Intelligent Uses of Intelligent Agents, New and Improved

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Resources for Intelligent Agents

Community wiki: bit.ly/IntAgents
Definitions of Intelligent Agents
What is an Intelligent Agent?

• An intelligent agent is a software that assists people and acts on their behalf.
• Intelligent agents work by allowing people to delegate work that they could have done, to the agent software.

• Source: Hanh Tran & Thaovy Tran
What is an Intelligent Agent in D2L?

Intelligent Agents can **assist** instructors, administrators, and students by providing an **automated notification** when **defined activity** occurs in a course (or not) or when there is a **lack of login or course entry**.
Creating an Intelligent Agent in D2L

I assume that you already know how to create an agent. If not, go to this URL to learn how:

bit.ly/IntAgents
Effective Practices with Intelligent Agents
Think carefully about whether you want the agent to send an email to the student, or to you, or both.

- There are various examples of where you might want to NOT automatically send an email to the students.
- Sending to yourself gives you one more chance to decide whether to contact the student, or not.
Effective Practices 2 of 7

• When the Agent sends you a notification, be prepared to contact the student, if warranted:

• Use a “text expander” when multiple, similar emails to students may be needed.
• A text expander can reduce the amount of time that you spend writing emails.
• Hat tip: Audrey Williams & Brandon Ballentine
Our Top Five Uses for Text Expanders:

1. Tech Support: sending commonly asked questions for tech support or common troubleshooting techniques for regular questions

2. Grading: adding commonly used phrases or resources for grading discussions, quiz feedback and other assignments

3. Common HTML Code: Brandon uses it for adding Easy Proxy links within the D2L HTML Editor to prevent it from messing up the links.

4. FAQ: Sometimes you just need to send the answer that is in an FAQ

5. Instructions/Information: Sending links and information about campus resources or instructions to install software, etc.
Effective Practices 3 of 7

• Use Intelligent Agents sparingly:
  • Repetitive emails may lose effectiveness
  • Reserve use for the most important items
Effective Practices 4 of 7

- Carefully consider the implications of Manual versus Automatic running of Intelligent Agents:
  - Automatic Agents will run once a day, or less often, as scheduled.
  - Manually triggering the Agent allows you to determine when the timing is right.
Effective Practices 5 of 7

• Use the Agent Name and Description fields to your own benefit:

• Describe what the Agent is intended to do and when it will be used.

• Add a reminder to yourself about info that needs to be changed from term to term (due dates, office hours, etc.).
Agent Details

Agent Name: *

01 Lack of System Login

Description:
This IA will check to see which students have not logged in to the D2L system during the designated time period.

* Current time period = 7 days

* This IA is run automatically every Monday and Friday, through the final class date.

* This IA only sends an email to the advisor, for possible further action.
List of Agent Names & Descriptions

03 - Welcome to the Course
This IA will be sent to each student upon their first entry to the course. * Update details every term about office hours and teaching assistants.

04 - No Course Access During the First Week
This IA will send an email to the student (CC Instructor) to remind them that the semester has started and that they will fall behind if they don't get started. * Update details every term about office hours and teaching assistants.

05 - Successful Completion of 1st Week Activities
This IA will send an email to the student (CC Instructor) to assure them that they have completed all the required first week activities for the course. *Edit this agent if the required activities change in a future term.
Effective Practices 6 of 7

• If using an Agent to send an email to yourself, and if you expect many of these emails:

• Create a rule in your email client to automatically place these message into a special folder

• Make sure the folder is visible on your email client.
Setting up a Rule in Outlook

• Base the rule on unique text in the Agent Email subject line.

• Consider separate folders for each class – or each Agent.
Example of Outlook email client with Rule applied

[Image of an Outlook email client showing a rule applied to an email]

The following learner has completed the Certificate Tracking checklist:

Name: [Redacted]
Email: [Redacted]
Checklist: Honors Certificate Tracking

Sent by your Open Courses Intelligent Agent.
• Intelligent Agents become more valuable as class sizes increase.

• It’s a matter of scale. Automatic messaging is of less value when interacting with 10-15 students, and of great value when interacting with 30, 50, 100, or more.
Sanity Check – Does it Make Sense?

• Use Intelligent Agents when there isn’t a better way of communicating:
  • Can a D2L Notification work better?
  • Can a News Announcement work better?
  • Can a personally crafted email work better?
  • Would a discussion board posting work better?
Potential Pitfalls with Intelligent Agents
Potential Pitfalls 1 of 4

• Communications triggered by Intelligent Agents use “Replace Strings.”
• Ensure that your replace strings are properly formed.
• Use “name” strings sparingly, as you would when speaking with the student.
Replace Strings for Intelligent Agents

- Examples:
  - OrgName = Rose State College
  - OrgUnitName = ACCT 101
  - InitiatingUserFirstName = Jon
  - InitiatingUserLastName = Doe
  - InitiatingUserUserName = jon.doe

- NOTE: curly braces are essential, and no spaces
Potential Pitfalls 2 of 4

• If you are exporting a course, Intelligent Agents are not included as part of the course export package.
• You can copy course components from one course to another to transfer Intelligent Agents.
Potential Pitfalls 3 of 4

• When copying course components from an old course to a new one:
• Each Intelligent Agent will be copied over, BUT the settings of each agent will not be copied.
• You must enable agents in the new course to make them active (and this is a GOOD thing!).
Potential Pitfalls 4 of 4

• Using the replace string {OrgUnitName} can be an effective way of including the course name in your email to students.
• However, some schools use somewhat cryptic course names, such as 0023789 Classic Literature.
What’s New with Intelligent Agents?
"Not" Release Conditions
Release Conditions

• Definition: Release conditions are conditional requirements that restrict access or visibility to specific content, resources or areas within the Brightspace Learning Environment. Users must satisfy the conditions before the restrictions are removed.

• New! Additional release conditions have been added for students who have NOT satisfied certain restrictions.
Starting with the February 2016 release (10.5.6), the new NOT release conditions are available to institutions on Continuous Delivery.

- Sorry, they won’t be available to users with older versions of the Learning Environment.

- If you’re on Continuous Delivery (monthly updates), you won’t see the new conditions until your institution puts 10.5.6 into production.

- New release conditions are ON by default.
New Features for Intelligent Agents

“New” is a relative term, so let’s be specific.

These seven features were included in the August 2016 LE release, or 10.6.4
New Feature 1 of 7

Not sure what your agent will do? Take it out for a spin – or Practice Run

Practice Run Agent Confirmation

Your request for a practice run of agent "01 - You Didn't Read the Syllabus!" at Friday, September 9, 2016 9:17 AM EDT has been submitted.

An email will be sent to the account barry.dahl@desire2learn.com when your request has been completed. You can then check the results of the practice run from the Agent List page.

Note: Processing time varies based on server load and the priority of other scheduled agents.
New Feature 2 of 7

Want to see who has triggered it in the past? Check out the History Page (includes Practice Runs)
## New Feature 2 of 7 – Longer History

### 03 - Master Communicator Badge

<table>
<thead>
<tr>
<th>Date</th>
<th>Result</th>
<th>Type</th>
<th>Run By</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 minutes ago</td>
<td>0 users identified</td>
<td>Manual Run</td>
<td>Barry Dahl</td>
</tr>
<tr>
<td>5 hours ago</td>
<td>1 users identified</td>
<td>Manual Run</td>
<td>Barry Dahl</td>
</tr>
<tr>
<td>Sat at 11:52 AM</td>
<td>1 users identified</td>
<td>Practice Run</td>
<td>Barry Dahl</td>
</tr>
</tbody>
</table>
New Feature 3 of 7

Results of Last Run displays on Agent home page
New Feature 4 of 7

Customizable From: name

and

Reply-To: email addresses
New Feature 5 of 7

• Previously a 4,000-character limit on email text.
• Now unlimited.

No graphic needed – I think you get it.
New Feature 6 of 7

- **The **Agent **Name **field in an Intelligent Agent previously truncated to 50 characters.

- It now has an available length of 128 characters.

<table>
<thead>
<tr>
<th>Agent Name</th>
<th>Results of Last Run</th>
<th>Last Run Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>01</strong> - Hey! Someone Didn’t Read the Syllabus!</td>
<td>0 users identified</td>
<td>8 hours ago</td>
</tr>
<tr>
<td>This agent will notify you (the instructor) whenever a student submits the Syllabus Quiz without first viewing the Syllabus content page. Something fishy is going on, methinks. You can copy this and use it with later quizzes and associated content. If you like.</td>
<td>0 users identified</td>
<td>8 hours ago</td>
</tr>
<tr>
<td><strong>02</strong> - Read the Syllabus, but no introductions post</td>
<td>1 users identified</td>
<td>2 hours ago</td>
</tr>
<tr>
<td>This agent will notify students (and CC the instructor) if he/she has viewed the Syllabus content page, but didn’t follow the instructions to post in the Personel introductions discussion topic. This should be sent one day prior to the deadline for making the discussion post.</td>
<td>1 users identified</td>
<td>2 hours ago</td>
</tr>
<tr>
<td><strong>03</strong> - Master Communicator Badge</td>
<td>0 users identified</td>
<td>3 hours ago</td>
</tr>
<tr>
<td>This IA will award a badge for each student who completes all of the discussion requirements for posting in the forums. You may need to update this agent every time you change the required discussion topics. The email goes directly to the student, with a CC to you.</td>
<td>0 users identified</td>
<td>3 hours ago</td>
</tr>
<tr>
<td><strong>04</strong> - Online Learning Skills Achievement</td>
<td>2 users identified</td>
<td>2 hours ago</td>
</tr>
<tr>
<td>This agent will check to see whether students have completed all expectations related to demonstrating skills for online learning.</td>
<td>2 users identified</td>
<td>2 hours ago</td>
</tr>
</tbody>
</table>

This is just an intentionally long name for an Intelligent Agent. I still have 64 more characters, now 26, now less. Not serious about this one.
New Feature 7 of 7

Users can now copy Intelligent Agents within the same course from a new context menu item for each agent listed in the Agent List.
These changes implemented at least ten PIE items
Current PIE Items

• D2835 - Intelligent Agent notifications to include \{MatchingCriteria\} as a replacement string (17)

• D858 - "Digest" Email for Intelligent Agent Completion (for instructors) (17)
Intelligent Use #1. Email student about Award earned – Step One, Create Award

**Master Communicator**

- Credits
- 
- Award hidden until earned
- 

**Release Conditions**

- Create
- All conditions must be met

1. Adds 1 threads to discussion topic: Week One Discussions/Personal Introductions
2. Adds 1 threads to discussion topic: Week One Discussions/Your Thoughts about Digital Story Slams
3. Adds 1 threads to discussion topic: Week One Discussions/Discuss Discussions

[Save] [Cancel]
Use #1. Email student about Award earned.

Step Two, Attach Award Release Conditions.
Use #1. Email student about Award earned – Step Three, Create Intelligent Agent

Agent Details

Agent Name: 03 - Master Communicator Badge

Description:
This IA will award a badge for each student who completes all of the discussion requirements for posting in the forums.

* You may need to update this agent every time you change the required discussion topics.

* The email goes directly to the student, with a CC to you.

Release Conditions

To access this item, users must satisfy
All conditions must be met

Award Earned: Master Communicator

Agent Action

Action Repetition:
- Take action only the first time the agent’s criteria are satisfied for a user
- Take action every time the agent is evaluated and the agent’s criteria are met

Which Action Repetition setting should I use?
Use #1. Email student about Award earned.

- Step Four, Write Intelligent Agent Email

Name that the emails come from:
Professor Doonesbury

Reply-To address for responses:
barry.dahl@D2L.com
How can I change the default From and Reply settings?

To: 
(InitiatingUser)

Cc: 
barry.dahl@D2L.com

Email Subject: 
Congratulations! You're a Master Communicator!

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

Message:
Hi {firstname}, I'm glad to see that you have earned the Master Communicator Badge in {OrgUnitName}. Frame it, Hang it on the wall. You parents will be so proud. Me too.

Sincerely, Doonesbury
Use #1. Email student about Award earned

- Step Five, Run Intelligent Agent

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FROM: Professor Doonesbury [mailto:Events@D2L.com]
SENT: Monday, September 12, 2016 8:46 AM
TO: ajwilliams@pctcc.edu
CC: Barry Dahl <Barry.Dahl@D2L.com>
SUBJECT: Congratulations! You’re a Master Communicator

Hi Audrey, I'm glad to see that you have earned the Master Communicator Badge in eLearning Digital Story Slam.

Frame it. Hang it on the wall. You parents will be so proud. Me too.

Sincerely, Doonesbury
Intelligent Use #2 – No Course Entry

• Why: To see which students are not “attending” class.
• When: Daily, or at least a couple of times a week.
• How: Set to check for NO course access over the past 5 to 7 days.
• What: Send an email to yourself or directly to the student when they haven’t accessed the course during that time period.
Intelligent Use #3 – Welcome to the Course

• Why: To greet students after their first entry to an online class, and send additional information.
• When: Daily, during the first week or two.
• How: Set to check for first course access over the past 1 day.
• What: Send an email to the student (CC you, if desired) within 24 hours of first accessing the online course.
Intelligent Use #4 – Success in 1st Week

- Why: To reassure students that they have completed all the class expectations for the 1st week of class.
- When: When the student has completed the activities.
- How: Use release conditions for the required items, triggering IA when all conditions are met.
- What: Send an email to the student (CC you, if desired) encouraging them to keep up the good work.
Agent Details

Agent Name:
05 - Successful Completion of 1st Week Activities

Description:
This IA will send an email to the student (CC Instructor) to assure them that they have completed all the required first week activities for the course.

*Edit this agent if the required activities change in a future term.
#4 - Agent Release Conditions

- To access this item, users must satisfy
- All conditions must be met

- Visits the content topic: Course Syllabus
- Receives **equal to 100.00 %** on the quiz: Syllabus Quiz
- Adds 1 threads to discussion topic: General Course Info/Course Introductions
#4 - Agent Email to Students

Email Subject:

{OrgUnitName}: First Week Activities Completed!
What replace strings can I use in the subject and message?

Message:

Congratulations {InitiatingUserFirstName}

You have completed all of the required activities for the first week of {OrgUnitName}. My records indicate that you have:

1. Visited the Course Syllabus in Content
2. Scored 100% on the Syllabus Quiz
3. Posted your course introduction in a new thread on the Discussion Board

All Indications are that you are off to a good start for this course. Now that you have completed those activities, you should see the Week Two content module and you can begin work on that now. If you like. There are a couple of deadlines next week, so pay attention to all the requirements, just as you did in week one.

There is no need for you to reply to this email, but if you choose to do so, you MUST Reply All and ensure that my email address is in the CC field of your email before you send it. If you do not do this, I will not receive your email.

Keep up the good work.
Professor Dahl
Intelligent Use #5 – Checklist Completion

• Why: To let you know that a student has completed a full checklist, or a particular item on a checklist.
• When: Within 24 hours of student checking the box(es).
• How: Use release conditions for “Completes Checklist,” triggering an email when the IA runs.
• What: Send an email as warranted to recognize these actions.
Intelligent Use #6 – Low Grade

• Why: To give a student encouragement for improving their grade after a low score.
• When: Within 24 hours of the quiz being graded.
• How: Use release conditions for “Receives less than (XX%)” on a particular quiz.
• What: Send an email to the student with suggestions of how to proceed after getting a low score on a quiz.
Intelligent Use #7 – Improved Quiz Scores

• Why: To congratulate a student on significantly improving quiz scores between two quizzes.
• When: Within 24 hours of the 2nd quiz being graded.
• How: Use two release conditions for
  • a) “Receives less than (XX%)” on the 1st quiz, and
  • b) “Receives more than (XX%)” on the 2nd quiz.
• What: Send an email to the student with encouragement to continue on the upward path.
Intelligent Use #8 – Survey Submission

- Why: To thank a student for submitting a survey.
- When: Within 24 hours of the survey submission.
- How: Use release condition “Completes 1 attempt on Survey”
- What: Send an email to the student with information about their survey submission, if warranted.
When a survey for class is supposed to be anonymous, yet we submitted it through D2L and received individual feedback. Lol not anonymous.
The End is Near

Q & A