



# Dragon Pro 16 Academic VLA

|                                  |                              |
|----------------------------------|------------------------------|
| Initiative:                      | Dragon Pro 16                |
| Department or Service Area Name: | Assessment and Exam Services |

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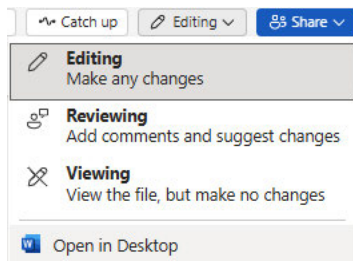
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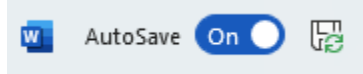
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Tip: Consider using the Microsoft Word Desktop app for a better experience while completing this form.



Once in desktop, the file should be linked to the online version. Just ensure that the autosave toggle is enabled (upper left side of screen):



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### Part 1 – General Information and Overview

#### 1.1 What is the Initiative?

Describe your initiative in enough detail that a reader who knows nothing about your work will understand the purpose of your initiative and who your partners and other stakeholders are. Describe what you're doing, how it works, who is involved and when or how long your initiative runs.

This initiative is the purchase and deployment of Dragon Professional 16 Academic (VLA license) as a speech-to-text exam accommodation. The software will be made available only to students who have an approved speech-to-text accommodation. Its primary purpose is to enable those students to produce typed exam responses by speaking rather than typing or handwriting. We currently use an older version of Dragon that is incompatible with Windows 11, so we need to purchase a newer version.

Dragon will be used predominantly offline under strict exam conditions in the Accommodated Exams Centre. It will be installed and configured on secure exam workstations so that speech-to-text processing occurs locally. In a limited number of cases, the software may also be used for assessments delivered through VIU Learn; where that occurs, the use will be controlled to match exam security and privacy requirements. Instead of dictating into a Word document, they would dictate into the text box in their VIU Learn exam. (VIU Learn has an approved PIA on file). Dragon will not be used outside of the AES exam centre, and only AES staff will manage its use.

Students speak into a microphone; Dragon converts speech to text locally on the exam device. Transcriptions are used as the student's exam submission. No cloud-based speech processing will be used and no 'recordings' are made or saved.

Use is limited to scheduled exam sittings for accommodated students as an accommodation option.

Each of the three private rooms in the Exam Assessment Centre has its own computer, and voice profiles are stored locally on those machines. If a returning student is in the same room, their existing profile will be on that computer. The invigilator selects the correct profile *before* the student arrives, when setting up the exam software. Once selected, the Dragon toolbar is active for the student to use.

There is no separate login for Dragon itself, and students are not involved in the setup stage. They only see the active toolbar once it's ready. All profile selection and initialization happens before they enter the room.

If the student is in a different room and does not yet have a voice profile there, the invigilator creates a new anonymized profile (usually using initials) and completes the setup steps up to the voice-training script. The student then reads aloud from that script so Dragon can calibrate to their voice. Once the system has enough data, it activates the toolbar for use.

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Note: not all students require unique profiles. They're only created when a student's speech characteristics, such as a lisp, accent, or stutter, make an individualized profile necessary for accurate transcription. We have a generic AES profile on all three computers that can be used for students that don't need anything uniquely tailored to them. This profile is fed vocal data from everyone that uses it (including staff members testing new headsets). The initial recording and profile creation is done by me or Susan (the exam specialists who run AES).

### 1.2. What is the scope of the PIA?

Your initiative might be part of a larger one or might be rolled out in phases. What part of the initiative is covered by this PIA? What is out of scope of this PIA?

This Privacy Impact Assessment covers the purchase, installation, and use of Dragon Professional 16 Academic (VLA) on specific computers managed by the Accommodated Exams Centre for the sole purpose of supporting approved speech-to-text exam accommodations.

### 1.3. Are there any related Privacy Impact Assessments?

Please indicate if this an update on an existing PIA or an additional module that was not covered in the original PIA.

No PIA was done when Dragon software was last purchased by Accessibility Services in 2019.

### 1.4. What are the data or information elements involved in your initiative?

In the table below, please list all the elements of information or data that you might collect, use, store, disclose or access as part of your initiative. If your initiative involves large quantities of information or datasets, you can list categories or other groupings of personal information in an appendix.

| Information Type     | Information Collected  |
|----------------------|--|
| Personal Information | <p><b>Student voice profiles:</b> 'In the Dragon speech recognition software, a vocal profile is a user profile that stores acoustic data about an individual's unique voice and speech patterns. This allows Dragon to adapt to how a specific person speaks, resulting in higher accuracy over time.</p> <p><b>What a vocal profile includes</b></p> <p><b>Acoustic information:</b> This includes the unique pitch, intonation, and other characteristics of your voice. When you first create a profile, you read a story to train the software, and Dragon records how you pronounce words and enunciate phrases.</p> <p><b>Vocabulary:</b> The profile also stores custom words, names, acronyms, and abbreviations that you add to the standard vocabulary. (NOTE: We do not permit this for exam security)</p> |

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|  |   |
|--|---|
|  | <p><b>Corrections:</b> When you manually correct a word that Dragon has transcribed incorrectly, that information is saved in your profile to improve future accuracy.</p> <p><b>Regional variations:</b> When you create a profile, you select your accent and region, which helps Dragon with spelling and interpreting your speech.</p> <p><b>Microphone settings:</b> Your vocal profile keeps track of the specific microphone you use and its calibration settings. '</p> <p>Only the invigilator/AES staff have access to this part of the set up. Only the designated student will use their profile. Nothing in a 'profile' can be seen or heard or replicated or shared.</p> <p><a href="https://www.nuance.com/products/help/dragon/dragon-for-mac/enx/Content/Introduction/Profiles_AudioSources.htm?srsId=AfmBOor6d0PO-Wtwo-T_s3UQ2pO618CstIUcYdRaEBmiiueWGDZbcMp">https://www.nuance.com/products/help/dragon/dragon-for-mac/enx/Content/Introduction/Profiles_AudioSources.htm?srsId=AfmBOor6d0PO-Wtwo-T_s3UQ2pO618CstIUcYdRaEBmiiueWGDZbcMp</a></p> |
| Contact details  | <b>No</b>   |
| Account information: what info is required to set up an account? | <b>AES generic accounts accessed by AES staff only</b>  |
| Commercial information   |   |

### 1.4a. Did you list personal information in question 1.4?

**Personal information (PI)** is any recorded information about an identifiable individual, other than business contact information. Personal information includes information that can be used to identify an individual through association or reference- see the table below for examples of Personal Information.

**Business contact information**, in turn, is defined as information to enable an individual at a place of business to be contacted and includes the name, position name or title, as well as business telephone number, address, email or fax number of the individual. BC FIPPA does not protect business contact information.

| Examples of Personal Information   |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Name, age, sex, weight, height</li> <li>• Home address, phone number</li> <li>• Race, ethnic origin, sexual orientation</li> <li>• Medical information</li> <li>• Health history</li> </ul> | <ul style="list-style-type: none"> <li>• Marital or family status</li> <li>• Religion</li> <li>• Education</li> <li>• Financial information</li> <li>• Criminal information</li> </ul> |



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|  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Number or symbol assigned to the individual</li><li>• Income, purchases and spending habits</li><li>• Blood type, DNA code, fingerprints</li></ul> | <ul style="list-style-type: none"><li>• Employment information</li><li>• Personal views or opinions, except if they are about someone else</li></ul> |
|--|--|

- If yes, go to [Part 2](#)
- If no, answer question 1.5 and submit questions 1 to 1.5 to pia@viu.ca. You do not need to complete the rest of the PIA template.

No.

1.5. How will you reduce the risk of unintentionally collecting or disclosing personal information?

Some initiatives that do not require personal information are at risk of collecting, using, or disclosing personal information inadvertently, which could result in an information incident.



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### Part 2 – Collection, Use, and Disclosure

This section will help you identify the legal authority for collecting, using, and disclosing personal information, and confirm that all personal information elements are necessary for the purpose of the initiative.

#### 2.1 Four point “Necessity Test” for the collection, use, and disclosure of Personal Information.

To determine if the Personal Information from your initiative meets the necessity threshold, apply the following four-point test to each element of PI from 1.4 above. Note that each element of PI must meet all four points of the test.

Four point “necessity test” for collecting personal information ([OIPC Canada, 2016](#)).

1. The information is rationally connected and demonstrably necessary to an operating program or activity
2. The information is likely to be effective in meeting the objectives of the program or activity
3. There are no other less privacy-invasive ways to effectively achieve the objectives of the program or activity
4. The loss of privacy is proportional to the objectives of the program or activity

| Personal Information element | Does it meet all four points of the necessity threshold? | Reasons for keeping or excluding from initiative            |
|------------------------------|--|---|
| Student Voice Profiles       | Yes  | Necessary for accurate operation of voice-to-text software. |
|                              |  |   |
|                              |  |   |
|                              |  |   |
|                              |  |   |
|                              |  |   |

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### 2.2 Does your initiative involve the use of Artificial Intelligence (AI)? If so, please fill out Appendix One: GenAI Analysis Questions

Yes: the software uses machine learning to improve the accuracy of the voice-to-text feature. However, the student's voice profiles are not shared/disclosed back to the service provider – they are stored locally on machines in the AES exam centre. In other words, the machine learning operates in a closed-loop system. As such, it is not necessary to fill out GenAI Analysis questions.

### 2.3 Personal Information Flow Diagram and/or Personal Information Flow Table

In the table below, list the personal information from question 1.4. Think about how each element of information flows through your project. Your Privacy Officer can help you figure out whether each step is a collection, use, or disclosure, and whether you have the legal authority for the way you're working with the information. Alternatively, you can attach a flow diagram to this PIA. Add rows as necessary.

|             | <b>Describe the way personal information moves through your initiative step by step as if you were explaining it to someone who does not know about your initiative.</b> | <b>(Collection, Use or Disclosure)</b> | <b>FIPPA or other legal authority (Privacy Office)</b>                          |
|-------------|--|--|---|
| <i>E.g.</i> | <i>E.g., Student email, password, and IP address collected by software platform for account creation.</i>  | <i>Collection</i>                      | <i>FIPPA 26(c) "info relates to and is necessary for a program or activity"</i> |
| 1.          | Student creates voice profile by reading a script into microphone. Software records how student pronounces words and enunciates phrases.                                 | Collection<br>Use                      | s. 26(c)<br>s.32(a)   |
| 2.          | Setting up the exam environment:   |  |   |
| 3.          | For exam, student speaks into microphone and the software converts their speech into text in MS Word or, on rare occasions, into a VIU Learn text box.                   | Collection<br>Use                      | s. 26(c)<br>s. 32(a)  |
| 3.          |  |  |   |

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|    |  |  |  |
|----|--|--|--|
|    |  |  |  |
| 4. |  |  |  |
| 5. |  |  |  |
| 6. |  |  |  |

### 2.4 Risk Mitigation Table

Thinking through the information flow, identify where there are risks for privacy incidents or data breaches. For each risk, identify a mitigation strategy, as well as the likelihood of an incident, and level of impact or harm if people's information were breached.

| Risk Mitigation Table |  |                                |            |                              |
|-----------------------|--|--------------------------------|------------|------------------------------|
|                       | Risk   | Mitigation Strategy            | Likelihood | Impact/harm                  |
| 1                     | VIU machine where voice profiles are stored is hacked/breached | Role-based Access<br>Firewalls | Low        | Low – profiles are anonymous |
| 2                     |  |                                |            |                              |
| 3                     |  |                                |            |                              |
| 4                     |  |                                |            |                              |
| 5                     |  |                                |            |                              |



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### 2.5. Collection or Privacy Notice

If you are collecting personal information directly from an individual the information is about, FIPPA requires that you provide a collection notice, also known as a privacy notification.

A collection notice must contain the following elements:

- The legal authority and section under FIPPA under which you are collecting personal information.
- The purpose for which you are collecting the personal information and how it will be used.
- The contact information of an employee or officer at VIU who can answer questions about the collection of personal information.

Contact the privacy office for a collection/privacy notice template.

If applicable, paste your privacy notice here.



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### Part 3: Storing Personal Information

#### 3.1. Is any personal information being stored outside of Canada?

If you're storing personal information outside of Canada, identify the sensitivity of the personal information and where and how it will be stored.

N/A

##### 3.1.1. Where is the personal information stored?

VIU AES Exam Centre local hard drives

#### 3.2. Does your initiative involve sensitive personal information?

Examples of sensitive personal information include personal health information, genetic and biometric data, personal finances, geolocation data, criminal records, counselling records, HR records, payroll records, racial or ethnic origin, sexual orientation, religious, philosophical, or political beliefs, etc.

No – voice profiles only and only associated with initials.

If **yes**, please complete [Part 4: Assessment for Disclosures of Sensitive Personal Information](#).

If **no**, skip to [Part 5: Security of Personal Information](#)

### Part 4: Assessment for Disclosures of Sensitive Personal Information

Complete this section if you are disclosing sensitive personal information. You may need help from your organization's Privacy Officer.

#### 4.1. Is the sensitive personal information stored by a service provider?

N/A

If yes, fill out the table below, then go to question 4.3. If no, continue to [question 5](#).

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### Information about Service Provider

| Name of service provider | Name of cloud infrastructure and/or platform provider(s) | Where is the sensitive personal information stored (including backups)? |
|--------------------------|--|---|
| N/A                      |  |   |
|                          |  |   |

4.2. Provide details on the disclosure, including where and how the personal information is stored.

Answer this if question 4.1 does not apply. Be specific about where and how the information is being stored.

The voice profiles are stored on dedicated machines in the AES exam centre.

4.3. Is there a contract that includes privacy-related terms?

If there is a contract with the provider, please describe any privacy-related terms in the contract, or attach the privacy schedule.

There is no contract. It's a license with annual maintenance fees.

### Part 5: Security of Personal Information

Section 30 of FIPPA imposes a duty on the public body to prevent unauthorized access to Personal Information both internally and with any contracted third parties. As such, we need to make sure that personal information is safely secured in both physical and technical environments. For each item in this section, please describe the security measures for both the service provider and for VIU internally.

5.1. Please describe the physical security measures related to the initiative (if applicable).

For example, physical security measures may include: the security environment of vendor's data centres; storing records containing PI in locked storage rooms, offices, and/or filing cabinets with controls over distributions of keys/access; locked workstations that do not permit others to view your screen (including when working remotely, etc).

| Physical safeguard                                   | VIU                                 | Third Party              |
|--|-------------------------------------|--------------------------|
| Restricted access to property (e.g. key card access) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Security monitoring building                         | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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|  |                                     |                          |
|--|-------------------------------------|--------------------------|
| Locked doors                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Locked filing cabinets                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Locked workstations                          | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Security cameras/ video surveillance systems | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Other:                                       | <input type="checkbox"/>            | <input type="checkbox"/> |

### 5.2. Please describe the technical security measures related to the initiative (if applicable).

E.g. Encryption standard for data in transit and data at rest; firewalls, strong passwords; MFA; encrypted documents, etc.

| Technical Security Measure                         | VIU                                 | Third Party              |
|--|-------------------------------------|--------------------------|
| Strong password requirement                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Multi-factor authentication (MFA)                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Role-based access controls                         | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Encryption in transit                              | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Encryption at rest                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Isolation control: Application                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Isolation control: Network                         | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Isolation control: Database                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Regular vulnerability scan and Penetration Testing | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Ongoing Security Awareness Training                | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Configuration management (CMBD)                    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Security Log Management and Retention              | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Security Patch Management: Server and End Point    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Technical control: perimeter firewalls             | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Technical control: Web application firewalls       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Technical control: Distributed denial of service   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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|   |                          |                          |
|---|--------------------------|--------------------------|
| Technical control: Intrusion prevention systems to control traffic flow | <input type="checkbox"/> | <input type="checkbox"/> |
| Technical Control: Intrusion prevention system                          | <input type="checkbox"/> | <input type="checkbox"/> |
| Technical control: End Point Detection and Response (EDR)               | <input type="checkbox"/> | <input type="checkbox"/> |
| Information Security Incident Response Plan                             | <input type="checkbox"/> | <input type="checkbox"/> |

5.3 Tracking Access / Access Controls. In this section, you will describe how the unit will minimize the risk of unauthorized access to Personal Information.

**5.3.1.** FIPPA section 30 requires public bodies to manage access to PI based on the principle of “need to know” – that users may only access information that is necessary to do their job. This is frequently accomplished by assigning role-based access controls (RBAC), and by establishing a security matrix that describes which positions/roles are permitted to access specific types or groups of Personal Information. Access to personal information should only be permitted to those who demonstrate their right of access on the security access chart. **Please describe how access controls work in the department, or with this initiative. Describe any access controls and/or ways in which you will limit or restrict unauthorized changes (such as additions or deletions) to personal information.**

Only the invigilator/AES staff have access to this part of the set up. Only the designated student will use their profile. Nothing in a 'profile' can be seen or heard or replicated or shared.

**5.3.2** How will you know if sensitive personal information is accessed, including access by service providers? This should include a description of what information is available through logs.

Service providers will not have access as the software is not cloud-based. Only students have access to their individual profiles.

5.4 What controls does the provider have in place to prevent unauthorized access to sensitive personal information?

Describe technical, administrative, and/or policy measures in place to protect PI. If using a cloud-based service provider, include a description of controls in each layer of the stack: software level, platform level, infrastructure level.

NA

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### Part 6: Accuracy/Correction/Retention of Personal Information

[FIPPA section 28 states](#) that a public body must make every reasonable effort to ensure that an individual's personal information is accurate and complete.

#### 6.1 How is an individual's information updated or corrected?

[FIPPA section 29](#) states that a person can ask you to correct their personal information in your custody or control. If it is not possible to update or correct (for physical, procedural or other reasons) it must be noted on the record. **Please explain how it will be updated or annotated. If personal information will be disclosed to others, how will VIU notify them of the update, correction, or annotation?**

Student can delete their own voice profiles.

6.2. Does your initiative use personal information to make decisions that directly affect an individual? FIPPA requires that public bodies keep personal information for a minimum of one year after it is used to make a decision.

NA

#### 6.3. Do you have a records management schedule in place?

How long will you keep the personal information collected? Is there a plan in place for retention and deletion? Please also use this question to note how long it will be stored by the service provider (if applicable).

VIU is in the process of implementing a Records Classification and Retention Schedule (RCRS).

According to the draft RCRS:

- Voice-to-text transcripts of student's exam answers should be kept for the university calendar year plus one year.
- Voice profiles: the department will review usage annually and delete any profiles of students who are no longer attending.

### Part 7 – Personal Information Banks



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*A personal information bank (PIB) is a collection of personal information searchable by name or unique identifier.*

7.1. Will your initiative result in a personal information bank?

|    |
|----|
| NA |
|----|

If yes, please complete the table below:

|   |
|---|
| Describe the type of information in the bank  |
|   |
| Name of main organization involved  |
|   |
| Any other ministries, agencies, public bodies or organizations involved                                   |
|   |
| Business contact title and phone number for person responsible for managing the Personal Information Bank |
|   |

### Part 8 – Further Information

8.1. Does the initiative involve systematic disclosures of personal information? If yes, please explain.

|    |
|----|
| NA |
|----|

8.2. Will the information collected be used for research or statistical purposes?

|    |
|----|
| No |
|----|



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### Part 9 – Summary and Proponent Responsibility

This section is for Privacy Office recommendations as well as any limitations due to privacy concerns.

The personal information collected “voice profile” is low-risk. The software is not cloud-based so there is no transmission of personal data between VIU machines and the provider. Further, profiles are stored on local, specialized machines in the AES Exam Centre. Only AES staff members will interact in any way with this profile. This involves clicking on an anonymized username to 'open' the profile for a specific student for their exam. Nothing is seen or heard by staff.

I have reviewed privacy components, and I have no concerns. I recommend the proponents proceed with the initiative.

### Part 10: Approvals

*This PIA accurately documents the data elements and information flow at the time of completion. If there are any changes to the overall initiative, including to the way personal information is collected, used, stored or disclosed, the program area will engage with their Privacy Office and if necessary, complete a PIA update.*

|                    |                                   |
|--------------------|-----------------------------------|
| <b>Reviewed by</b> | <b>Privacy Officer</b>            |
| <b>Approved by</b> | <b>Director, Student Services</b> |
| <b>Date:</b>       | <b>2025-10-23</b>                 |