

**Generalized Intelligent Framework for Tutoring**

**Course Technical Details**

**COIN AutoTutor**

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Table of Contents

[Overview 3](#_Toc361742372)

[Course Content 3](#_Toc361742373)

# Overview

This document describes the technical details specific to the “COIN AutoTutor” named domain content. It is meant to help GIFT course authors find examples of implementations GIFT supports in order to help facilitate re-use and quicker understanding of supported features. Basically what can GIFT do and how can you create similar course elements of your own.

For more details on what the user should see in this course refer to the test procedures for the course (if available).

For more details on authoring in general, refer to the help documentation for GIFT available in the “docs” folder of GIFT.

# Course Content

The purpose of this course is to exercise the use of an AutoTutor session within GIFT as a top-level course element (i.e. the AutoTutor interface is presented at the same level as Guidance or AAR and not as a mid-lesson element).

This course utilizes the following important features:

* **PowerPoint** – presents a PowerPoint show file as the Training Application and is assessed using the “simplest.dkf.xml” file (which doesn’t provide any actual assessment and is meant to fill the requirement of needing a DKF, plus identify when assessment should end). The show file contains lesson material, deemed important for the AutoTutor session forthcoming in the course execution.
  + **simplest.dkf.xml** – this is the simplest DKF that can be authored as of now and is used in this course to fill the requirement of needing a DKF for, among other things, assessing.
* **Survey** – an AutoTutor session top-level course element is authored as a “Present Survey” choice in the Course Authoring Tool. The AT session requires a DKF that configures the assessment engine and facilitates the tutor loop in GIFT, in this case the “autotutor\_session.dkf.xml” is used and is described in more detail elsewhere in this document.
  + **autotutor\_session.dkf.xml** – this configures the AT session tutor loop in GIFT by specifying the:
    - **AT script (aka SKO) to use**: the SKO is an input to the AutoTutor web service condition (the only condition in the DKF).The SKO XML file is located in the same folder as this file (“COIN AutoTutor\COIN.AT.sko.xml”). It is consider a ‘local’ SKO, which means it is located on the same machine as the Domain folder of GIFT.
* *To Author an AutoTutor SKO* visit <http://www.skoonline.org/home/about-autotutor-lite/create-new-sko>. For more information about AutoTutor authoring visit <https://sites.google.com/site/atliteinstructions/assessment-self-reflection>.
  + - **Concept Assessment:** the one and only concept in this DKF also has the “assessments” element populated with a “conditionAssessment” choice. This allows the concept to be further assessed by its conditions, which in this case is the AutoTutor web service condition. This assessment allows the tutor loop to continue or end based on the state of the AT discussion.
    - **State Transitions and Instructional Strategies:** There is only 1 state transition of interest and 1 instructional strategy to choose from in this configuration which configures the Pedagogy and Strategy implementation of the Pedagogical module and Domain module, respectively.
      * **“AT Session” (state transition):** this transition uses a wild card value for the “current” state element, meaning that the transition is true when the state for the concept goes from Unknown to any other state besides Unknown. In an AT session tutor loop, the AT condition will change the assessment value to Unknown each time a Pedagogical request for Performance Assessment is received. Therefore, a value of Below, At or Above Expectation will be calculated for each interaction with AT (unless the session is over).
      * **“Continue Chat” (Instructional Strategy):** This Performance Assessment strategy references the only concept in this DKF, the AT concept, and uses the Default Strategy Handler. The handler will call upon the concept referenced for additional performance assessment, which in turn will query the AT web service for the next action in the AT discussion.