



cmi5 vs. SCORM

Five Reasons why cmi5 is better than SCORM



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 - LMS
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Does xAPI replace SCORM?

- xAPI defines communication layer and storage.
- LMS is not mentioned... no LMS to content communication
- SCORM features are not included
 - Sequencing
 - Bookmarking
 - Completion criteria
- You COULD use extensions, but there is no interoperability.



cmi5: Next Generation SCORM

- Next generation Content To LMS interoperability specification

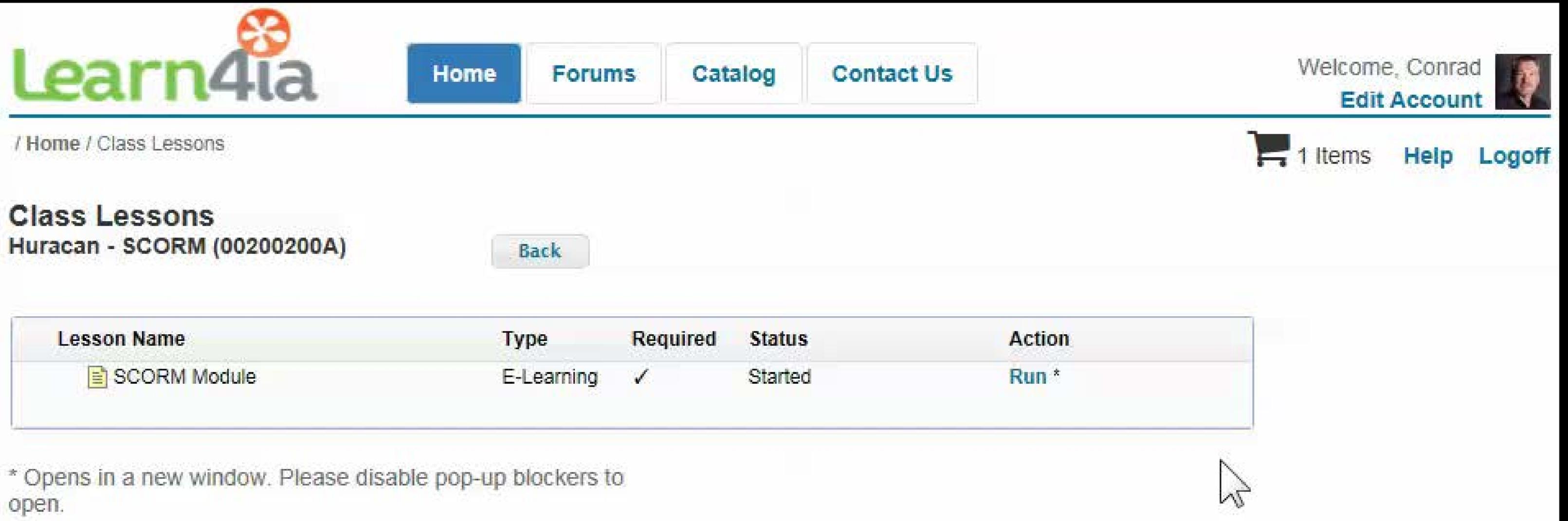
LMS “Use Case” for xAPI

- Built on top of xAPI

xAPI + “rules” = cmi5

- Some cmi5 features have been replicated for SCORM by various LMS vendors, but...
 - Not part of the SCORM specification
 - Not interoperable

Case 1: The dreaded, silent pop-up blocker.

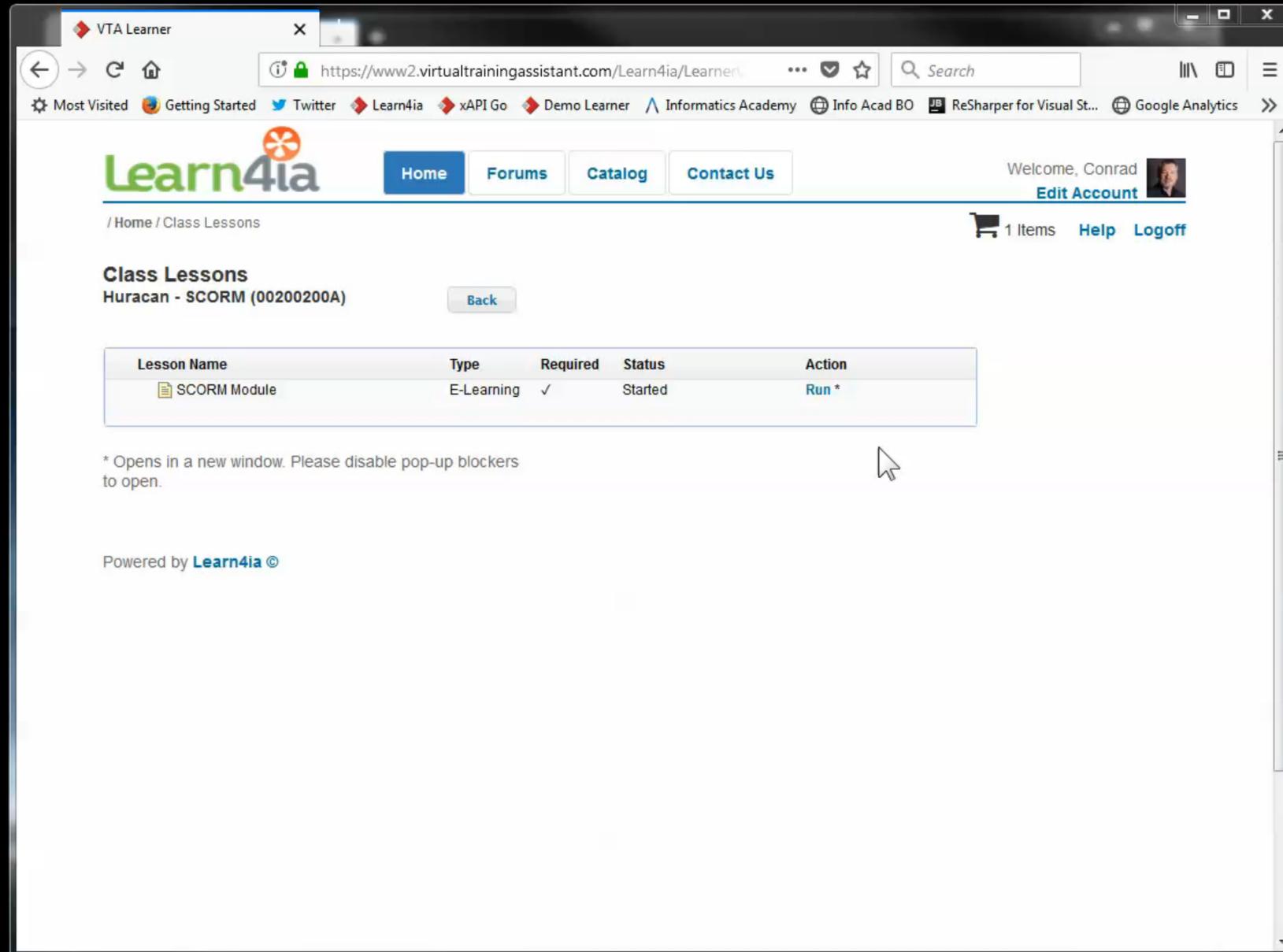


The screenshot shows the Learn4ia website interface. At the top left is the Learn4ia logo. To its right are navigation buttons for Home, Forums, Catalog, and Contact Us. On the top right, there is a user greeting "Welcome, Conrad" with a profile picture and a link to "Edit Account". Below the navigation is a breadcrumb trail "/ Home / Class Lessons" and a shopping cart icon with "1 Items", along with "Help" and "Logoff" links. The main content area is titled "Class Lessons" and "Huracan - SCORM (00200200A)", with a "Back" button. A table lists the lesson details:

Lesson Name	Type	Required	Status	Action
 SCORM Module	E-Learning	✓	Started	Run *

* Opens in a new window. Please disable pop-up blockers to open.

Case 2: The dastardly pop-behind.



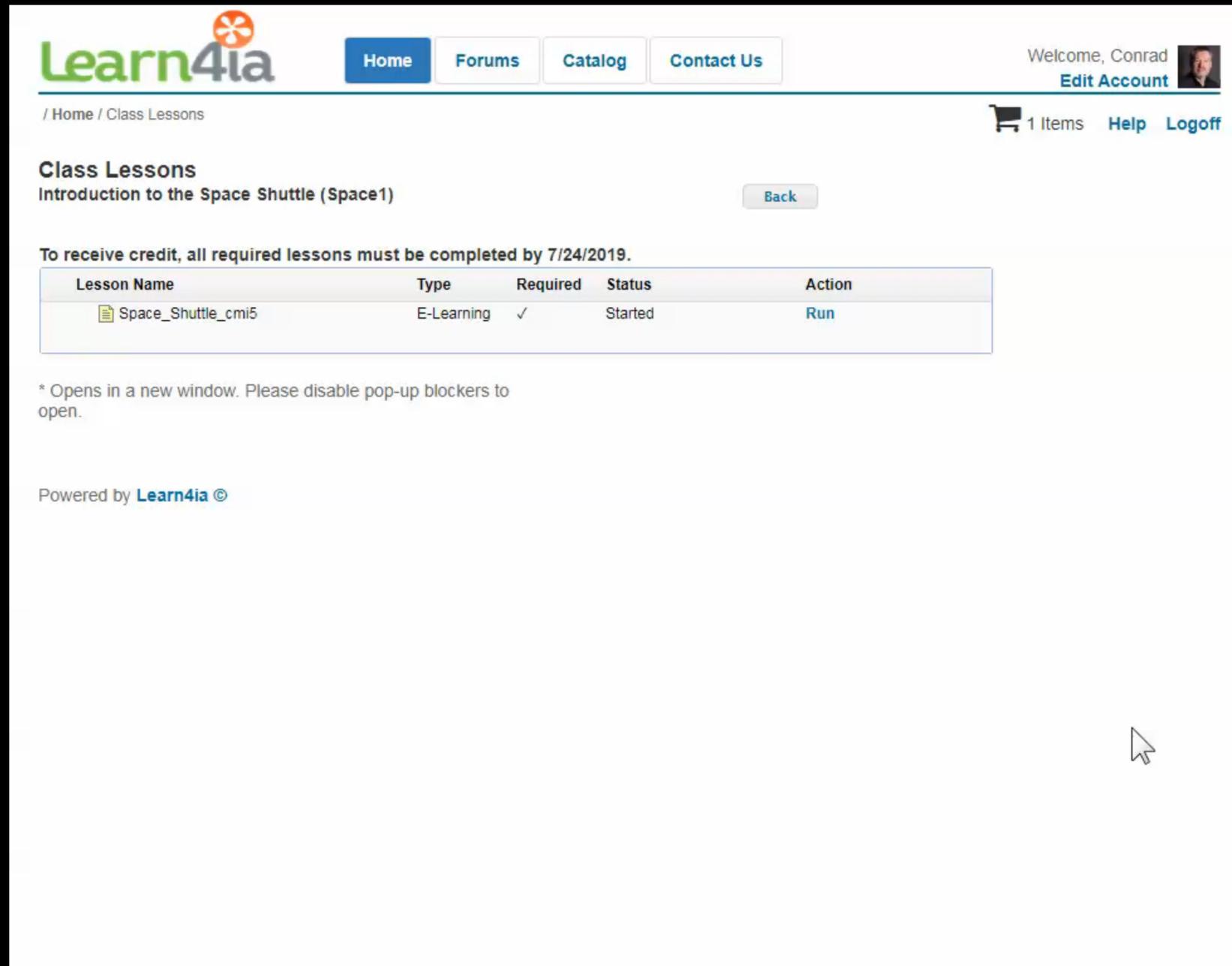
The screenshot shows a web browser window titled 'VTA Learner' with the URL 'https://www2.virtualtrainingassistant.com/Learn4ia/Learner...'. The page is for 'Learn4ia' and displays 'Class Lessons' for 'Huracan - SCORM (00200200A)'. A table lists a lesson named 'SCORM Module' with a 'Run' button. A note below the table states: '* Opens in a new window. Please disable pop-up blockers to open.' The footer indicates 'Powered by Learn4ia ©'.

Lesson Name	Type	Required	Status	Action
SCORM Module	E-Learning	✓	Started	Run *

* Opens in a new window. Please disable pop-up blockers to open.

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cmi5 in action



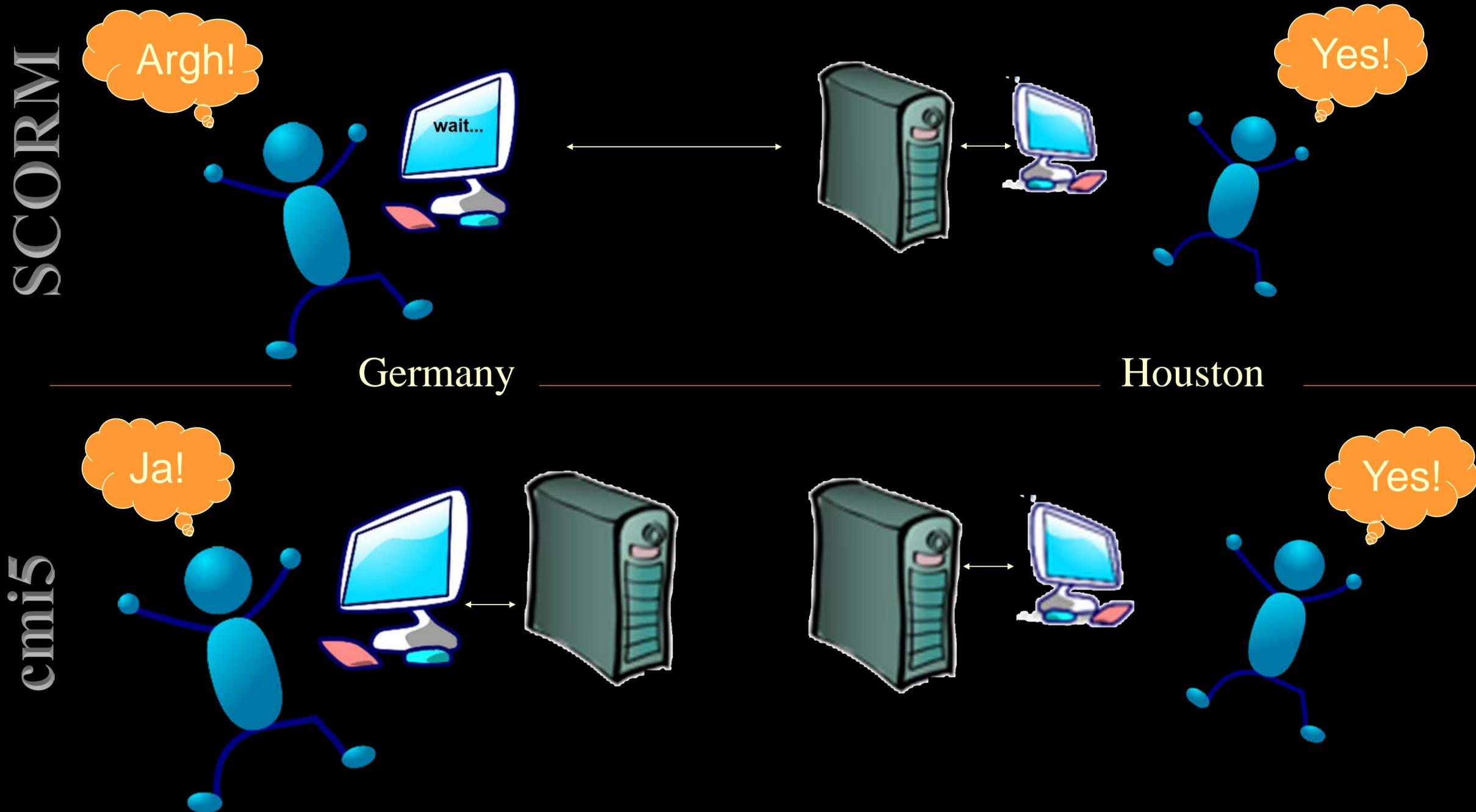
The screenshot shows the Learn4ia website interface. At the top left is the Learn4ia logo. To its right are navigation buttons for Home, Forums, Catalog, and Contact Us. On the top right, there is a user greeting "Welcome, Conrad" with a profile picture and a link to "Edit Account". Below the navigation is a breadcrumb trail "/ Home / Class Lessons" and a shopping cart icon with "1 Items", along with "Help" and "Logoff" links.

The main content area is titled "Class Lessons" and shows "Introduction to the Space Shuttle (Space1)" with a "Back" button. A notice states: "To receive credit, all required lessons must be completed by 7/24/2019." Below this is a table with the following data:

Lesson Name	Type	Required	Status	Action
 Space_Shuttle_cmi5	E-Learning	✓	Started	Run

Below the table, a note says: "* Opens in a new window. Please disable pop-up blockers to open." At the bottom left, it says "Powered by Learn4ia ©". A mouse cursor is visible in the bottom right corner of the screenshot.

Benefit 2: Distributed Content





Benefit 2: Distributed Content

cmi5 in action

The screenshot shows a web browser window displaying the VTA Learner application. The browser's address bar shows the URL: <https://www2.virtualtrainingassistant.com/demo/LearnerConnection/M>. The page header includes the VTA Learner logo, a search bar, and a user greeting: "Welcome, Richard". The breadcrumb trail indicates the current location: "/ Current Training / In-Progress Training / Class Lessons".

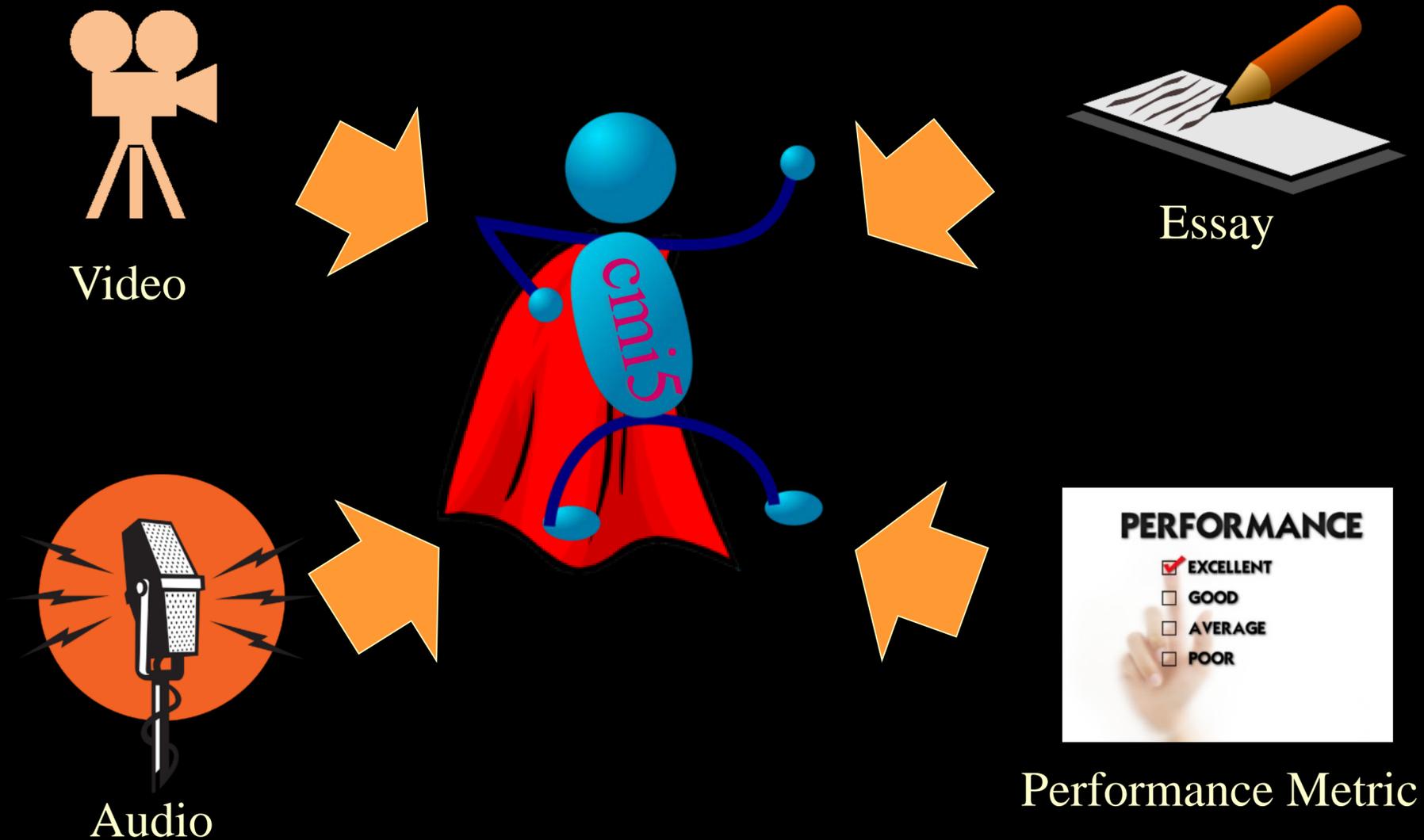
The main content area is titled "Class Lessons" and "Critical Success Factors (BUSSPVCFS)". Below this is a table with the following data:

Lesson Name	Type	Required	Status	Action
Critical Success Factors Self-Assessment T E-Learning		✓	Started	Run

Below the table, there is a note: "* Opens in a new window. Please disable pop-up blockers to open." A "Back" button is located above the table.

Benefit 3: Extensible Data Model

- The SCORM data model, while extensive, is fixed.
- cmi5 uses xAPI, which is extensible.





Benefit 3: Extensible Data Model

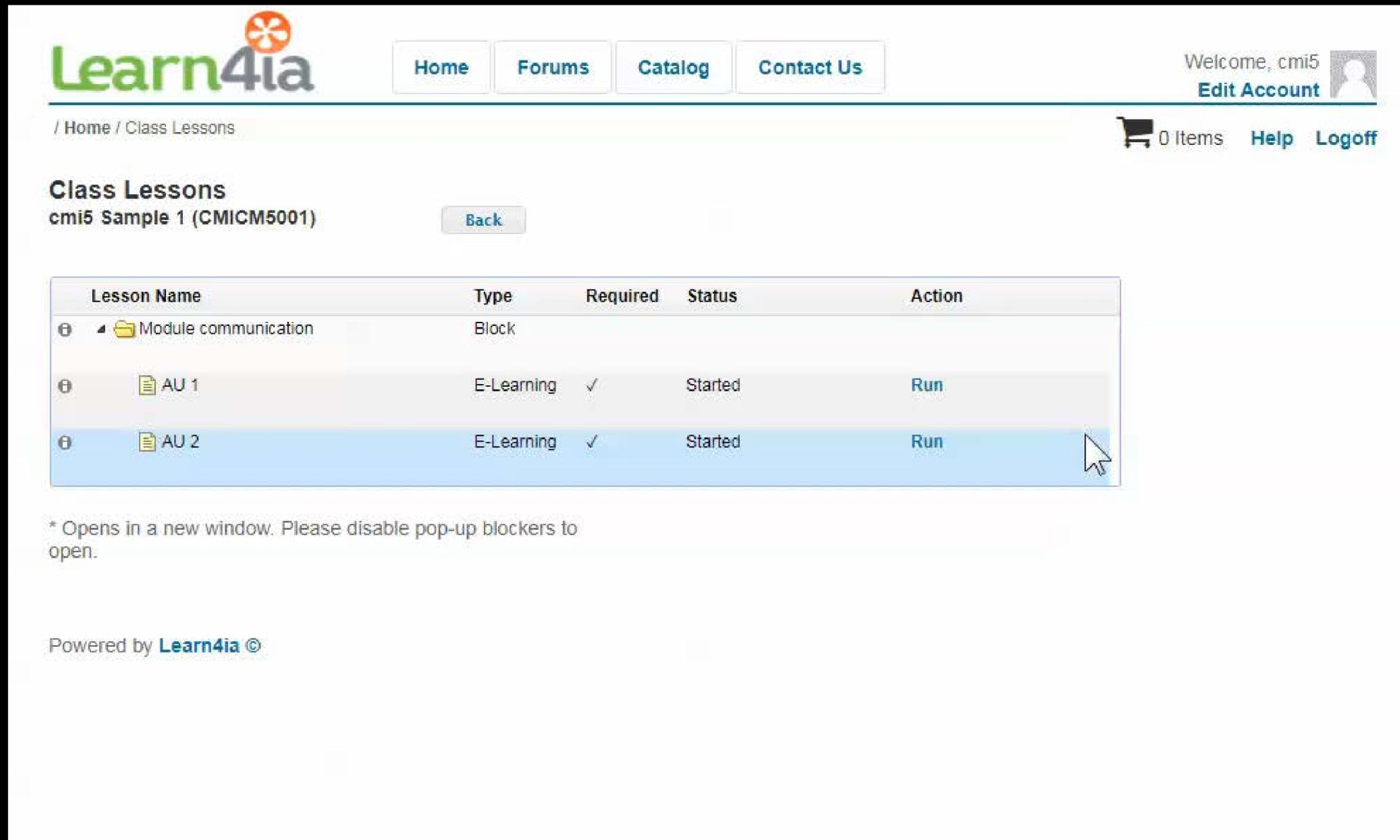
cmi5 in action

The screenshot displays the Learn4ia web application interface. At the top left is the Learn4ia logo. To its right are navigation buttons for Home, Forums, Catalog, and Contact Us. On the far right, there is a user greeting "Welcome, cmi5" with a profile icon, and links for "Edit Account", "0 Items", "Help", and "Logoff". Below the navigation is a breadcrumb trail: "/ Home / Class Lessons". The main content area is titled "Class Lessons" and shows "cmi5 Sample 1 (CMICM5001)" with a "Back" button. A table lists the lessons:

Lesson Name	Type	Required	Status	Action
Module communication	Block			
AU 1	E-Learning	✓	Not Started	Run
AU 2	E-Learning	✓	Not Started	Run
AU 3	E-Learning	✓	Started	Run

Below the table, a note states: "* Opens in a new window. Please disable pop-up blockers to open." At the bottom left, it says "Powered by Learn4ia ©". A mouse cursor is visible at the bottom center of the page.

Lesson Name	Type	Required	Status	Action
 Geologic materials	Block			
 Rock and rock cycle	E-Learning	✓	Completed	Run
 Unconsolidated material	E-Learning		Completed	Run
 Whole-Earth structure	Block			
 Plate tectonics	E-Learning	✓	Completed	Run
 Structure of the earth	E-Learning	✓	Not Started	Run
 Geologic time scale	Block			
 History and nomenclature of the time sca	E-Learning	✓	Not Started	Not Available
 Current official geologic time scale	Block			



The screenshot shows the Learn4ia web application interface. At the top left is the Learn4ia logo. To its right are navigation buttons for Home, Forums, Catalog, and Contact Us. On the top right, there is a user greeting "Welcome, cmi5" with a profile icon, and links for "Edit Account", "0 Items" (shopping cart), "Help", and "Logoff". Below the navigation is a breadcrumb trail: "/ Home / Class Lessons". The main content area is titled "Class Lessons" and shows "cmi5 Sample 1 (CMICM5001)" with a "Back" button. A table lists the lessons:

Lesson Name	Type	Required	Status	Action
Module communication	Block			
AU 1	E-Learning	✓	Started	Run
AU 2	E-Learning	✓	Started	Run

* Opens in a new window. Please disable pop-up blockers to open.

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Bonus 1: Clarity of “move on”

Since a long time ago (2001?), in this galaxy, there’s been a war going on....

- Options
 - Completed
 - Passed
 - CompletedAndPassed

SCORM WARS





Bonus 2: Administrator is in charge

Feature	Whose in charge?	
	SCORM	cmi5
Passing Score	Content	Administrator
Move On Criteria	Content	Administrator

- For all practical purposes, SCORM is dependent on the browser (javascript)
- cmi5 is not (REST and JSON)
 - Most coding languages can interpret JSON data.
 - cmi5 can launch mobile app, for example

Bonus 4: Data Portability

Have you ever tried to transfer data from one LMS to another?

SCORM



cmi5



- http://aicc.github.io/CMI-5_Spec_Current/
- http://aicc.github.io/CMI-5_Spec_Current/SCORM/
- <http://risc-inc.com/next-generation-scorm-cmi5/>