Privacy Impact Assessment for:

VANCOUVER ISLAND UNIVERSITY

Physics for Life and Physical Sciences I, II

Initiative Title: MacMillan Achieve online textbook and homework platform
Department or Service Area: Physics

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.

Physics is a course that requires students to practice problems to develop their understanding of the concepts, theories, problem-solving strategies and mathematics. The MacMillan Achieve online platform allows students to access their textbook and the homework assignments (that are either instructor selected and customized or pre-loaded) online, on a desktop or mobile device 24 hours a day. In addition to 24hour access, ease of use, the cost is substantially less than traditional textbooks. The feature that is most appealing from an instructor perspective, is wide variety of questions and question types that all have targeted feedback (the feedback is customized to support student learning and depends on the mistakes they made). For students this immediate feedback and support allows them to progress immediately. In addition, once the homework is completed, detailed complete solutions are provided for every question. The AI Tutor (authored content only) can also be used by students to get direct feedback and guidance on how to proceed with solving the problem.

Macmillan Achieve is a cloud- based software provided by Macmillan to complement their textbook offerings. This platform contains digital textbook materials as well as interactive learning activities to enrich the student learning experience. Students must have an active license for the online version of the textbook in order to access the platform and access is limited to the duration of their subscription.

Currently, if a VIU instructor is using a Macmillan textbook and wants students to use the online resources that go along with that textbook, students are required to create an account with Macmillan Learning and log in directly to the platform to access those materials. If the instructor wants to attach any grades to activities within the Macmillan Achieve platform, they must manually include these in their overall grade calculations (either offline or by adding them manually to the VIULearn gradebook).

This initiative will integrate the Macmillan Achieve platform with VIULearn to allow students to link their Macmillan account to their VIULearn user for easy access to activities and content hosted on the Macmillan platform from within their VIULearn course. For instructors, this integration allows linking of specific content and activities inside VIULearn and allows activities with grades to be connected to the VIULearn grade book so students' scores transfer automatically from Achieve to VIULearn.

The initial request for this integration was made by the VIU Physics department and the set up and testing of the integration will involve the Centre for Innovation and Excellence in Learning (CIEL) who manage VIULearn as well as the instructors in the VIU Physics department who wish to use the integration. Once the integration is established, instructors will be responsible for setting up

integration links in course content, assisting students in accessing the Achieve materials and submitting requests to CIEL to add the integration to courses each academic year for as long as they choose to use the platform and integration. CIEL will, on request from a course instructor, connect courses in VIULearn to the integration and provide technical support for the integration. Any support for the Achieve platform and its materials will come from Macmillan Learning and it will be up to the instructor or student to connect with Macmillan for support.

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 PIA covers the integration of the Macmillan Achieve platform with VIU's Learning Management System, VIULearn (Brightspace by D2L) and the use of this integration by instructors and students in courses where the integration is enabled.
The initial roll out of this integration is for use in select Physics courses at VIU but other departments who have Macmillan textbooks may request to have access to the Achieve platform relevant to their textbook once the integration is in place and those use cases will also be covered by this PIA.

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.

VIU's Brightspace Learning Management System has a PIA drafted by BCNET on behalf of the province. Data sent from the Achieve platform to VIULearn (such as grades) will be handled in accordance with that PIA.

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	From Students: • First and last name • Email • VIULearn username • IP address and device information • Data related to user's interaction with the platform • Any data submitted by the student to fulfill an activity on the platform

	• Any feedback received on activities completed on the platform In addition, Macmillan Learning may collect: • Age • Gender • Social Media profile details • Payment information From Third Parties: n/a **From VIU Employees:** First and last name of instructors using the integration, their email and username
Contact details	From Students: student email From Third Parties: n/a From VIU Employees: instructor email
Account information: what info is required to set up an account?	First name, Last Name, email, VIULearn username
Commercial information	Intuition Name, Address, country

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

Personal information 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	
• Name, age, sex, weight, height • Home address, phone number • Race, ethnic origin, sexual orientation • Medical information • Health history • Number or symbol assigned to the individual • Income, purchases and spending habits • Blood type, DNA code, fingerprints	• Marital or family status • Religion • Education • Financial information • Criminal information • Employment information • Personal views or opinions, except if they are about someone else • IP Address

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.

yes

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.

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
First Name, Last Name	Yes	Name is required to tether assigned readings and homework questions and results to each student to VIU Learn (D2L)
VIU Learn Username	Yes	VIU Learn Username is required to tether assigned readings and homework questions and results to each student to VIU Learn (D2L)
Student Email	Yes	Student email is required to tether assigned readings and homework questions and results to each student to VIU Learn (D2L)
Educational history (Grades and test scores; attendance; subjects studied; etc.).	Yes	This information is required to record the results of their work in the Macmillan Achieve platform in the D2L (VIULearn) gradebook

Meta data: IP address and device information	Yes	Macmillan uses this data to "understand how you use our products, content and services, including associating you with different devices that you may use to access our content, for analytics and product development purposes, and to create de-identified datasets"
Tracking technologies / Data related to user's interaction with the platform	Yes	Macmillan uses these types of tracking technologies to: "understand how individuals interact with our educational materials, such as to assess engagement and improve learning outcomes, and product development purposes. For example, we may use analytics to study the amount of time that students spend on specific content items and we may infer engagement from this process. These analytics also help us understand and improve our materials, and determine what materials are accessible to students. We may also use analytics for course integrity purposes, such as to identify individuals who may be cheating."
Any data submitted by the student to fulfill an activity on the platform	Yes	Student work is documented for practice and/or assessment.
Any feedback received on activities completed on the platform	Yes	Student can review and learn from feedback.
In addition, Macmillan Learning may collect:		
Age	No-optional	
Gender	No-optional	
Social Media profile details	No-optional	
Payment information	Yes	If student chooses to purchase product directly from Macmillan. (They also have the option to purchase from the VIU Campus Store).

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

In progress

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.

	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.	(Collection, Use or Disclosure)	FIPPA or other legal authority
E.g.	E.g., Student email, password, and IP address collected by software platform for account creation.	Collection	FIPPA 26(c) "info relates to and is necessary for a program or activity"
1.	**Student creates an account with Macmillan.** This may be done before trying to access the publisher content through the integration or as step one in accessing the course content. Publisher collects name, email, and payment information. Students have the option of purchasing an access code from the VIU bookstore, in which case they would not need to provide payment information at this step.	Collection	s. 26(c)
2.	**Student Macmillan account is connected to student's VIULearn user.** Student may be required to provide the email address that matches their existing account. VIULearn passes student's first and last name, VIULearn username, and system email address to publisher.	Disclosure	s. 33(2)(d)

3.	**Student accesses course content.** The publisher logs activity and device data.	Collection	s.26(c)
4.	**Student completes an activity on the platform.** Macmillan collected all data entered by student during activity. If the instructor connected a graded activity to the grades tool in VIULearn, the grade for that activity will be passed through the integration to VIULearn.	Collection, Use	s. 26(c); s.32(a)
5.	**Instructor reviews/assesses student activity.** Instructors can see submitted activities completed by students and leave feedback for the student. Feedback left by an instructor will be shared with the student.	Use	s.32(a)

2.4 Risk Mitigation Table

Thinking through the information flow, identify where there are risks for privacy incidents or data es. 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	Unauthorized access of student's data	• [redacted] • [redacted]	Low	High
2	Data breach of service provider's database(s) of student's PI	The Macmillan Learning implements multi-layered technical protections: [redacted] s. 15(1)(l)	Low	Medium

		[redacted] s. 15(1)(l) [redacted]		

4	Data sharing with third party advertisers or analytics companies without consent or knowledge	According to Macmillan School Data Privacy Notice, the only use PI in School Data for: • Providing products, content, or services selected by student or instructor; • Assure academic integrity; • Understand how students use the product, content, and services; • Send end of course surveys • Manage everyday business needs (website, business continuity, disaster recovery, fraud prevention, etc.) *they will only use School Data for other purposes with the consent of VIU or with student's consent. **They do not use School Data for targeted advertising**: **"**We do not use School Data for targeted marketing purposes. This means that we do not select or deliver ads to you in our educational products and services based on your School Data obtained or inferred over time from your use of our educational products and services. We may deliver generic or contextual ads to you while you use our educational products or platforms, but we do not target these ads based on your School Data.	Low	Low

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

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.

Yes. The sensitivity of the personal information being stored is low (first name, last name, student number and email).

3.1.1. Where is the personal information stored?

Macmillan Learning is headquartered in the United States. Personal information may be transferred to, stored at or processed in the European Economic Area (EEA), the United Kingdom (UK), the United States and other countries (including Australia, Argentina and India) which may not have equivalent privacy or data protection laws. However, regardless of where personal information is transferred, Macmillan Learning will protect it in accordance with this Privacy Notice and applicable law.
Where required, they use approved Standard Contractual Clauses and other approved data transfer mechanisms to assure that personal data is adequately protected. Please contact the Macmillan Learning Privacy Office at privacyisimportant@macmillan.com if you would like more information about cross-border transfers or to obtain a copy of any applicable Standard Contractual Clauses.

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.

yes

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?

yes

If yes, fill out the table below, then go to question 4.3. If no, continue to question 5.

Information about Service Provider

Name of service provider	Purpose of disclosure to service provider	Name of cloud infrastructure and/or platform provider(s) (if applicable)	Where is the sensitive personal information stored (including backups)?
Ada Support Inc.	Customer Experience Support		United States
Amazon Web Services (AWS)	Storage		Canada, United States, and Ireland
EdInvent, Inc., d/b/a Accredible	Course Completion Badging		United States

InMotion Software	IT Tech Support		United States
QA Infotech	IT Tech Support		India
Spark Digital	IT Tech Support		Argentina
TechMahindra	IT Tech Support		United States and India
Transcosmos Information Systems Limited	Customer Experience Support		Hungary
InTouch CX	Customer Experience Support		United States and Jamaica
Salesforce	Storage		United States

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.

n/a

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.

n/a

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.

Internally at VIU: Workstations are locked after hours. All workstations are password protected and have lock out after 15 min.

Macmillan Learning applies robust physical controls, including:

- [redacted]

s. 15(1)(l)

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

Internally at VIU: all personal computers are protected with timed lock outs, in addition VIU Learn and Achieve also time-out (30 minutes).

All VIU personal computers are protected with strong alphanumeric passwords. Access to VIU Learn and Achieve Physics is also protected with strong alphanumeric passwords.
Instructors only have access to the student information of the courses they teach, access is through VIU Learn and is password protected. Unless an instructor is the chair or senior administration (Dean or Associate Dean), they will only have access to student name, email and student number.

The Macmillan Learning implements multi-layered technical protections:

- [redacted]

s. 15(1)(l)

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.

VIU: Only course instructors will have access to the student names, student numbers and emails. These same instructors will have access to this information via D2L.

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.

Logs capture detailed information, including:

[redacted]

s. 15(1)(l)

5.3.3 Please describe any access controls and/or ways in which you will limit or restrict unauthorized changes (such as additions or deletions) to personal information.

Measures include:

- [redacted]

s. 15(1)(l)

- [redacted]

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.

- Security layers include:
- **Application/software:** [redacted] s. 15(1)(l)
- **Platform:** [redacted].
- **Infrastructure:** [redacted] enter [redacted]
- **Policy/Administrative:** Security awareness training, configuration control, and formal risk assessments

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. In this section, you will demonstrate how you intend to keep personal information on file 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?**

Internally, Macmillan Learning maintains procedures to ensure PII is accurate, relevant, and up to date, including mechanisms to check and correct outdated data where possible.

Individuals have the right to request updates or corrections to their personal information if it is inaccurate or incomplete. These requests can be submitted via the "Your Privacy Choices" link on Macmillan Learning websites. Identity verification may be required, and supporting documentation might be requested.

For school-related data, students and instructors must contact their institution directly, as Macmillan Learning acts as a service provider and does not control the accuracy of that data.

6.2. Does your initiative use personal information to make decisions that directly affect an individual(s)?

Yes: VIU instructors may use student interactions with activities on the Macmillan Achieve platform as part of grading for a VIU course.

6.2.1 If you answered “yes” to question 6.2, do you have an information schedule in place related to personal information used to make a decision?

FIPPA requires that public bodies keep personal information for a minimum of one year after it is used to make a decision.

VIU: Courses and data remain in D2L/VIU Learn for two academic years, after which all student data and courses are deleted.

Macmillan Learning retains personal information only as long as necessary to fulfill the purposes for which it was collected, or as required or permitted by law*. Retention periods vary based on:

- Legal, regulatory, business, or accounting requirements
- The nature and use of the data collected
- Once data is no longer required, it is securely deleted in accordance with applicable retention policies and data classification standards.
- For users requesting deletion, Macmillan provides a **"Your Privacy Choices"** link in the footer of its websites to submit such requests. However, deletion may not be possible if the information must be retained for legal compliance, internal business needs, or contractual obligations.
- For students and instructors, requests to delete school-related data must be directed to the respective educational institution, as Macmillan acts as a service provider and does not control institutional data.

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).

Macmillan Learning will retain your personal information for as long as the information is needed for the purposes listed above and for any additional period that may be required or permitted by law, such as for business, legal, accounting, or reporting requirements. The length of time your personal information is retained depends on the purpose(s) for which it was collected, how it is used, and the requirements we have under applicable laws. If you would like us to delete your personal information, please visit the Your Privacy Choices link in the footer of the respective Macmillan Learning site. If we do not have a legal basis for retaining your information, we will delete it as required by applicable law.

Part 7 – Personal Information Banks

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?

No

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
[redacted] to answer

s. 22(1)

Part 8 – Further Information

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

Macmillan Learning may disclose School Data to their affiliates, which only use the School Data for the purposes listed above, and with our service providers**, who are bound by law or contract to protect the School Data and only use it as needed to provide the services requested. They will also disclose School Data when required by law, such as in response to a subpoena, including to law enforcement agencies and courts in the United States and other countries where they operate.
For questions about privacy rights or if you believe that Macmillan Learning has not handled your personal information properly, you may also contact the Macmillan Learning Privacy Office via email to privacyisimportant@macmillan.com.

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

Macmillan Learning may use analytics on de-identified datasets to understand how individuals interact with our educational materials, such as to assess engagement and improve learning outcomes, and product development purposes. For example, they may use analytics to study the amount of time that students spend on specific content items and they may infer engagement from this process. These analytics also help them understand and improve their materials, and determine

what materials are accessible to students.

Part 9 – Summary and Proponent Responsibility

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

Click or tap here to enter text.

Part 10: Signatures

This PIA accurately documents the data elements and information flow at the time of signing. 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.

Physics for Life and Physical Sciences I, II

Role	Name	Electronic signature	Date
Initiative lead	Physics and Mathematics Instructor		31-Aug-2025
Program/Department Manager (if different from initiative lead)			