



#### NS ONLINE INTELLIGENT AGENTS

Become familiar with creating Intelligent Agents to encourage student interaction.

Office of Online Learning



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## What is an Intelligent Agent (IA)?

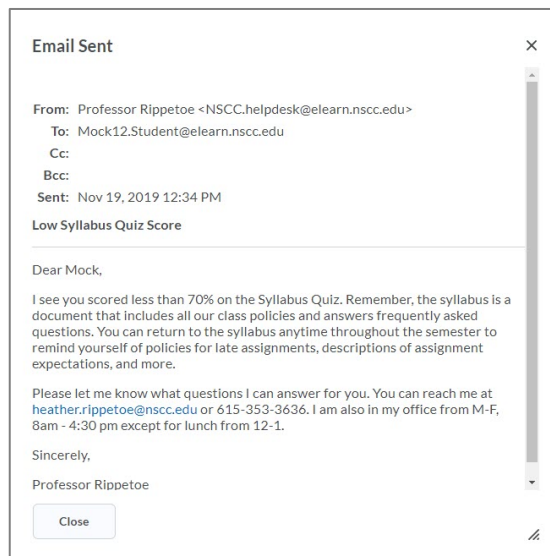
Intelligent Agent is a tool in D2L that scans your course for learner activity and sends a pre-populated response based on that activity (or lack of activity). These pre-populated responses are emails, created by you, that D2L sends to students when criteria is – or is not, depending on your choice – satisfied. Intelligent Agents can be created to send email notifications when students have (or have not) accessed content, scored a certain amount on a quiz, or submitted (or not submitted) to an Assignment Dropbox.

## What is the result of an IA?

### For Students

After an IA runs, an email is sent to users identified as qualifying for the agent. For example, an IA that runs for all students who have not yet attempted a certain quiz will send an email to all users identified as not having yet attempted the quiz. The email says whatever the instructor sets it up to say in the IA; this is part of the planning process below.

Here is an example of an email a student has received as the result of an IA:



### For Instructors

On the Agent List, the instructor sees the following: the name of the **Agent**, the **Results of the Last Run**, the **Last Run Date**, and the **Next Run Date** that is scheduled. Note that an agent can be run manually at any time.

<input type="checkbox"/>	Agent ▲	Results of Last Run	Last Run Date	Next Run Date
<input type="checkbox"/>	Essay 1 Draft - not yet submitted ▼	9 users identified	2 hours ago	Thursday, November 14, 2019
<input type="checkbox"/>	Haven't taken Syllabus Quiz ▼	6 users identified	3 hours ago	Thursday, November 14, 2019
<input type="checkbox"/>	Read the syllabus ▼	0 users identified	3 hours ago	Thursday, November 14, 2019
<input type="checkbox"/>	Syllabus Quiz ▼	1 users identified	3 hours ago	Thursday, November 14, 2019

Note also that the **Results of Last Run** fields are hyperlinks that, when opened, reveal the list of students who received the IA email.

## Planning the IA

As with most tools in D2L, planning saves time. Here's what you'll want to consider:

- Who do I want the IA email to come from?
- What action do I want the IA to respond to?
- What do I want the email that the IA sends to say?

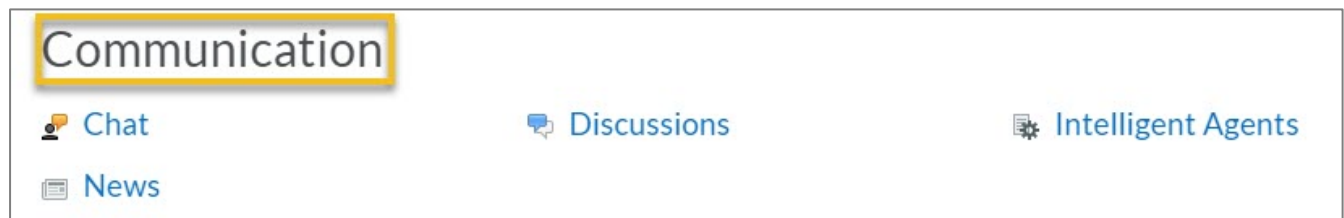
Decide: Who do I want the email to come from?

The email address that agent emails come from cannot be set to your personal address due to how spam filters operate, but you can add a personal touch by setting the Name for the address, and you can set the Reply-To address. Use settings to set the **Name** and **Reply to** address in the IA email.

1. Enter the course in which you want to create the IA.
2. Click **Edit Course**.



3. Scroll down to **Communication**.



4. Choose **Intelligent Agents**.

# Communication

Chat
 Discussions
 

Intelligent Agents

 News

5. Click **Settings**.

## Agent List

Settings

New

More Actions ▾

6. Select the radio button for **Select custom values for this course**.

### Intelligent Agents Settings

☐ Use the system defaults

Name that emails come from

Reply-To address for responses

d2lhelp@nscs.edu

NSCC.helpdesk@elearn.nscs.edu

☒ Set custom values for this course

Name that emails come from

Reply-To address for responses

7. Enter your name and reply-to email in the fields.

☒ Set custom values for this course

Name that emails come from

Reply-To address for responses

Professor Doe

jane.doe@nscs.edu

8. Click **Save**.

In a nutshell: know what name and address you want your IA email to include for students.

Decide: What action do I want to the Intelligent Agent (IA) to respond to?

IAs can be created to reach out to a student based on **Login Activity** and **Course Activity**. **Login Activity** refers to the user logging into the course. **Course Activity** refers to actions that D2L calls **Condition Type** and **Condition**

**Details:** These are the most relevant **Condition Types**:

- Checklist
- Content
- Discussions
- Assignment Dropbox
- Grades
- Quizzes
- Surveys

Actions to select within the **Condition Types** include students doing or not doing the following:

- interacting with Content
- participating in or receiving a certain score on a Discussion
- submitting to or receiving a certain grade in Assignment Dropbox
- earning a Grade greater than or less than a set number

- taking and earning a certain score on a Quiz
- participating in a Survey

**Condition Details** refers to the specifics of the chosen **Condition Type**. For example, if I choose **Content** for my **Content Type**, then I might choose **Syllabus** as the **Condition Detail**.

In a nutshell: Know in advance what student action or inaction should generate the IA.

Decide: What do I want the email that the IA sends to say?

Understandably, different **Condition Types** and **Condition Details** merit different automated email responses. For each IA, you will load an email message that the IA sends to the student when the condition is met. For example, an email for a student who has read the syllabus might include congratulations for reading the syllabus and a reminder that the student can return to the syllabus any time during the semester to find answers to frequently asked questions. An email about a grade lower than 70% might reference learning materials to review, suggest resources to contact, and remind about office hours available for one-on-one interaction with the instructor.

In a nutshell: Compose the email you want students to receive from the activated IA.

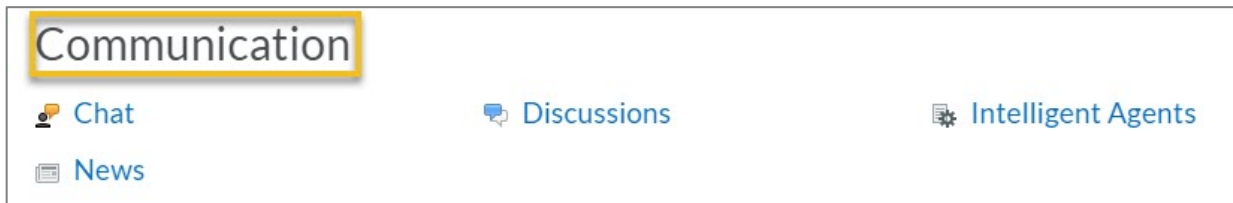
## Create an Intelligent Agent

Criteria

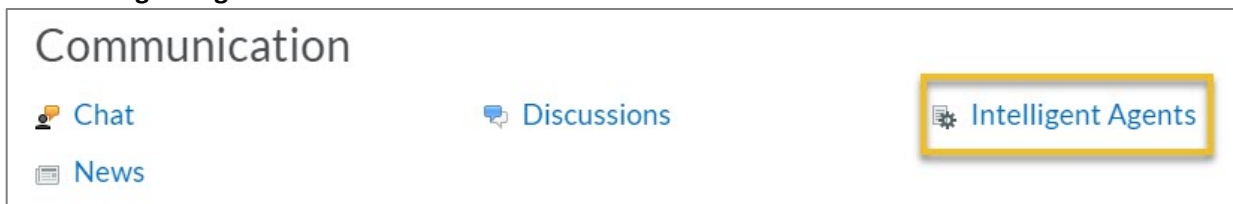
1. Click **Edit Course**.



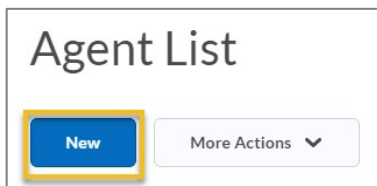
2. Scroll down to **Communication**.



3. Click **Intelligent Agents**.



4. Click **New**.



5. Enter the name of the agent in the **Agent Name** field.

Agent Name: \*

6. Check the **Agent is enabled** checkbox; (the default is for it to be checked already).

Status:

☒ Agent is enabled

7. Click the radio button for **Users with specific roles**

1. Criteria

Role in Classlist

☐ All users **visible** in the Classlist

☒ Users with specific roles:

8. Check the box next to **Banner\_Student**.

☒ Users with specific roles:

☐ NonPrimaryFaculty

☐ Z-IGrade

☐ Banner\_Teacher

☒ **Banner\_Student**

☐ Turney\_Student

☐ Teacher

☐ Student

☐ QM Review

9. Choose one of the following for your Intelligent Agent: **Login Activity** (for logging in to D2L overall), **Course Activity** (for logging into your particular course), or **Release Conditions** (for specific criteria to be determined).

**Login Activity** ← Choose one

☐ Take action when the following login criteria are satisfied:

☒ User has not logged in for at least  day(s)

☐ User has logged in during the past  day(s)

**Course Activity** ← Choose one

☐ Take action when the following course activity criteria are satisfied:

☒ User has not accessed course for at least  day(s)

☐ User has accessed course during the past  day(s)

**Release Conditions** ← Choose one

There are no conditions attached to this item.

If you chose **Login Activity**:

1. Select the checkbox next to **Take action when the following login criteria are satisfied**:

**Login Activity**

☒ Take action when the following login criteria are satisfied:

☒ User has not logged in for at least  day(s)

☐ User has logged in during the past  day(s)

2. Choose whether you want the IA to take action if the user has or has not logged in.
3. Enter the number of days you choose.

**Login Activity**

☒ Take action when the following login criteria are satisfied:

☒ User has not logged in for at least  day(s)

☐ User has logged in during the past  day(s)

4. Go to [Actions](#)

If you chose **Course Activity**:

1. Select the checkbox next to **Take action when the following course activity criteria are satisfied**:

**Course Activity**

☒ Take action when the following course activity criteria are satisfied:

☒ User has not accessed course for at least  day(s)

☐ User has accessed course during the past  day(s)

2. Choose whether you want the IA to take action if the user has or has not accessed the course.
3. Enter the number of days you choose.

**Course Activity**

☒ Take action when the following course activity criteria are satisfied:

☐ User has not accessed course for at least  day(s)

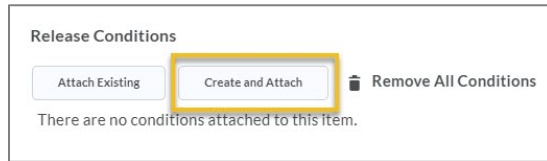
☒ User has accessed course during the past  day(s)

4. Go to [Actions](#)



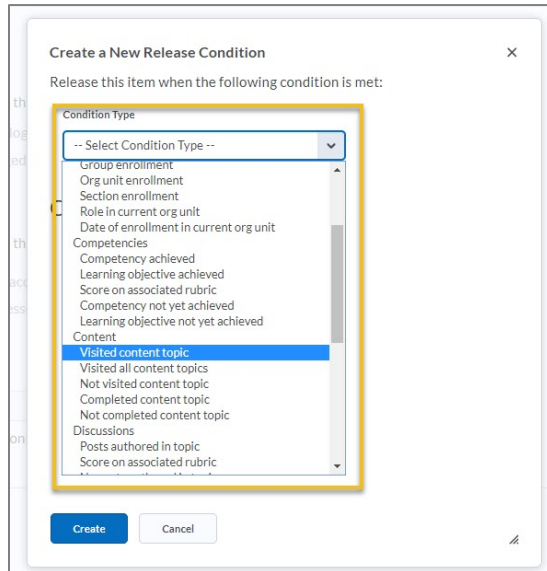
If you chose **Release Conditions**:

1. Click **Create and Attach**. The **Create a New Release Condition** window appears.



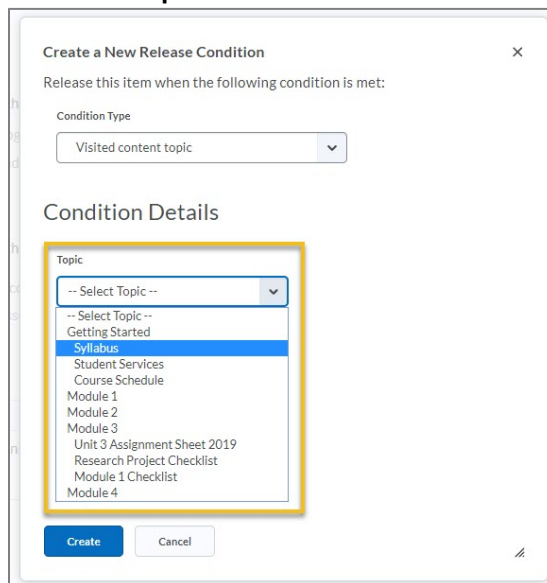
The 'Release Conditions' window shows three buttons: 'Attach Existing', 'Create and Attach' (highlighted with a yellow box), and 'Remove All Conditions'. Below the buttons, it states: 'There are no conditions attached to this item.'

2. Select the **Condition Type**. Scroll down to see the different condition types.



The 'Create a New Release Condition' window shows a dropdown menu for 'Condition Type' (highlighted with a yellow box). The list includes: Group enrollment, Org unit enrollment, Section enrollment, Role in current org unit, Date of enrollment in current org unit, Competencies, Competency achieved, Learning objective achieved, Score on associated rubric, Competency not yet achieved, Learning objective not yet achieved, Content, Visited content topic (highlighted in blue), Visited all content topics, Not visited content topic, Completed content topic, Not completed content topic, Discussions, Posts authored in topic, and Score on associated rubric. At the bottom are 'Create' and 'Cancel' buttons.

3. Select the **Topic**.



The 'Create a New Release Condition' window shows the 'Condition Type' dropdown set to 'Visited content topic'. Below, the 'Condition Details' section has a 'Topic' dropdown (highlighted with a yellow box) with the following list: -- Select Topic --, -- Select Topic --, Getting Started, Syllabus (highlighted in blue), Student Services, Course Schedule, Module 1, Module 2, Module 3, Unit 3 Assignment Sheet 2019, Research Project Checklist, Module 1 Checklist, and Module 4. At the bottom are 'Create' and 'Cancel' buttons.

4. Click **Create**.

5. Go to [Actions](#)

## Actions

1. Choose whether you want the IA to **Take action only the first time the agent's criteria are satisfied for a user** or **Take action every time the agent is evaluated and the agent's criteria are satisfied for a user**. Note: there is some evidence that if students receive too many IAs, they will begin ignoring them.
2. Click the radio button next to either **Take action only the first time the agent's criteria are satisfied for a user** or **Take action every time the agent is evaluated and the agent's criteria are satisfied for a user**.

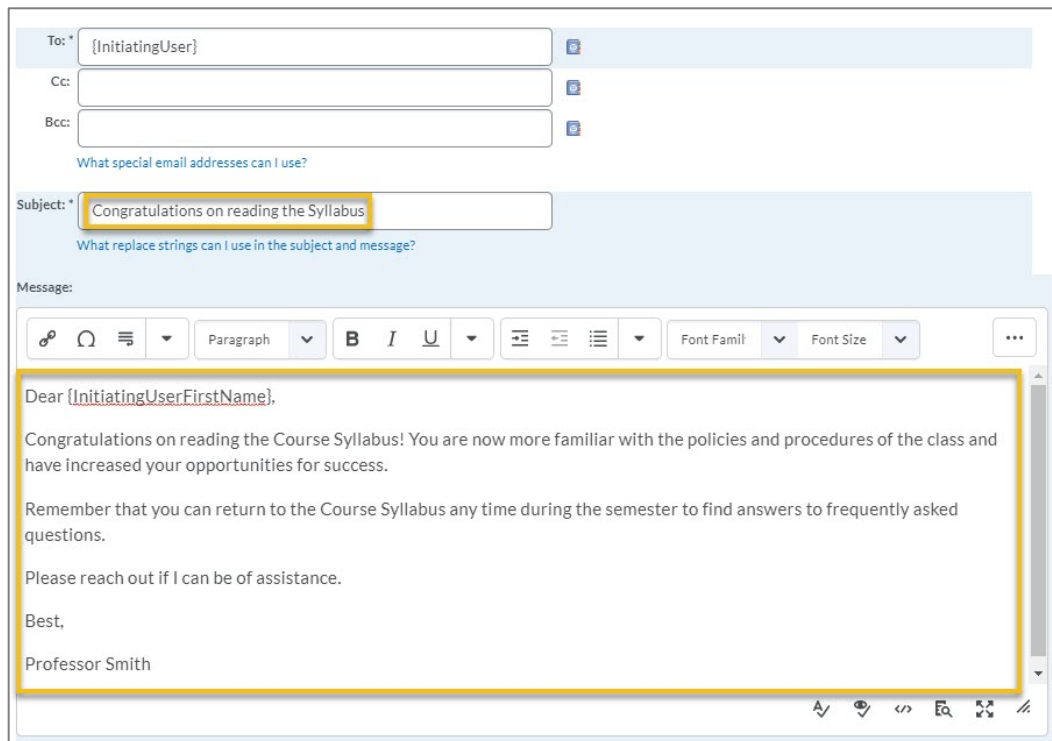
3. Click the radio button next to **Send an email when the criteria are satisfied**. This will expand the email options area.

4. Enter **{InitiatingUser}** into the **To** field. This is a "replace string" that auto-populates the email of the user who performs the actions necessary to satisfy the agent's criteria.

5. Enter your subject and message into the **Subject** and **Message** fields. Note: there are many replace strings you can use in the subject and message:

The following are replace strings you can use in the subject line and the email message.

- {OrgName} - The name of the organization.
- {OrgUnitCode} - The code for the org unit.
- {OrgUnitName} - The name of the org unit.
- {OrgUnitStartDate} - The start date specified for the org unit.
- {OrgUnitEndDate} - The end date specified for the org unit.
- {OrgUnitId} - The id for the org unit.
- {InitiatingUserFirstName} - The first name of the initiating user.
- {InitiatingUserLastName} - The last name of the initiating user.
- {InitiatingUserUserName} - The username of the initiating user.
- {InitiatingUserOrgDefinedId} - The Org Defined ID of the initiating user.
- {LoginPath} - The address of the login path for the site.
- {LastCourseAccessDate} - The date the initiating user last accessed the course.
- {LastLoginDate} - The date the initiating user last logged in.



To: \* {InitiatingUser}

Cc:

Bcc:

What special email addresses can I use?

Subject: \* Congratulations on reading the Syllabus

What replace strings can I use in the subject and message?

Message:

Dear {InitiatingUserFirstName},

Congratulations on reading the Course Syllabus! You are now more familiar with the policies and procedures of the class and have increased your opportunities for success.

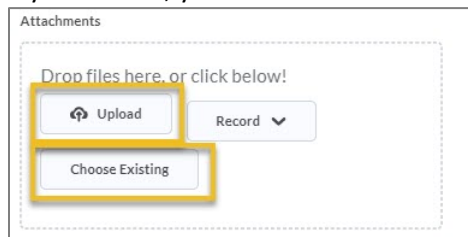
Remember that you can return to the Course Syllabus any time during the semester to find answers to frequently asked questions.

Please reach out if I can be of assistance.

Best,

Professor Smith

6. If you choose, you can add an attachment.



Attachments

Drop files here, or click below!

Upload

Record ▼

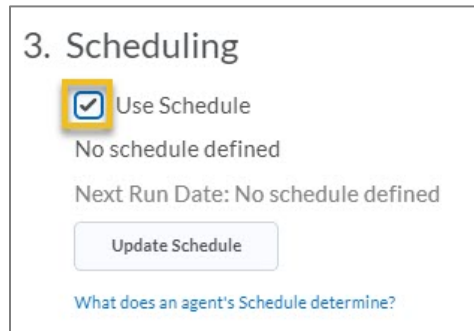
Choose Existing

7. Go to [Scheduling](#).

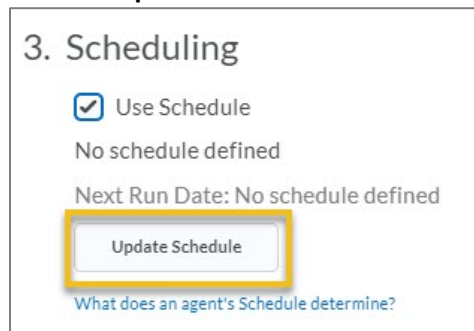
## Scheduling

You can set the agent to run on a schedule, and you can also [run an agent manually](#). To set the agent to run on a schedule:

1. Click the checkbox next to **Use Schedule**.

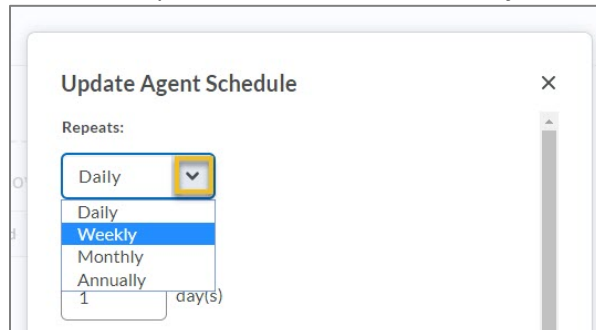


2. Click the **Update Schedule** button.

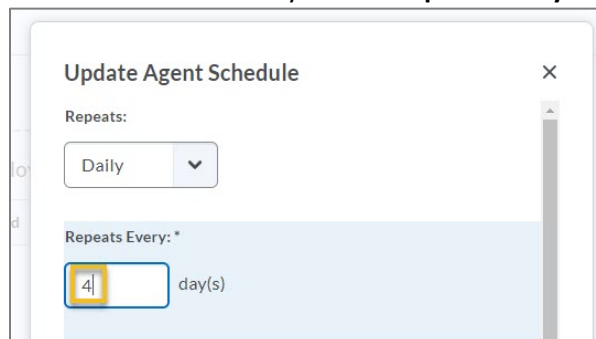


This opens the **Update Agent Schedule** window.

3. Click the drop-down arrow to choose **Daily**, **Weekly**, **Monthly**, or **Annually**.



4. Enter the number of days in the **Repeats Every** field:



5. Check the checkboxes for **Has Start Date** and **Has End Date**, and enter your semester start and end dates (or the dates you want the IA to run).

**Schedule Dates:**

<input checked="" type="checkbox"/> Has Start Date	8/26/2019	Now
<input checked="" type="checkbox"/> Has End Date	12/6/2019	Now

6. Click **Update**.

**Update**

7. Click **Save and Close**.

**Save and Close**

Your IA is now listed in the **Agent List** and will run as scheduled.

## Run an Intelligent Agent

### Practice Run


Want to test your IA? You can do a practice run.

1. Click the dropdown arrow next to the IA you want to Practice Run.

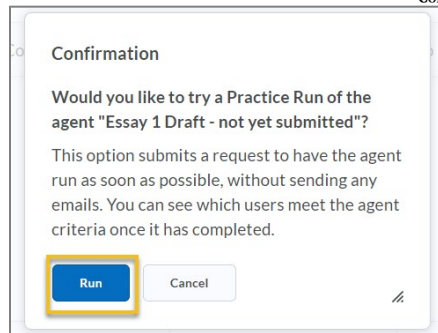
Essay 1 Draft - not yet submitted 

2. Select **Practice Run**. This will open a **Confirmation** window.

Edit  
 Copy  
 View History  
 Export History  
**Practice Run**  
 Run Now  
 Delete

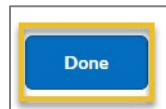


3. Click **Run**.



The **Practice Run Agent Confirmation** page will display.

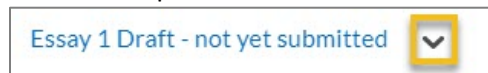
4. Click **Done**.



The **Agent List** page will display. Check the **Last Run Date** column to see if the Practice Run has completed, and check the **Results of Last Run** column to see the results. Remember, the information in the **Results of Last Run** column is a hyperlink that will take you to a list of users identified. You may also notice that D2L sends an email to confirm the IA has run.

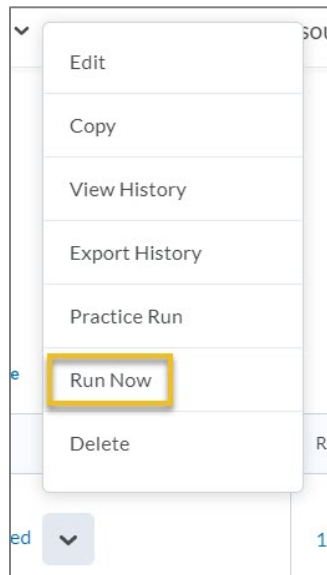
## Run Now

1. Click the dropdown arrow next to the IA you want to Run.

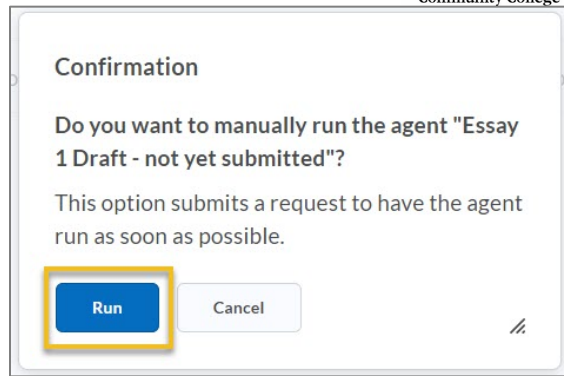


Select **Run Now**. This opens the **Confirmation** window.

- 2.

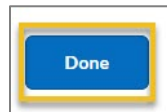


3. Click **Run**.



The **Manually Run Agent Confirmation** page displays.

4. Click **Done**.



The **Agent List** page will display. Check the **Last Run Date** column to see if the Run Now has completed, and check the **Results of Last Run** column to see the results. Remember, the information in the **Results of Last Run** column is a hyperlink that will take you to a list of users identified. You may also notice that D2L sends an email to confirm the IA has run.