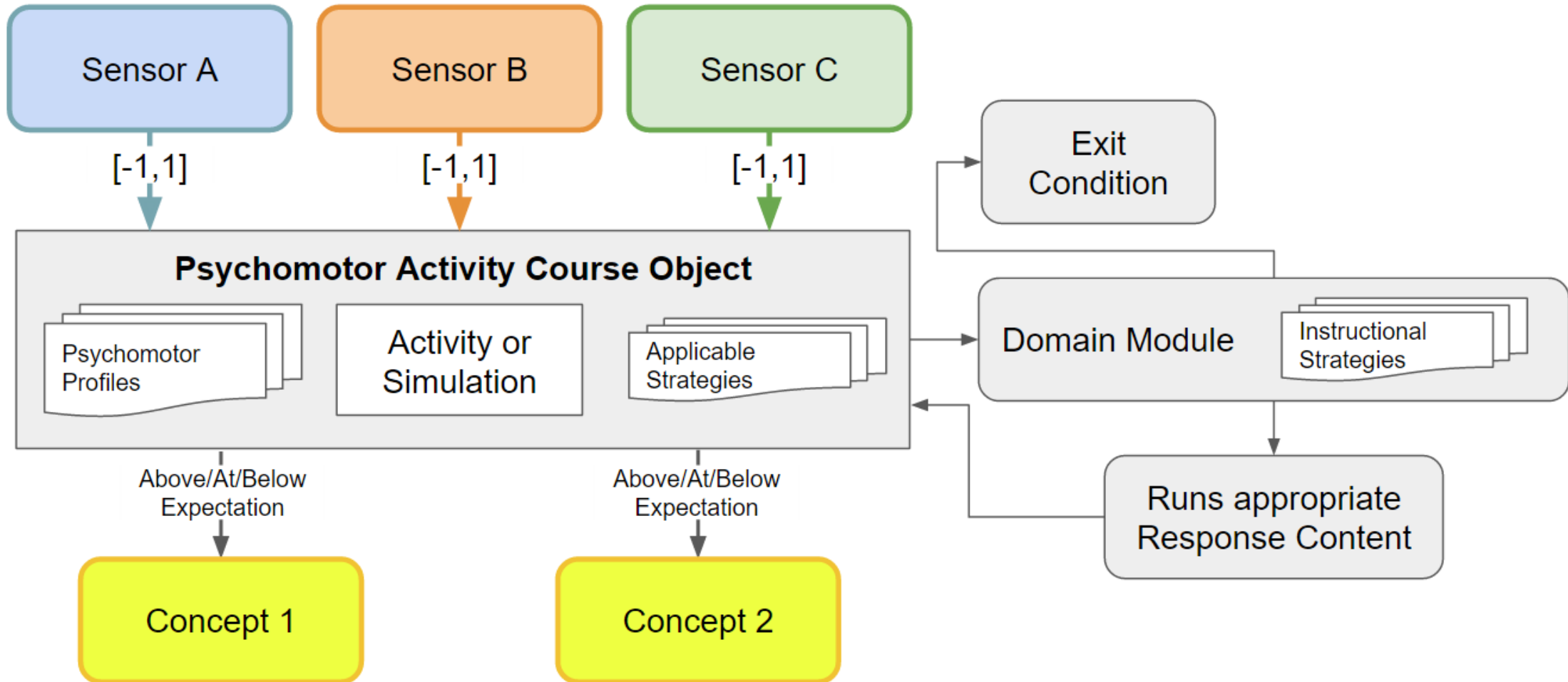


# Psychomotor: Making sense of sensors

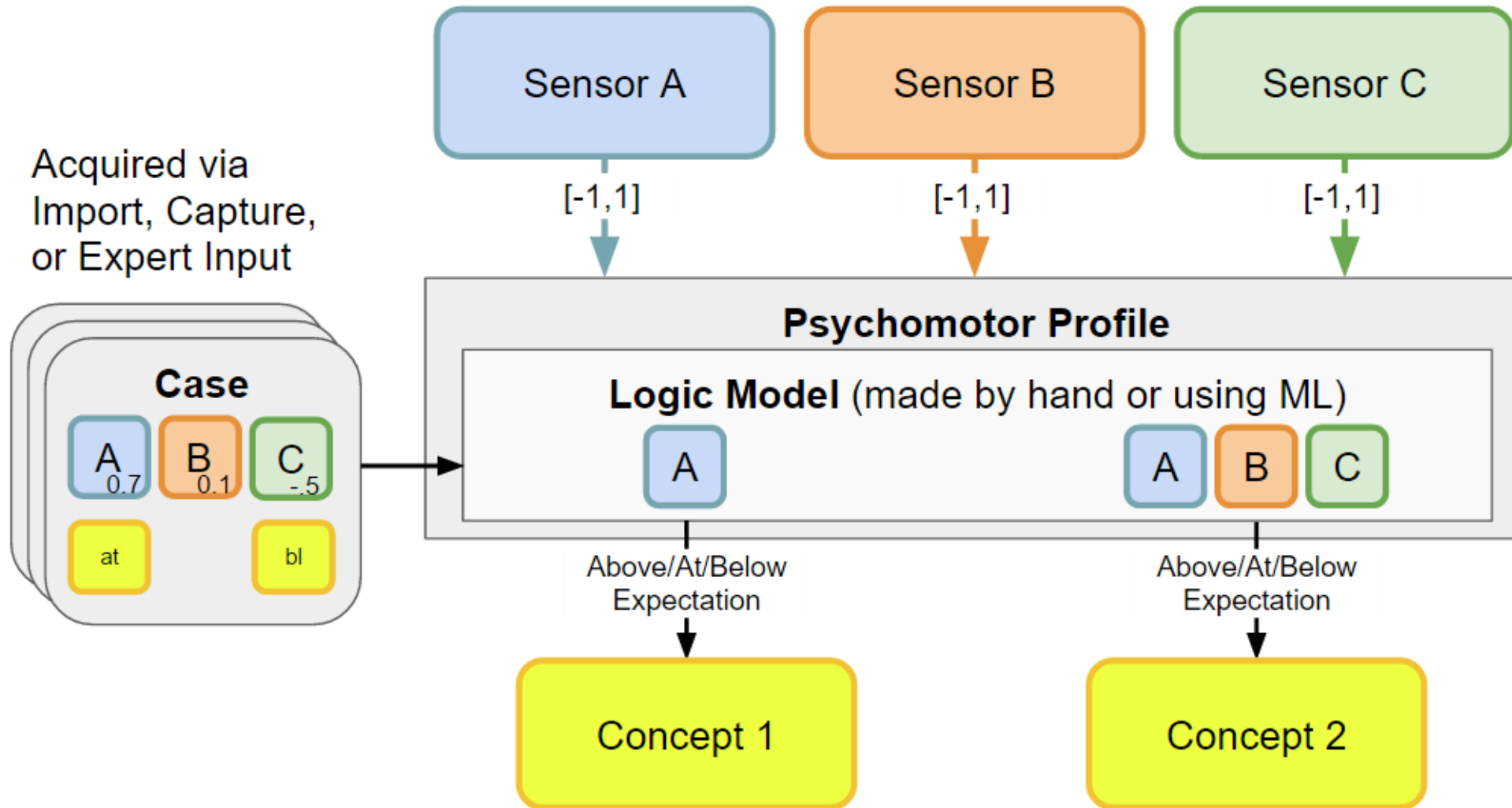
- Simplify by separating **sensor configuration** from **instructional design**  
(Psychomotor Profile) (Psychomotor Activity)
- Need to help author map sensors to concepts
- Generalize approach used in exemplar



# Psychomotor Activity Course Object

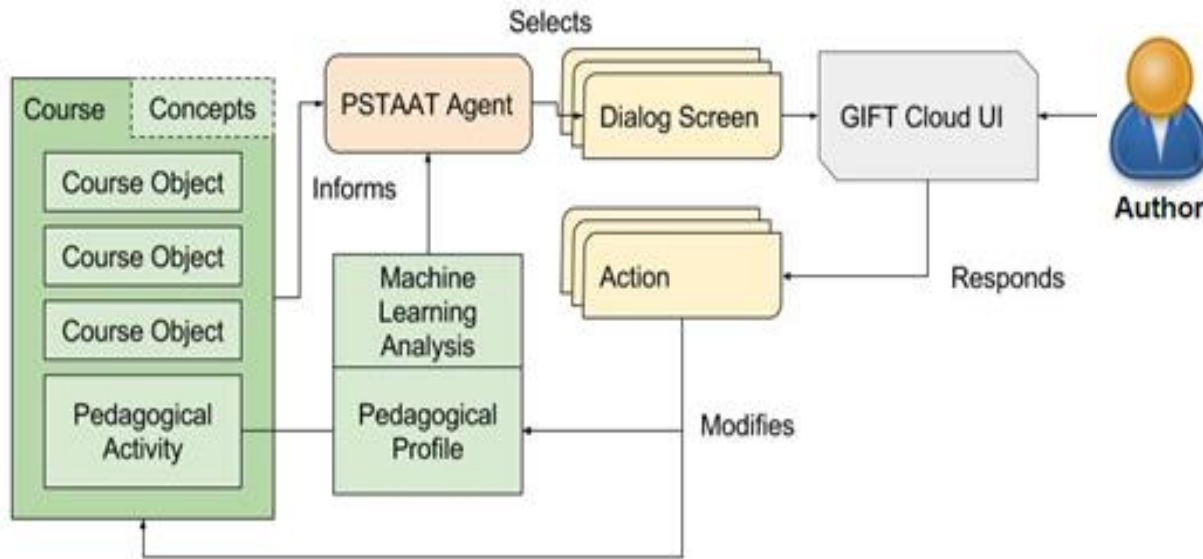


# Psychomotor Profile

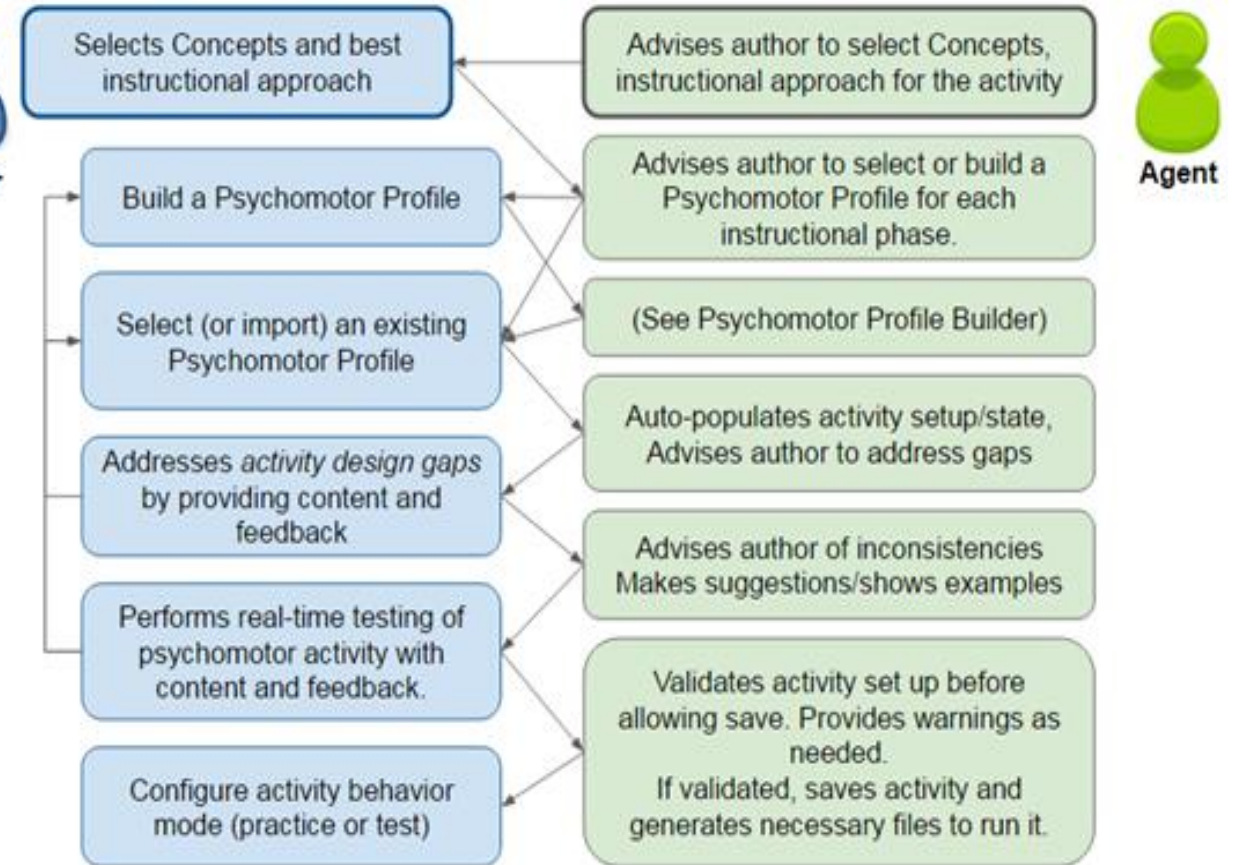


# PSTAAT Authoring Agent

## Functional Block Diagram

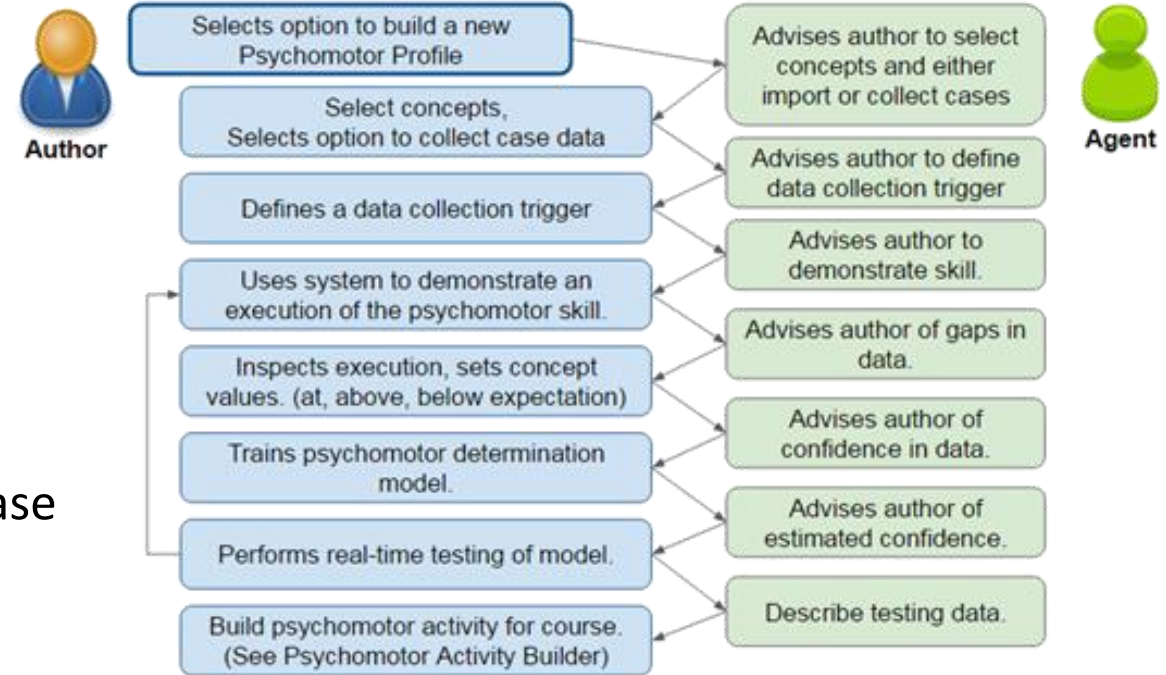


## Dialogue Outline for Building Activity



# Authoring Agent w/ Machine Learning

- Train ML model using demonstration cases
  - Author creates Psychomotor Profile
  - Selects and calibrates sensors
- System requests demonstration of activity
  - Author (or expert) demonstrates activity
  - At specified threshold levels (below, at, above)
  - Author accepts or rejects each demonstration case
- Repeat until ML model can recognize level
- System identifies gaps in model
- Model can correctly and completely measure performance.



# Psychomotor Activity Course Object

Author adds a *Psychomotor Activity* course object to a course.

The screenshot displays a course authoring tool interface. At the top, there are navigation tabs: 'Take a Course', 'Learner Profile', 'Course Creator', and 'My Research'. The main window is titled 'PSTAAT Example Course'. On the left, a 'Course Properties' sidebar is visible, with a 'Course Objects' section containing a grid of icons for various objects: PowerPoint, Virtual Battle Space, TC3, DE Testbed, ARES, Example Application, Survey/Test, AutoTutor Conversation, Conversation Tree, Question Bank, Media, Structured Review, Adaptive Courseflow, and Psychomotor Activity. The 'Psychomotor Activity' object is highlighted with a blue border. Below the grid, a note reads: 'Drag objects onto the course flow area to add them to your course.' At the bottom of the sidebar, a 'Media' section is partially visible, with a description for 'Psychomotor Activity': 'Promotes the development of psychomotor task skills with increasing complexity and delivers remediation based on learner state according to sensor readings and profiles.'

The main workspace shows a course flow diagram. It starts with a black oval labeled 'Course Start', which points to a white box labeled 'Information as Text' containing 'Example Guidance'. Below this, a dashed rectangular box with a plus sign (+) is positioned. An orange arrow points from the 'Psychomotor Activity' object in the sidebar to this dashed box, indicating its addition to the course flow.



# Building the Psychomotor Activity

The screenshot displays the PSTAAT course creator interface. On the left, a sidebar lists various course objects such as PowerPoint, Virtual Battle Space, TC3, DE Testbed, ARES, Example Application, Survey/Test, AutoTutor Conversation, Conversation Tree, Question Bank, Media, Structured Review, Adaptive Courseflow, and Psycho motor Activity. The main area shows a course flow diagram for 'PSTAAT Example Course' with a 'Course Start' node leading to 'Information as Text' (Example Guidance), which then leads to a 'Psychomotor Activity' (Marksmanship EST). A dashed box with a plus sign indicates a placeholder for additional content. On the right, a configuration window for 'Marksmanship EST' is open, showing a list of concepts to cover (Breathing, Trigger Squeeze, Barrel Movement, Sight Picture) and a dropdown menu for the 'Psychomotor Domain Instructional Approach' set to 'Dave'. Below this, the 'Dave's model' is described as adequate for adult training, consisting of 5 phases. A 'Continue' button is visible. At the bottom, the 'PSTAAT Agent says' section provides a tip about the 'Dave model'.

Course Properties

Course Objects

PowerPoint Virtual Battle Space

TC3 DE Testbed

ARES Example Application

Survey/Test AutoTutor Conversation

Conversation Tree Question Bank

Media Structured Review

Adaptive Courseflow Psycho motor Activity

Drag objects onto the course flow area to add them to your course.

Media

Psychomotor Activity  
Promotes the development of psychomotor task skills with increasing complexity and delivers remediation based on learner state according to sensor readings and profiles.

PSTAAT Example Course

Course Start

Information as Text  
Example Guidance

Psychomotor Activity  
Marksmanship EST

Marksmanship EST

Concepts to cover:

- Breathing
- Trigger Squeeze
- Barrel Movement
- Sight Picture

Psychomotor Domain Instructional Approach:

Dave

**Dave's model**  
The Dave model is adequate and appropriate for most adult training in the workplace. It consists of 5 phases based on consciously improving competence in sequenced stages. [Learn more...](#)

Continue

Save Changes Cancel

PSTAAT Agent says:  
The **Dave model** is useful for describing work- and life-related skill development. Most designers find it relatively easy to apply and pretty thorough as an instructional approach for average learners.

Author selects concepts and a Psychomotor Domain Instructional Approach from list.

Agent auto-generates corresponding instructional phases and learner guidance from templates.

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# Building the Psychomotor Activity

Take a Course | Learner Profile | Course Creator | My Research

## Edit Psychomotor Profile

Profile Name:  [Duplicate Profile](#) | [Export Profile](#) | [Delete](#)

Concepts and Sensors: **Breathing** | Trigger Squeeze | Barrel Movement | + [Import Cases](#) | [Collect Cases](#)

### Sensor configuration for Breathing

[Copy Configuration](#) | [Delete Concept](#)

Expectation Level	True if	are met	Bioharness Sensor	Other Sensor A	On/Off
Above Expectation	ALL		0.7	0.5	On
At Expectation			0.2	0.0	Off
Below Expectation	ANY		0.0	-0.1	On

[Add / Remove Sensors](#)

[Save Changes](#) | [Cancel](#)

### Marksmanship EST

Concepts to cover:

- Breathing
- Trigger Squeeze
- Barrel Movement
- Sight Picture

Psychomotor Domain Instructional Approach:

#### Dave's model

- ▼ Imitation Phase In progress
  - Marksmanship Imitation Profile [Edit](#)
  - [Add Responses](#)
  - [Show Content Files](#)
  - Show message on completion
  - [Preview](#)
- ▶ Manipulation Phase not started
- ▶ Precision Phase not started
- ▶ Articulation Phase not started
- ▶ Naturalization Phase not started
- ▶ Activity Options

[Save Changes](#) | [Cancel](#)

PSTAAT Agent says:

For each concept tab, **configure the sensor readings** for Above, At, and Below Expectation performance levels. Sensors can be disabled and their relationships altered for each performance level.

For each phase, Author selects a Psychomotor Profile from list to reuse or edit.

Agent generates placeholder instructional strategies for all possible learner performance scenarios.

# Building the Psychomotor Activity

Take a Course Learner Profile Course Creator My Research

## Add Responses for the Imitation Phase

	Below Expectation	At Expectation	Above Expectation
Breathing	<a href="#">Modify feedback</a>	<a href="#">Add instructional feedback strategy</a>	<a href="#">Add instructional feedback strategy</a>
Trigger Squeeze	<a href="#">Modify feedback</a>	<a href="#">Add instructional feedback strategy</a>	<a href="#">Add instructional feedback strategy</a>
Barrel Movement	<a href="#">Add instructional feedback strategy</a>	<a href="#">Add instructional feedback strategy</a>	<a href="#">Add instructional feedback strategy</a>
Sight Picture	<a href="#">Add instructional feedback strategy</a>	<a href="#">Add instructional feedback strategy</a>	<a href="#">Add instructional feedback strategy</a>

Save Responses Cancel

Marksmanship EST

Concepts to cover:

- Breathing
- Trigger Squeeze
- Barrel Movement
- Sight Picture

Psychomotor Domain Instructional Approach:  
**Dave's model**

▼ Imitation Phase In progress

Marksmanship Imitation Profile Edit

**Add Responses**

[Show Content Files](#)

Show message on completion

[Preview](#)

► Manipulation Phase not started

► Precision Phase not started

► Articulation Phase not started

► Naturalization Phase not started

► Activity Options

**Save Changes** Cancel

PSTAAT Agent says:

Use the chart to **add instructional responses** for each level of performance detected during the imitation phase.

Author designs ITS instructional strategies for each possible performance scenario.

Author has option to review ITS behavior for each phase by using Preview Mode.

# Building a Psychomotor Profile

Author can create a new Psychomotor Profile by selecting “New Profile...”

Take a Course   Learner Profile   Course Creator   My Research

## New Psychomotor Profile

Profile Name Delete

Marksmanship Imitation Profile

Concepts and Sensors

**Import Cases** Import existing modeling data. The system will attempt to match to covered concepts.

**Collect Cases** Collect data by demonstrating performance expectations.

**Manual Entry** Manually set up concepts and sensor associations.

**Save Changes**   **Cancel**

Marksmanship EST

Concepts to cover:

- Breathing
- Trigger Squeeze
- Barrel Movement
- Sight Picture

Psychomotor Domain Instructional Approach:

### Dave's model

▼ Imitation Phase In progress

New Profile... Edit

**Add Responses**

[Show Content Files](#)

Show message on completion

**Preview**

► Manipulation Phase not started

► Precision Phase not started

► Articulation Phase not started

► Naturalization Phase not started

► Activity Options

**Save Changes**   **Cancel**

PSTAAT Agent says:

To create a new **psychomotor profile** you'll need to provide a unique name, then select the best concept and sensor configuration method for your tutor.

# Building a Psychomotor Profile

Author has option to import existing sensor/performance data.

Agent analyzes the imported data and uses ML techniques to recommend sensor performance level thresholds.

The screenshot displays the 'New Psychomotor Profile' interface. On the left, the 'Profile Name' field contains 'Marksmanship Imitation Profile'. Below it, the 'Concepts and Sensors' section has three buttons: 'Import Cases', 'Collect Cases', and 'Manual Entry'. An orange arrow points from the 'Import Cases' button to the 'Import Case Data' dialog box. The dialog box prompts the user to 'Select all of the concepts covered in the case data:' and lists 'Breathing', 'Trigger Squeeze', 'Barrel Movement', and 'Sight Picture'. Below this, it asks to 'Locate your data file to import:' with a 'Browse' button and a 'No file selected' indicator. At the bottom of the dialog are 'Import' and 'Cancel' buttons. On the right, the 'Marksmanship EST' profile configuration is shown. It includes a 'Concepts to cover:' list with the same four items. Below that, the 'Psychomotor Domain Instructional Approach:' is set to 'Dave's model'. Under 'Dave's model', the 'Imitation Phase' is expanded and marked 'In progress', with a dropdown menu showing 'New Profile...' and an 'Edit' button. There are buttons for 'Add Responses', 'Show Content Files', and 'Preview'. Below this, a list of phases is shown: 'Manipulation Phase', 'Precision Phase', 'Articulation Phase', and 'Naturalization Phase', each with a status of 'not started'. At the bottom of the configuration are 'Save Changes' and 'Cancel' buttons. At the very bottom, a 'PSTAAT Agent says:' section features a lightbulb icon and the text: 'Let's try to reuse your existing psychomotor task performance data. First, tell me what concepts are covered, then point me to your data file. I'll guide you through the next steps and analysis.'

# Building a Psychomotor Profile

Author has option to collect sensor/performance data.

Agent launches ML-supported process using GIFT as experiment station to measure and collect performance demonstration cases.

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The screenshot displays the 'New Psychomotor Profile' interface. On the left, the 'Profile Name' field contains 'Marksmanship Imitation Profile'. Below it, the 'Concepts and Sensors' section has three buttons: 'Import Cases', 'Collect Cases' (highlighted in orange), and 'Manual Entry'. An orange arrow points from the 'Collect Cases' button to a 'Collect Case Data' dialog box. The dialog box has a 'Collect' button and a 'Cancel' button. On the right, the 'Marksmanship EST' window shows 'Concepts to cover' with checkboxes for 'Breathing', 'Trigger Squeeze', 'Barrel Movement', and 'Sight Picture'. Below this is the 'Psychomotor Domain Instructional Approach' section, titled 'Dave's model', which includes an 'Imitation Phase' (marked 'In progress') with a 'New Profile...' dropdown and an 'Add Responses' button. Other phases listed are 'Manipulation Phase', 'Precision Phase', 'Articulation Phase', and 'Naturalization Phase', all marked 'not started'. At the bottom of the right window, there is a 'Save Changes' button and a 'Cancel' button. A PSTAAT Agent message at the bottom says: 'Let's try to use GIFT sensors to collect psychomotor task performance data now. I'll guide you through the next steps and analysis.'

# Building a Psychomotor Profile

The screenshot displays the 'New Psychomotor Profile' interface. At the top, there are navigation links: 'Take a Course', 'Learner Profile', 'Course Creator', and 'My Research'. The main heading is 'New Psychomotor Profile'. Below this, there is a 'Profile Name' field containing 'Marksmanship Imitation Profile' and a 'Delete' link. Under 'Concepts and Sensors', there are three buttons: 'Import Cases', 'Collect Cases', and 'Manual Entry'. An orange arrow points from the 'Manual Entry' button to a modal window titled 'Add concepts'. This modal window prompts the user to 'Select all of the concepts to be covered in this profile:' and lists four concepts: 'Breathing', 'Trigger Squeeze', 'Barrel Movement', and 'Sight Picture'. The 'Trigger Squeeze' concept is selected. There are 'Add' and 'Cancel' buttons at the bottom of the modal. To the right, a browser window titled 'Marksmanship EST' shows the profile configuration. It includes a 'Concepts to cover:' list with the same four concepts, all of which are checked. Below this is the 'Psychomotor Domain Instructional Approach:' section, which is set to 'Dave's model'. Under 'Dave's model', there is a section for 'Imitation Phase' which is 'In progress'. It contains a dropdown menu with 'New Profile...' and an 'Edit' link, an 'Add Responses' button, a 'Show Content Files' link, and a 'Show message on completion' checkbox. Below this are four phases: 'Manipulation Phase', 'Precision Phase', 'Articulation Phase', and 'Naturalization Phase', each with a 'not started' status. There is also an 'Activity Options' section. At the bottom of the browser window, there are 'Save Changes' and 'Cancel' buttons. At the very bottom of the interface, a 'PSTAAT Agent says:' section features a lightbulb icon and the text: 'Select the concepts that you need to include in this profile. Once concepts are added, I can help you associate sensors.'

Author has option to create a profile manually in an agent-guided process.

Author starts by adding concepts to be covered in the profile.

# Building a Psychomotor Profile

The screenshot shows the 'New Psychomotor Profile' interface. At the top, there are navigation links: 'Take a Course', 'Learner Profile', 'Course Creator', and 'My Research'. The main title is 'New Psychomotor Profile'. Below it, there is a 'Profile Name' field containing 'Marksmanship Imitation Profile' and links for 'Duplicate Profile', 'Export', and 'Delete'. The 'Concepts and Sensors' section has tabs for 'Breathing', 'Trigger Squeeze', and 'Barrel Movement', along with a '+' icon and links for 'Import Cases' and 'Collect Cases'. A 'Sensor configuration for Breathing' section includes a '+ Add Sensor' button. An 'Add Sensors' dialog box is open, showing a list of sensors: BioHarness (checked), Emotiv, Kinect, MotivationAndExpertiseSurrogates, Mouse, MouseAndSelfAssessment, Multisense, OS3D, QSensor, SelfAssessment, and SineWave. At the bottom of the dialog are 'Add', 'Add to all concepts', and 'Cancel' buttons. On the right, a 'Marksmanship EST' window shows 'Concepts to cover' (Breathing, Trigger Squeeze, Barrel Movement, Sight Picture) and a 'Psychomotor Domain Instructional Approach' section for 'Dave's model'. This section includes an 'Imitation Phase' (In progress) with a 'New Profile...' dropdown and 'Add Responses' button, and a 'Show Content Files' link. Below are 'Manipulation Phase', 'Precision Phase', 'Articulation Phase', and 'Naturalization Phase', each with a 'not started' status. There is also an 'Activity Options' section. At the bottom of the right window are 'Save Changes' and 'Cancel' buttons. A 'PSTAAT Agent says:' section at the very bottom contains a lightbulb icon and the text: 'Each tab represents a concept. Choose "Add Sensor" to **select sensors** that each concept will be using for assessment.'

Agent generates tabs per concept.

Author can add more concepts with “+” tab.

Author adds sensor(s) used to measure performance in each concept tab.

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# Building a Psychomotor Profile

Agent incorporates selected sensor(s) in the concept tab(s).

Author enters sensor thresholds for Above, At, and Below Expectation levels of performance.

Sensors can be disabled, added, removed, combined.

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# PSTAAT Summary

- GIFT, other authoring tools can streamline sim-based ITS development
  - Help Army achieve its ALM objectives; more broadly for force-wide readiness
  - Limitations of general-purpose tools addressable w/specialized instances of tools
- PSTAAT provides specialized authoring within GIFT authoring framework
  - Focusing on specific categories of skills can give tools more knowledge & power
  - Agent-guided workflow, decision support, and contextual examples provide powerful aid
  - Streamlines ITS development with templates, reuse, semi-automation
  - Supports development of simulation-based ITS in the psychomotor domain.
  - Demonstrates use of exemplar ITS as basis for creating new instances
- Can support diversity of psychomotor skills ITS authoring
  - Templated approach provides path for extensions and customizations

# Moving forward

- PSTAAT templates, imports, and exports
  - Authoring agent uses JSON templates to define concepts, instructional approaches, and task workflows
  - PSTAAT tool imports/exports psychomotor profiles, psychomotor activities, \*instructional strategies
  - Is this (or similar) templated approach of general interest to other GIFT tools?
- PSTAAT ML-supported features
  - Existing GIFT psychomotor task performance data sources
- Leveraging existing/future GIFT components
  - Reuse is good – harmonization is key
  - Can we embed existing course objects in a psychomotor activity's instructional strategies?
  - Would like more visibility of GIFT Cloud roadmap, related components