R U A Cyber Detective? teaching notes

R U A Cyber Detective? is a digital citizenship game for students in Stage 2. Students take on the role of a junior detective at the Cyber Detective Agency. Assigned an urgent case involving stolen identities, students are challenged to use their digital citizenship skills in a range of mock situations, including chat rooms and using webcams, as they race against time to recover the identities from Dr Hiss. At the conclusion of the game, students make a five-point guide about staying safe online and receive a Junior Detective Award.



How to play the game

The game was designed to be played by students individually, although it could be played in pairs or even as a whole class activity. Headphones are essential when playing the game individually or in pairs. The game takes approximately 30–45 minutes to play, depending on students' abilities. It must be completed in one sitting. Students cannot save their location in the game.

When students first enter the game, they see a map with a road and six buildings. Students can explore the map but to begin the game (and earn 20 points) they must click on CDA HQ. At HQ they complete three tasks to get set up at the agency and learn about their mission. Points are awarded (or deducted) as they complete activities throughout the game.

After receiving their mission, a clock appears on the screen and begins counting down from 20 minutes to zero. However students can take as long as they need. While the clock stops at zero, students will receive an alert telling them that they have more time.

To carry out their mission, students make their way to the fortress by clicking on each building on the map and completing a task related to digital citizenship. Teachers may want to revise particular concepts with students before they begin the game. Appendix 1 at the end of these Teaching notes lists each interaction, the correct response/s and how points are won or lost for each interaction.

Students complete two 'hazard' sections by rolling a dice and responding to chance, community and challenge cards as they go. At the end of each hazard they collect an object which they need to enter the fortress. Students receive a clue about the order in which to use these objects along the way.

Once inside the fortress, students crack the safe password in order to recover the stolen identities. They return to CDA HQ to create their online safety guide and collect their Junior Cyber Detective award. Help contains suggestions on how to save the award if no printer is available.

Assistance with the game

Teachers might talk with students about where they can get help during the game if they don't understand what to do or come across words or terms that are unfamiliar.



A glossary provides an explanation of relevant words and terms in the game. Access it at any time the left panel is active. The glossary is included here as Appendix 2.



Help provides advice on what to do in the game. Only information relevant to the user's current location on the map (and the related tasks and activities) is displayed. Access Help any time the left panel is active. The entire Help file is appended here as Appendix 3.

Accessibility

For help changing the size of text on the screen or addressing other accessibility issues, click on the link to Accessibility on the opening screen.

As noted on the Accessibility page, the NSW Department of Education and Communities strives to conform to the <u>W3C's Web Content Accessibility Guidelines</u>. *R U A Cyber Detective?* conforms to these guidelines except with 'drag and drop' and 'reordering' activities, which cannot be completed by keyboard alone. Students who require keyboard use should speak to their teacher.

For further help, read Technical requirements, also accessed via the link on the opening screen.

Digital citizenship domains

R U A Cyber Detective? supports learning within the following digital citizenship domains:

Digital conduct

- The concepts of ethical, responsible and respectful online use.
- Positive online conduct and codes of practice.
- 'Netspeak' and 'netiquette' interacting properly with online contacts e.g. courteous email forwarding and thinking before posting.
- Recognising inappropriate or suspicious behaviour online and knowing how to report it.

Digital Law

Considerations when using a webcam.

Digital relationships

- Recognition of the risks of social networking, that there is no guarantee that a person online
 is who they say they are, recognising grooming or luring tactics, cyber stalking, unwanted
 contact and how to report abuse.
- Use of avatars, virtual worlds, chat rooms.

Quality teaching framework

This resource supports students to:

- engage with various mock online scenarios addressing a range of digital citizenship issues (Problematic knowledge)
- engage with language associated with internet-based activities (Metalanguage)
- challenge themselves by building points and beating the clock as they successfully complete their mission (Engagement)
- work independently at their own pace, with the support of audio instructions as well as a glossary and a help area (Student self-regulation)
- take on the role of a junior cyber detective to recover a communities stolen identities (Narrative)
- draw on their prior knowledge when responding to tasks (Background knowledge)
- learn skills and knowledge applicable in their school life and to the world outside school (Connectedness).





Appendix 1: Table of activities, responses and scoring

Bldg	Action or activity	Max Pts	Correct responses and scoring breakdown
CDA HQ	Enter CDA HQ	20	-
	Set up: Create ID card: delete inappropriate names	40	Partychick, Gunslinger, Clownboy, UR2Ugly 10 pts x 4 items less 5 point for a wrong answer
	Set up: Create ID card: match undercover names to reason they are inappropriate	40	Clownboy: too silly so you won't be taken seriously Partychick: too casual and adult Gunslinger: too violent, could attract nasty people UR2Ugly: too rude and mean about other people 10 pts x 4 items
	Set up: Receive device: delete weak passwords	50	lion, aBc5, 87654321, BookWorm, DANCE101 10 pts x 5 items
	Set up: Receive device: match weak passwords to reason for deleting them	40	aBc5: too short BookWorm: doesn't have letters and numbers 8765432: a sequence that is easy to guess DANCE101: doesn't have lowercase and capital letters 10 pts x 4 items
	Set up: Select travel vehicle: modify Terms and Conditions	50	bonus points only: must tick check box within the terms and conditions to remove Condition 2.
	Case file: Review: complete five sentences about the case	50	1. theft, 2. Hiss, 3. The Fortress, 4. identities, 5. 20 minutes (10 pts x 5 endings).
Civic Centre	Internet search: A search for 'Dr Hiss' has found four sites. Rate them (4 options)	40	1. untrustworthy, 2. irrelevant, 3. no go!, 4. relevant 10 pt x 4 items less 10 pts if blocked site is visited.
Kuranda Library	Chatroom: Choose a username, create a password and choose an avatar then log in	40	Password must be 8 characters long with at least one upper case and lower case letter and a number; Avatar cannot be the image on their ID card. 40 pts less 5 points for each failed log in attempt.
	Chatroom: Add a message (4 options)	20	4. Hi, Hiss has done this for sure 20 pts less 5 pts for each wrong selection
	Chatroom: Respond to private chat room message asking for your location	20	Either option 2 or 3; Pay 20 pts to get back in the game if you choose option 1 (tell peanuts where you are).
(Hazard)	Hazard I: Chance	_	
	Hazard I: Community: 1 A strong password has: 2 Should your share a password?	10	1 d: all of the above 2 a: No, only with your parents
	Hazard I: Challenge Help Pepper find the 8 strong passwords in a list of 16 possible passwords.	40	4MumnDad, catloveR9, catsR4ME, macar0Ni, figureSk8, Gr8books, pepPEr99, purpleCat7 Note: the o in macar0Ni is zero not a letter; also Pepper08 and 27SmithSt contain personal information although they appear to be strong. 5 pts x 8 strong passwords less 5 points to view hint.





Bldg	Action or activity	Max Pts	Correct responses and scoring breakdown	
Boots Cafe	Cam-mail: View webcam message and choose whether to follow or ignore lead.	20	Ignore lead Pay 20 pts to get back in the game if you choose to follow the lead.	
	Cam-mail: Find clues in the web message which help you respond correctly	50	Sign outside window, award on wall, letter on desk, property stamp on desk, logo on the shirt 10 pts x 5 clues	
Pa's Petrol	TextTalk: You receive a nasty text message. How do you respond?	20	Keep (20 pts); Delete (10 pts); Reply (lose 20 pts)	
(Hazard)	Hazard II: Chance	_		
	Hazard II: Community 1. An avatar should not be: 2. In an online chatroom you should:	10	1a. real life photo of you 2b. be respectful of others	
	Hazard II: Challenge Match the five avatars to their owners	50	cupcake: Annie scat: Asiz crow: chan roo27: Nanna magician: Kaylee 10 pts x 5 items	
Fortress	Enter the fortress grounds	-	Throw pooch powder to pacify dogs then use the swipe card. Pay 20 pts to get back in the game if you open the gate before you deal with the dogs.	
	Fortress ground floor map: Click on a door to get to the safe and security room	_	Door 1 Pay 20 pts to get back in the game if you enter through Door 2.	
	The Safe: Enter the correct password to open it	50	Mincer (Students are instructed to look in their notebook on the CDAT for clues; feedback is given after the third and fifth wrong attempt) 50 pts but lose 5 pts for each wrong attempt.	
	Escape to CDA HQ	_	Pay 20 pts to get back in the game if you wait too long to escape.	
	Reach HQ	40	-	
	TOTAL POINTS	700		





Appendix 2: Glossary

Word or phrase	Meaning
Avatar	An avatar is an icon or picture you use to represent yourself in online situations, for example in chat rooms or games. Your avatar can let others know something about yourself. For example, it could show your personality or something you like. Choose an avatar that suits the online situation. Avoid using a real-life photo.
CDA	Cyber Detective Agency, the agency that solves online crime on time.
CDAT	Cyber Detective Agency Tablet, the mobile device CDA detectives use to research cases and communicate.
Chat room	A chat room is a site on the internet where you can chat and discuss online with others anywhere in the world. This is usually by typing text.
Contract	A contract is an agreement between two people or organisations, often about providing and using a service. This might be a mobile phone, or downloading ringtones. The contract sets out the terms and conditions that are agreed to.
Cyber	of, or relating to the internet
Identity theft	The theft of personal information (such as your name, address, date of birth, bank details) by others usually for criminal activity.
ID	identity
Irrelevant	not relevant, not related to the topic
Online name	The name a person uses when logging into an online service such as chat room. This is also known as a username.
Password	A password is a secret code, usually a word or phrase, used to enter to a restricted area online or in the real world.
	A strong password has at least eight characters and includes numbers, and upper and lower case letters.
	A strong password is difficult to crack. Don't use your date of birth, address, pet's name or other personal information that is easy to guess.
PIN	PIN stands for Personal Identification Number. It is a secret code or password that is mostly used to access ATMs. It is made up of 4–6 numbers which are entered on a number pad. You can choose a word instead of numbers for your PIN because letters are written above each number on the pad. For example, the word 'orange' is the same as 672643.
Private message	A message between two people in a chat room that others in the chat room cannot see.
Relevant	related to the subject matter
Terms and conditions	Rules, rights and responsibilities that are part of an agreement or contract between two people or a person and a company. For example, a website that lets you register and log in as a member might have rules about how you use the website and any cost.





Word or phrase	Meaning
Undercover name	Your undercover name is like an online name. It is different to your real name and keeps your identity private.
	Choose an undercover name that suits the situation and is appropriate to your age. For example, choosing a silly name as your detective undercover name means people probably won't take you seriously.
Username	The name a person uses when logging into a computer or an online service such as email, chat room. This is also known as an online name.
Untrustworthy	not to be trusted
Webcam	A webcam, or web camera, is a camera attached to a computer (either a desktop computer or portable device) to transmit pictures to others over a network, including the internet.





Appendix 3: Help

The following information can be accessed by clicking the Help button during the game.

Map

Click on any building on the map to go there. The game will only start/continue when you click on the first/next building in the sequence.

If you click on a building that is not the current scene, it will be closed or you will be unable to continue. Click on the 'Map' button to return to the map and try another building.

To begin the game (and receive 20 points), click on the CDA HQ building.

To continue your mission after leaving a building, click on the next building on the map.

When you have achieved your mission you will automatically return to CDA HQ.

CDA HQ reception

If CDA HQ reception is closed, click on the 'Map' button to return to the map. Choose another building.

Listen to the receptionist's instructions. Click on the computer monitor to begin the 'Set up'.

'Set up' main menu

Click on each task button and complete the activities. After completing all tasks the 'Done' button becomes active. Click the 'Done' button to return to CDA reception.

Create ID card

- Tab 1—Photo: Click the 'Take photo' button to show the images you can use on your ID card. There is a loop of four images (two boys and two girls).

 Select the image you will use by displaying it. This is 'you' during the game.

 Click on the 'Name' tab when you are ready to continue.
- Tab 2—Name: Step 1 Drag the four names that are not appropriate into the rubbish bin. The glossary has information about appropriate and inappropriate undercover names.

 Matching activity: Drag the undercover name up or down the column of names. Release the mouse when the name is next to the matching reason for deleting it. Check the names are in the correct position before you click the 'Check' button.

 Step 2 Click on the name you will use. Click on another name to change your selection. Click the 'Create' tab when you are ready to continue.
- Tab 3—Create: Check the undercover name and photo displayed. Click on the Photo and Name tabs if you want to change your selections. Click 'Create' to make your ID card.

ID card: Print the ID card by clicking on the 'Print' button (optional). If you do not have a printer you may be able to do one of the following:

- save the card as an HTML file
- click 'Print' then select 'Adobe PDF' or similar from the Printer list and save the card as a PDF file
- capture the screen (Windows: Alt+Print Screen) and save the card as an image.

Click the close box to close the ID card. It appears in a wallet in the panel on the left. Click on the card in the wallet to display the ID card again.

Receive mobile device

- Tab 1—About: This screen tells you about the CDAT that you will use during the game. Click the 'Password' tab when you are ready to continue.
- Tab 2—Password: *Step 1* Drag the five weak passwords into the rubbish bin. The glossary has information about passwords that may help you.





Matching activity: Drag the password up or down the column of passwords. Release the mouse when the password is next to the matching reason for deleting it. Check the passwords are in the correct position before you click the 'Check' button.

Step 2: Click on the password you will use. Click another password to change your selection. Click the 'Confirm' tab when you are ready to continue.

Tab 3—Confirm: Type your password in the empty box. It appears as black dots to keep it private. If you have forgotten your password, click 'Show hint' to show all the passwords. You must type the password exactly, including capital letters. Make sure 'Caps Lock' is not active. Click 'Confirm' to confirm your password and finish the activity. The CDAT icon now appears in the panel on the left. Click on the icon to open the CDAT. (For help using the CDAT, see the information below.)

Select travel vehicle

- Tab 1—Choose: Click on a vehicle to select it. Click on another vehicle to change your selection. Click the 'Accept' tab when you are ready to continue.
- Tab 2—Accept: Read the terms and conditions and respond to any prompts. Click on the box to show that you have read the terms and conditions. You must do this in order to 'Accept' the vehicle. Click the 'Accept' button to continue.

Rego card: Print the Rego card by clicking on the 'Print' button (optional). If you do not have a printer you may be able to do one of the following:

- save the card as an HTML file
- click 'Print' then select 'Adobe PDF' or similar from the Printer list and save the card as a PDF file
- capture the screen (Windows: Alt+Print Screen) and save the card as an image.

Click the close box to close the Rego card. It appears in the wallet in the left panel. Click on the card in the wallet to display the Rego card.

CDAT (Cyber Detective Agency Tablet)

To open the CDAT, click on the CDAT icon in the left panel.

To open an application or 'app' click on any of the icons on the screen. For example, to open Case Files, click on the Case File icon. Most 'apps' will be empty or unavailable.

To close an 'app' and return to the main CDAT window, click the close box in the right corner of the open 'app'.

To close the CDAT, click the close box in the top right corner of the tablet.

CDA HQ reception (part 2)

Listen to the receptionist's instructions. Click on the CDAT in the bottom corner to open it.

CDAT Case file

Click on the Case File button to review the case file notes.

You can open other applications ('apps') on the CDAT by clicking on other buttons. To return to the main CDAT window, click the close button in the top right corner of the open app.

Case file 11904: Listen to/read about the case. Then click on 'Test your knowledge'.

Review activity: Read the five sentences carefully and click on the correct ending for each one. Some endings are more than one word. When you are ready, click the 'Check' button. Review any incorrect responses and then click 'Continue'.

Back at CDA HQ reception

A timer in the left panel is now counting down from 20 minutes. This is the approximate time you have to complete your mission.





Listen to the receptionist and follow her instructions. To return to the map, click on the 'Map' button. To take the first step in your mission, click on the next building on the map.

Civic Centre

If you are told you cannot see the mayor, or the Civic Centre is closed, click on the map button to return to the map. Choose another building.

Listen to the mayor and then click on the CDAT in the bottom corner to begin your web search activity.

Websearch

The internet search for 'Dr Hiss' has found four web pages. They are listed on the left.

Click on a symbol to rate each page as relevant, irrelevant, untrustworthy or 'no-go'. The glossary explains the meaning of these words. To change your rating, click on a different symbol. A symbol guide is shown on the page.

The content of each page will help you decide what rating to give it. Click the link to view a page. Click the 'Back' button to return to Boogle search and your ratings.

Click the 'Check' button when you are ready to check your ratings.

At the end of this activity, information from the search is added to your CDAT Notebook.

Kuranda Library

If the library is closed, click on the 'Map' button to go back to the map. Choose another building.

Listen to the librarian and then click on the CDAT in the bottom corner to open it.

Chat room login

Choose an online name, enter a password, select an avatar then log in to the chat room.

Online name: click on the down arrow to show the list of names. Click on a name you want to use. You can choose any name.

Password: Make up a strong password. You don't have to remember it. Look up 'password' in the Glossary if you have forgotten what makes a strong password. The password cannot be the same as the one you chose to log in to CDA from your CDAT.

Avatar: Look up 'avatar' in the Glossary to learn about choosing an appropriate avatar. You must choose an appropriate avatar.

Click 'Log in' when you are ready to continue. You lose points each time you are not successful in your 'log in'.

Chat room message

Six people (including you) are logged into the chat room. The avatar and online name of each person is shown on the left. Your avatar and online name are at the bottom.

Read the discussion on the screen and then choose your own message to send.

To do this, click on the message box to display the four options. Choose the suitable message and click 'Send' to add it to the chat room discussion.

You lose points if you choose an inappropriate message. You then choose again.

Private message from peanuts

Read peanuts' private message to you. This is a message that only you and peanuts can see.

Read the instructions and the three ways that you could respond. Click on the option that you think is best. Then click 'Do it!'

Read the information on the next screen. Then click the button to continue.





Hazard 1

Click on the dice. The car automatically moves forward the number of cards rolled on the dice. For example, if the dice rolls '2', the car moves forward two cards.

If the car stops on a blank card, click the dice to move again. If the car lands on a chance, community or challenge card, respond to the card that appears on the screen.

Chance

Read the card information and click OK. The car will automatically move to a new card.

Community

Read the question and choose a response. 'Check' your answer and then click 'Continue'. Click the dice again to continue.

Challenge

Read the card and then click 'Go' to begin the challenge.

To move a password into the 'Strong password' box, select it (click on it) and click on the arrow '>' button. To move it back again, select it and click the back arrow '<' button.

Remember to look at the facts about Pepper before you decide on the strong passwords.

Click the 'Hint' button for information about strong passwords. This will cost you points. You can also look in the Glossary.

Click the 'Check' button when you are ready to check your response. When you have completed the challenge, click the dice again to continue.

End of hazard

At the end of this hazard you collect a swipe card. It is added to the left-hand panel when you click 'Back to mission'. You will need to use the swipe card later in the game.

Boot's café

If Boot's café is closed, click on the 'Map' button to go back to the map. Choose another building.

Listen to the detective's advice and then click on the CDAT in the bottom corner to open it.

Cam-mail

Click on the 'View' button to view your new message. You cannot open other messages.

Webcam message

Listen to the message. To replay the message, click on the audio button in the left panel.

Choose to 'ignore' or 'follow' the lead by clicking on the button. If you ignore the lead, read the information on the next screen. Then click the button to continue.

Webcam message activity

Click on parts of the picture to select the clues. If you are correct, a green box will appear. If you click 'Continue' before you find all the clues a pop-up message appears warning that you will miss out on some points. Click 'Cancel' to return to find the other clues or click 'Continue'.

Pa's petrol, Parkdale

If the petrol station is unattended, click on the 'Map' button to return to the map. Choose another building.

Listen to the attendant and then click on the CDAT in the bottom corner to go to your text message.





TextTalk

Click on the message to display the contents. Read the message that is supposedly from the mayor. Choose the way that you will respond and click on the button. You can reply to the message, delete the message or keep the message.

Read the information on the next feedback screen. Then click the button to continue.

Hazard 2

Click on the dice. The car automatically moves across the number of Hazard cards rolled on the dice. For example, if the dice rolls '2', the car moves forward two cards.

If the car stops on a blank card, click the dice to move again. If the car lands on a chance, community or challenge card, respond to the card that appears on the screen.

Chance

Read the card information and click OK. The car will automatically move to a new card.

Community

Read the question and choose a response. 'Check' your answer and then click 'Continue'. Click the dice again to continue.

Challenge

Read the card and then click 'Go' to begin the challenge.

Drag each avatar into the empty box next to the person you think 'owns' it. If you change your mind, drag the avatar to a different box or back to the top.

Click the 'Hint' button for information about strong passwords. This will cost you points. You can also look in the Glossary.

Click the 'Check' button when you are ready to check your response. When you have completed the challenge, click the dice again to continue.

End of hazard

At the end of this hazard you collect a tin of 'Pooch powder', a product that makes dogs peaceful. It is added to the left-hand panel after you click 'Back to mission'. You will need to use this dog powder later in the game.

Fortress

If you haven't collected the items to get inside the Fortress, click on the 'Map' button to return to the map. Choose another building.

Use the swipe card and dog powder to get into the Fortress. Follow the advice of the detective at Boot's café and you will use them in the correct order. Drag and drop each item onto the correct area of the screen. If you are incorrect, the item will return to the left panel.

The Fortress – ground floor

Click on Door 1 or Door 2 to get to the security and safe room inside the Fortress. Choose wisely and don't get caught by Dr Hiss.

Safe and security room

In the safe and security room, click on the safe to get up close.

At the safe

Enter the password in the keypad to open the safe. For help on how to do this, click on the question mark (?) on the keypad. To delete your entry before you enter the last character, click the 'Clear' button. The password is tested as soon as you enter the last character.





If the password is correct, the safe will open. If it is incorrect, you are prompted to have another try. You lose 5 points with each incorrect attempt. After three attempts you are told where to find the password. After five attempts you are told what password to use.

To find the password, look in your CDAT Notebook. Click on the CDAT icon in the left panel to open it. Click the close box on the top left of the CDAT to close it.

Inside the safe

Grab the identities inside the safe by clicking on the envelope. After you grab the envelop, a pop-up message appears. Click the button in the message to get out of the Fortress and return to CDA HQ. Don't wait too long or Hiss Security will get you!

CDA HQ reception

Congratulations! You've completed your mission and arrived safely back at CDA HQ. Listen to the receptionist and then click on the computer monitor on the desk to begin your guide.

Online safety guide

You create an online safety guide by choosing five tips from a list of top ten tips.

Click on the Top Ten Tips drop-down menu to display the list. Read each tip. You may have to scroll down the list.

To add a tip to your guide, click on the tip and then click the 'Add tip' button.

To change the order of the tips in your guide, drag a tip to a new position.

To delete a tip from your guide, drag it to the trash.

These instructions can be viewed by clicking the 'Instructions' button.

Print the guide when you are finished. If you do not have a printer you may be able to do one of the following:

- save the guide as an HTML file
- click 'Print' then select 'Adobe PDF' or similar from the Printer list and save the guide as a PDF file
- capture the screen (Windows: Alt+Print Screen) and save the guide as an image.

Junior Cyber Detective Award

Type your real name in the box if you want it to appear on the award. You may type a nickname. The name you enter is not saved and it is not part of the game. You may leave this box blank. Click 'Create' to make the award.

Print the award. If you do not have a printer you may be able to do one of the following:

- save the award as an HTML file
- click 'Print' then select 'Adobe PDF' or similar from the Printer list and save the award as a PDF file
- capture the screen (Windows: Alt+Print Screen) and save the award as an image.



