Intelligent Agents in CloudDeakin

Intelligent Agents are automatic emails sent to students in response to their actions. It is an efficient way to personalise the learning experience for students, and reach those most at risk of disengaging. There is very little time required for teaching staff to set up the agents - generally 10 minutes for the first one, and less time thereafter.

Advantages of Intelligent Agents

1. Increases communication between lecturer and students, even in very large classes
2. Provides a personalised message to students, connecting them more strongly to the lecturer and the unit
3. Automatically send students links to resources they may need to guide their studies or to overcome challenges they may be facing.
4. Allows lecturer to efficiently reach all students who meet a specified criteria. Once created, no action or monitoring is required as Agents are sent automatically to all intended students.

Uses of Intelligent Agents

Retention:

Email students who have not logging in to CloudDeakin to remind them it is not too late to do so, link them to resources and information they need to navigate the unit, and encourage them to let the Unit Chair know if there are circumstances preventing their engagement in their studies.

Engagement:

Encouraging those who are achieving a low mark in an assessment task to access unit resources, seek assistance, and persist and succeed in their studies.

Motivation

Encouraging those who achieve a high mark in an assessment task.

Learning:

Increase students' focus on their learning rather than just their marks by sending an email to those who pass having failed in the past, or improve their performance from one assessment to another.

Why use Intelligent Agents?

Informal evaluation of the use of Intelligent Agents in HBS110 a large, compulsory first year unit chaired by Dr Jaclyn Broadbent indicates:

- student retention has increased and is double that of other first year units;
- students are completing assessment tasks at higher rates; and
- student feedback indicates both struggling and high achieving students find this personalised contact very motivating.

<h1 style="text-align:center">Limitations of Intelligent Agents</h1>

1. **Student action**
   Issue: For a student to receive an email through the Intelligent Agent, they need to DO something. So at present the Intelligent Agent cannot send an email to students who have not submitted an Assessment task.
   Fix: In the Assessments tool, click "Email users without submission"

2. **Overall progress**
   Issue: There is no Intelligent Agent for overall student progress or final grade.
   Fix: There is currently no alternative solution.

<h1 style="text-align:center">Considerations in using Intelligent Agents</h1>

1. **Email access**
   Issue: IAs can only reach students who access their Deakin email account.
   Fix: At the start of the trimester, encourage your students to forward their Deakin email to their personal email address and provide this link.

2. **Overdose:**
   Issue: Students may ignore IAs if they receive too many.
   Fix: Distribute IAs over the trimester and over other units.

3. **Replying to IAs**
   Issue: Students can't reply to the IA email address.
   Fix: Include the email address of your unit team in the CC. However, this means you will receive hundreds of emails as you are cc'd into each one the Agent sends. (You can set up a rule in Outlook to move or delete emails from clouddeakin-noreply@deakin.edu.au. See this screencast for instructions.

4. **Copying IAs to next trimester**
   Issue: When copying IAs from one trimester to another, the contents are copied but not the settings.
   Fix: Document both the email and the IA settings you use, and store them in your Unit's folder on the School share drive.

Case study

Watch this [video](#) of Dr Jaclyn Broadbent outlining her use of Intelligent Agents in D2L.

Example emails

1.   To engage students not logging on to D2L regularly:

> Hi {InitiatingUserFirstName},
>
> Just thought I would send you a quick email as I noticed you haven't been on CloudDeakin for a while. I realise you may be busy with other things, but just want to make sure you don't forget there are weekly quizzes due / Assignment X instructions and eLive sessions to guide your work.
>
> We are very keen for you to learn and do well in this unit, and are very happy to help, so if there are issues preventing you engaging in your studies please contact us.
>
> The HBS110 team
>
> PS: Please do not reply to this email. If you would like to contact me, please do so at
> HBS110@ deakin.edu.au

2.   To motivate low achievers: example 1

> Hi {InitiatingUserFirstName},
>
> We noticed that you perhaps didn't do as well as you hoped on one or more of the Assessment tasks. We just want to remind you that we are there to help, and that there are many resources to help you succeed in your studies in our unit and across the University.
> Here are some ways you can get help
> - Ask your tutor
> - Attend the eLive session on [date]
> - Post questions on the discussion board
> - Review the recorded lectures and eLive materials
>
> The University also has lots of resources that may help.
> - Ask Library staff for assistance
> - If there are personal, health or financial issues, there are many online resources, workshop and support staff in the Division of Student Life ([link](#)) you can make appointments to see.
>
> If you wish to apply for an Extension or Special Consideration, please feel free to discuss with me or complete the form [here](#)
>
> GOOD LUCK from the HBS110 team!

To motivate low achievers: example 2

Hi {InitiatingUserFirstName},
We noticed that you may not have done as well as you had hoped on assessment task 1 (Part A) in HSE203. We just wanted to remind you that we are here to help! It's very important that you are able to demonstrate the skills required for Part B to successfully complete this unit.
We've compiled a list of suggestions that you might find useful as we near the due date for Assessment task 2 (Friday May 9th, 2014 at 10:59 am):

1. **Review the feedback that you were given on your literature review plan.** This will help you to identify the specific areas in your assignment where you can improve. It will also identify the sections that were done well.

2. **Attend your tutorials and speak to your tutor.** The tutors can help explain the assignment expectations and provide tips for doing well in Part B. They really are a wealth of information so please be sure to use them as much as you can!

3. **Watch the narrated PowerPoint presentations** available under the 'Assessments' tab on CloudDeakin. These presentations clearly outline the expectations for Part B, and in the past students have reported that they found them to be extremely helpful.

4. **Review the marking criteria** for Part B available under the 'Assessments' tab on CloudDeakin to ensure that you meet all of the assignment requirements. This will specify the important things for you to focus on- it is the same marking sheet that we mark from!

5. **Ask questions on the CloudDeakin discussion boards**...and also review other students' questions as you may get tips that you didn't know you needed. Remember there are no silly questions! If you're unsure about something, ask!

As it is a busy and stressful time of year, please remember that Deakin University has free [medical](#) and [counselling](#) services available to all students if needed.

Best wishes, the HSE203 team

PS: Please do not reply to this email. If you need to email me, please do so at [HSE203@ deakin.edu.au](#)

3. To inspire high achievers:

Hi {InitiatingUserFirstName},

We just wanted to send you a quick email to say congratulations on receiving an HD for your assessment task 1 in HSE203! It's great to see you starting off the trimester so strong. We know that receiving an HD isn't easy and would have taken a lot of effort on your part, and you should be commended for the work that you've put in. Hopefully this plan has helped put you in a good spot for the second part of the assessment task. Remember to review the assignment information sheet and marking criteria available on CloudDeakin to ensure you have a good result in Part B!

Congrats again and all the best!

The HSE203 team

PS: Please do not reply to this email. If you would like to contact me, please do so at [HSE203@ deakin.edu.au](#)

<h1 style="text-align:center">Features of Intelligent Agents</h1>

When creating an Intelligent Agent, you will need to specify:

1) the criteria
2) when to send the email
3) the content of your email.

Decide these with your unit team before creating the IA.

1. **The criteria that will trigger the email.**
   You can specify a wide range of triggers for an IA, including:

   - A student has not logged in to CloudDeakin at all, or for a certain period of time.

   - A student has received a certain grade in an assessment task. This allows you to encourage students who are struggling and acknowledge the efforts of students who are doing well.

   - A student has attained one grade in one assessment task and another in a subsequent task. This allows you to encourage students who are improving.

     You can either have one simple IA encouraging students who failed one task but have now passed, or you can set up multiple IAs to cover all ranges across which students may improve. For example:

     - from > 50 to a pass or over
     - from 50-59% to > 60%
     - from 60-69% to > 70%
     - from 70-79% to > 80%

   - Time: sending students emails at particular times of the trimester to mark the passing of time and progress of the unit. This approach can be particularly valuable for students studying off-campus. Also a useful way to bring some completion at the end of the trimester or after exams.

2. **There are two methods for determining the timing of the email:**
   - You can send the email manually (recommended the first time you use IAs), or
   - Use the Calendar to program the IA to check if the criteria have been met. This is the most complex part of setting up IAs and can confuse first time IA users, so you may wish to seek assistance from HADU or other experienced IA users.

3. **The content of the email that will be sent.**
   Prior to setting up the Agent, it is recommended you create the contents of the email and save this in a Word document, including the text, links to resources, and any images or video you wish to include.

Creating an Intelligent Agent

1. Go to your unit site on CloudDeakin.

2. Go to **Setup** > **Intelligent Agents**

3. Click **New**.

4. **Create a name for the Agent.**

   Use logical naming conventions that are easy for you or other teaching staff to recognise in subsequent trimesters, such as "Assignment 1 HD", or "Not Logging in for 1 week".

5. **Describe** the agent, including:
   i. purpose of the Agent
   ii. the criteria, including the Assessment task if relevant
   iii. how frequently the Agent checks the criteria
   iv. how often per trimester it runs

6. Tick the "Agent is enabled" checkbox.

Now choose the criteria.

7. **Login or Site Activity**
   If you wish to send an email to students who haven't logged on to CloudDeakin, tick the box.

   Choose the time period of not logging in that in your unit would mean a student is missing out on learning or assessment tasks. E.g if there are quizzes open only for one week, you may decide to specify 5 days.

8. **Use existing or Create new Release Conditions**
   - Choose the Condition or Conditions you would like to specify.

   Note that you can set several conditions for one Agent. Examples include:

- to Burwood students (*Group Enrolment*) who have failed (*Grade Value on a Grade Item*).
- to students who fail one task then achieve a higher grade in the next (both *Grade Value on a Grade Item*).

9. **To encourage students who have received a low or high grade:**
   - **Choose** Grade Value on a Grade Item
   - **Choose** the relevant Assessment task
   - Enter the mark that will trigger the agent. For example to send an email to support students who have failed, choose < 50.

Create a New Release Condition

Release this item when the following condition is met:

Condition Type

Grade Value on a Grade Item

> Choose "Grade Value on a Grade Item"

Condition Details

Grade Item

Topic 3 Quiz

> Choose the relevant Assessment task

Criteria:

<

> Enter the criteria & mark that will trigger the agent.

Grade

50   %

Create   Cancel

10. **To respond to students who have contributed to a Discussion:**

Create a New Release Condition

Release this item when the following condition is met:

Condition Type

Discussion Messages authored in Topic

> Choose: "Discussion Messages authored in Topic"

Condition Details

Discussions

Blood and cardiovascular system

> Select the appropriate Discussion Board

Number of Messages:

1

> Type in the number of messages the student needs to have posted to receive the email

Type:

New Messages Only

> Choose new messages or messages and replies

Create   Cancel

11. **Determine the Action Repetition**

Select whether you wish the student to receive an email only once, or each time the criteria occurs.

PLEASE NOTE: In most cases, the option you will select is "Take action only once".

If you select "Take action every time" and the IA checks each day, the student will receive multiple emails.

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 satisfied for a user

For example:

- if you wish to send an email to all students the first time they post a message on the Discussion board, select the first option.

12. **Calendar**

The calendar is perhaps the most complex part of creating IAs. If you are a first time user, you may wish to avoid using the calendar and instead run IAs manually. You can then set reminders on your own Outlook calendar.

a) To have the Intelligent Agents run automatically, select **Use calendar**

b) Select **Update Calendar**

c) To determine how often the AI searches for the specified criteria, you can select daily, weekly, monthly or annually.

d) You can then specify how often it repeats. For example:
   - If you select daily you can specify: every day, every 2 days etc.
   - If you select weekly you can specify: every 1 week, every 3 weeks etc. and the day of the week that it runs, Monday, or Tuesday or Wednesday etc.
   - If you select monthly you can specify: every 1 month, every 2 months etc. and the day of the month e.g. the 1st, the 18th, the 22nd etc.
   - If you select annually you can specify: the month and the day each year when the AI runs.

e) Specify the start and end date.
   The start and end date is useful to tell the agent the period as to when to start looking and the period to stop. For example if you have a quiz that is open for two weeks only you could use the quiz's start and end date for the AI as well.

Update Agent Calendar

Repeats:
Weekly ▼

Repeats Every: *
1   week(s)

Repeats On: *
☐ Monday   ☐ Friday
☐ Tuesday   ☐ Saturday
☑ Wednesday   ☐ Sunday
☐ Thursday

Calendar Dates:
☑ Has Start Date
   29/04/2014
☑ Has End Date
   06/05/2014

Update   **Cancel**

13. **Create your email.**

Note: it is recommended you create the text of the email in a Word document and save it with your Unit materials.

14. In the **To** field, type or better yet, paste {InitiatingUser}

15. If you wish to have students reply to the email, type your Unit or staff email address in the **CC** field.

16. In the **Message** field, enter the email text. Make sure you use the string {InitiatingUserFirstName} – it is recommended to copy and paste the string to ensure no errors.
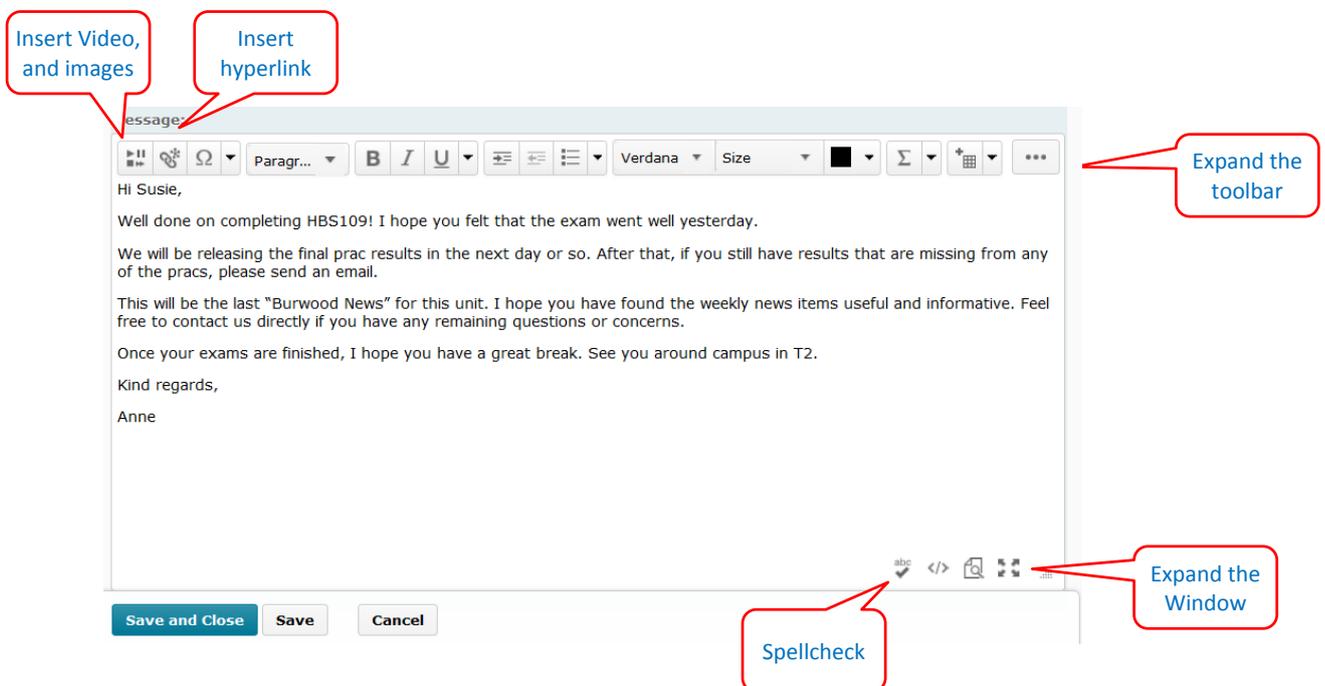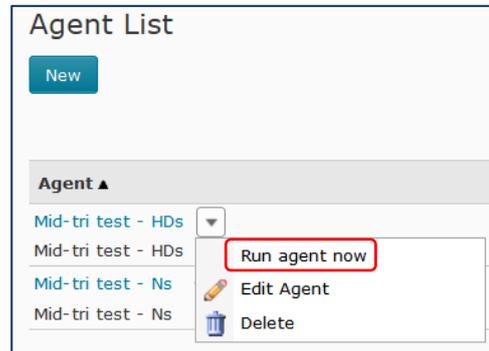

17. Tick the "**Enable Agent**" box
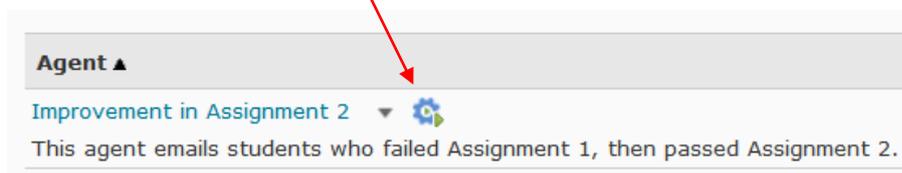
18. Click **Save and Close**

Running the Intelligent Agent

To manually run the Agent (only use this if you are not using the Calender):
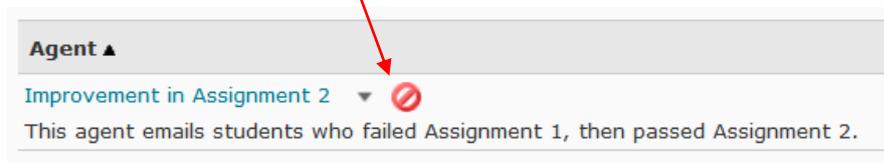
1. Go to the Intelligent Agent area in your Unit's CloudDeakin site, select the dropdown menu for the relevant agent, and choose **Run agent now**.

2. You will see that an Agent has a symbol indicating it is set to Manually run

3. If the Agent is not enabled, a red circle with a line through it will display.

To enable and run the agent:

4. Click the drop down menu and click **Edit**. You can now tick the "Enable Agent" box.

5. Click the drop down menu and choose **Run agent now.**
   Note: it can take some time for the Agent to send out emails to all students.

6. You can also **Delete Agents** using the drop down menu.

Congratulations, you have now

run an Intelligent Agent!
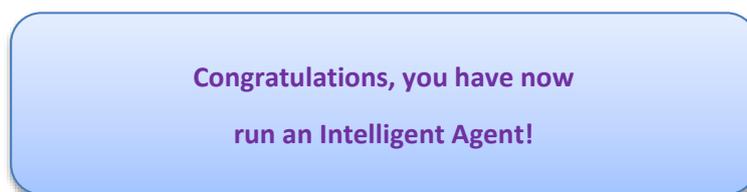
Please email Susie Macfarlane or Jacqueline Broadbent to provide feedback about errors or updates to this guide.