

**CANADIAN
POLICE
KNOWLEDGE
NETWORK**



**RÉSEAU
CANADIEN DU
SAVOIR
POLICIER**

Learning that Sticks: The Importance of Research in Training

Chantelle Ivanski

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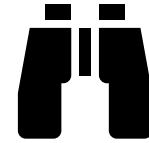
Banana



Sanitizer



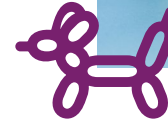
Couch



Texts



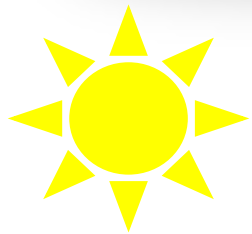
Fountain



Airplane



Lawnmower



Smile



Computer

Fish



Water bottle



Pencil



Write down as many things you saw on the previous slide.

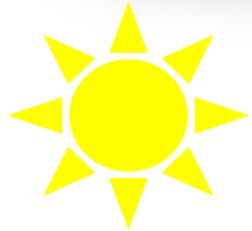


Put your hand up if you have the word
“Fish” in your list.





Banana



Smile



Computer



Texts



Fountain



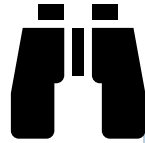
Airplane



Water bottle



Sanitizer



Fish



Couch



Lawnmower



Pencil



The importance of evidence supported training



The Challenge: Ensuring Quality in Police Training

How do we know it's working?

CPKN needed a way to:

- Measure effectiveness
- Stay current with what research is coming out
- Ensure continuous improvement



A Structured, Evidence-Based Approach

To address this, we developed the **Research Arm** to:

- Ground our training in learning science
- Evaluate what works and what doesn't
- Build a culture of continuous improvement



How do we do that?

Research Evaluation Framework (REF):

- Integrates theory and practice
- Encourages collaboration with public safety organizations
- Adapts to emerging trends and technologies



The science behind the framework



Grounding Training in Cognitive Psychology

Effective training isn't just about content – it's about how people learn.

CPKN's framework is rooted in psychological theories of:

- Memory
- Cognitive Load
- Retrieval practice

“Learning is not the product of teaching. Learning is the product of the activity of learners.”

–John Holt



I'm going to give you a couple numbers –
try to remember them



9



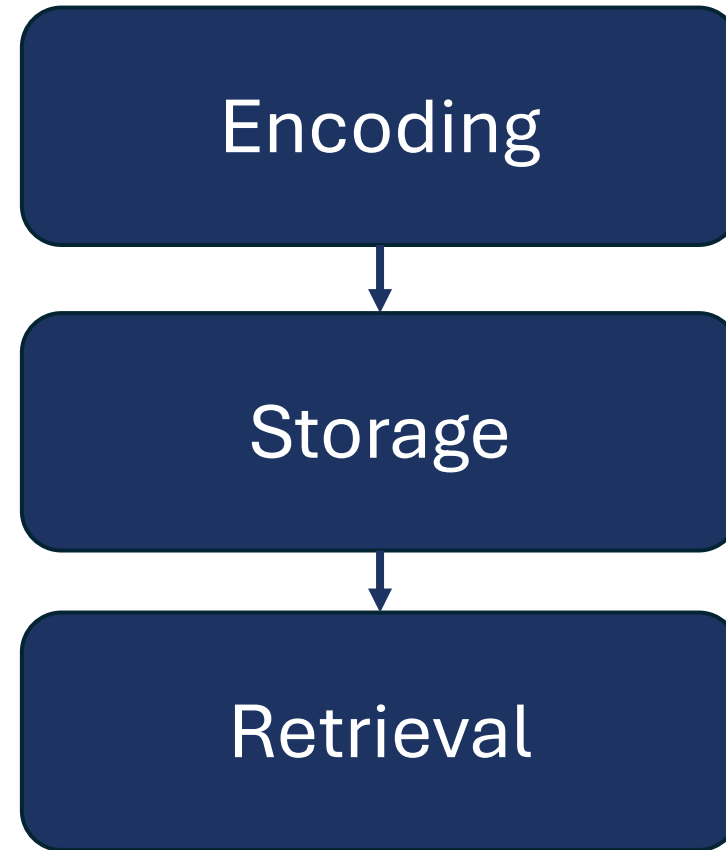
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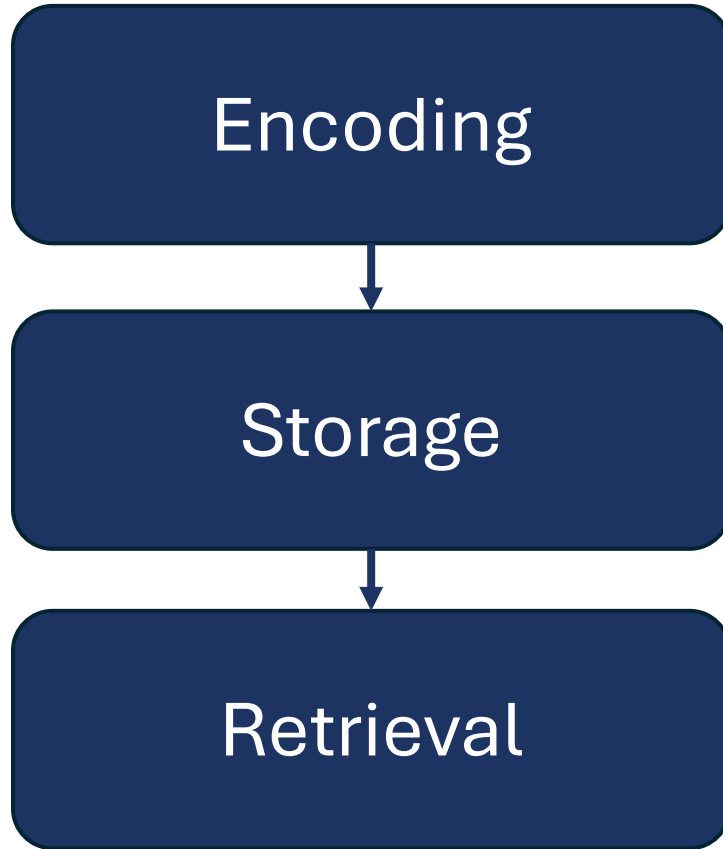
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From Exposure to Retention



From Exposure to Retention



The process of taking information and putting into a format the brain can store

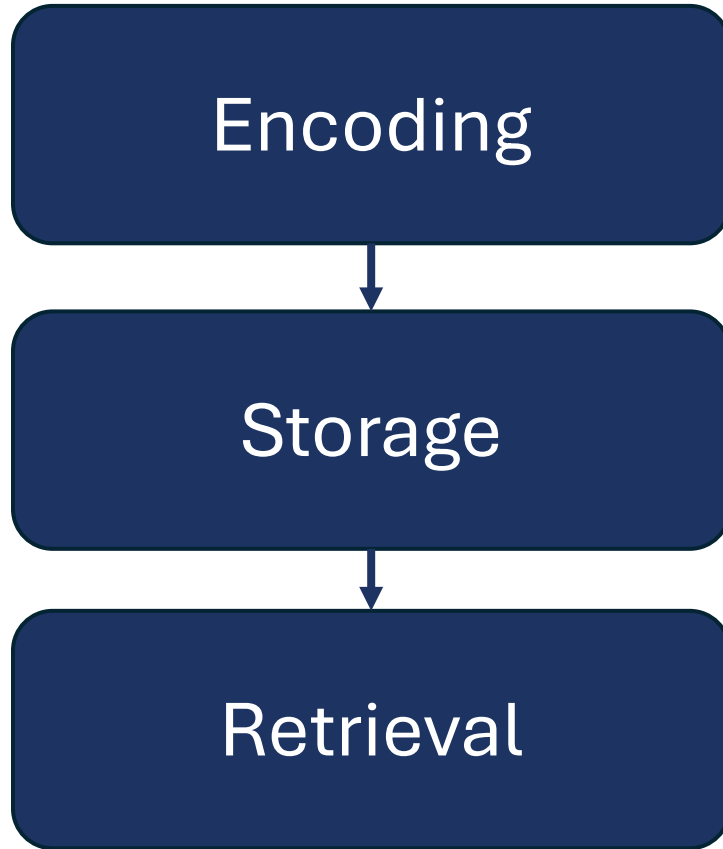
It can be helpful to

- Use different modes to engage multiple senses
- Connect to prior knowledge
- Use storytelling and real-world scenarios

***Training must support all three stages to be effective



From Exposure to Retention



The process of maintaining information over time

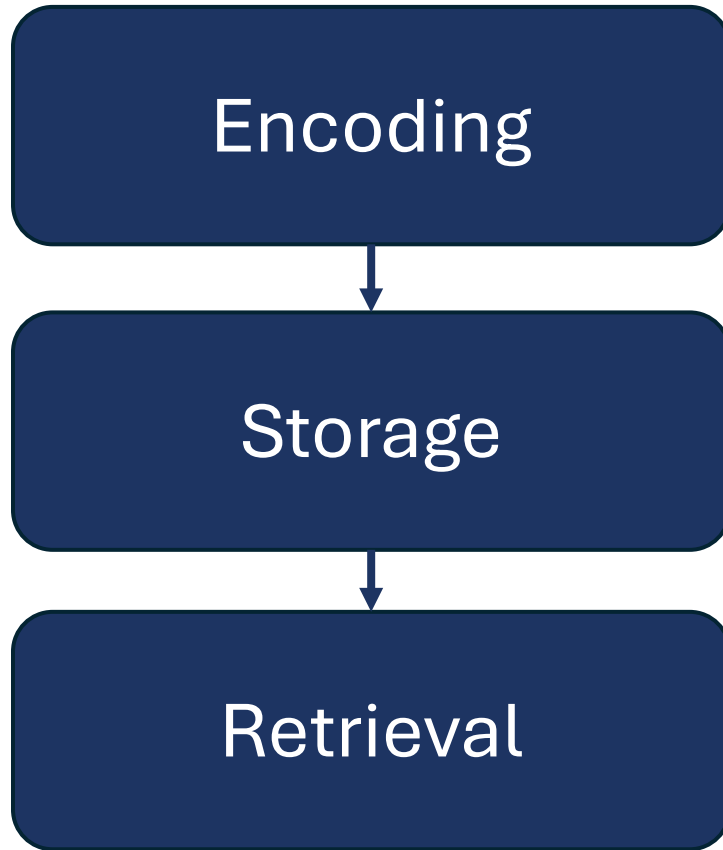
It can be helpful to

- Use spaced repetition to revisit key concepts
- Organize content into logical chunks
- Provide summaries and visual organizers

***Training must support all three stages to be effective



From Exposure to Retention



The processing of getting the information when you need it

Common strategies:

- Use quizzes, scenario-based questions, and reflection prompts
- Provide feedback loops to reinforce correct retrieval
- Engage in active rather than passive recall

***Training must support all three stages to be effective



What was the one digit number I showed
you earlier?



What was the three digit number I showed
you earlier?



**What was the seven digit number I showed
you earlier?**



Cognitive Overload

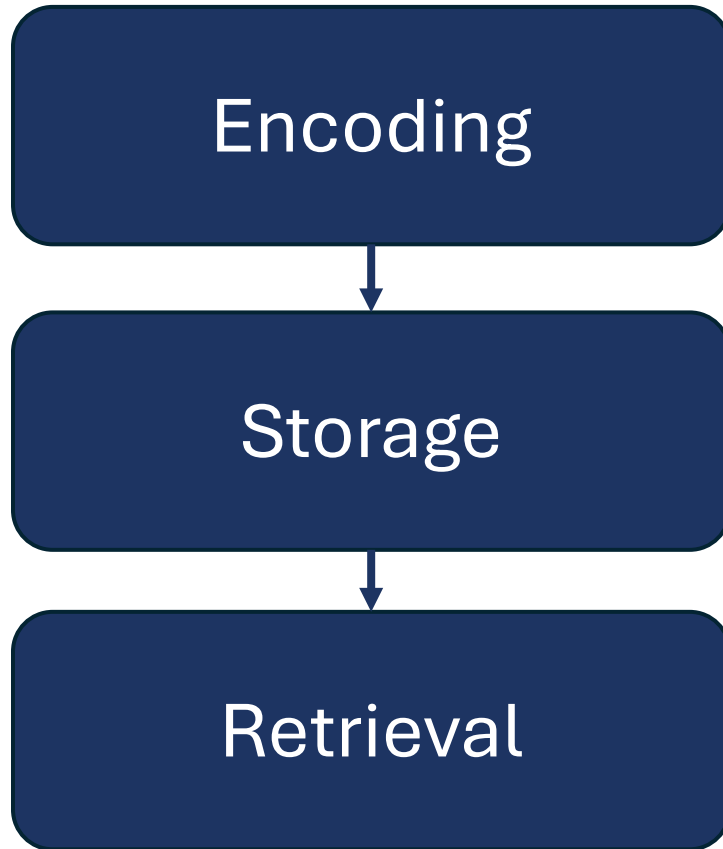
When the information someone is trying to process exceeds their mental capacity

Training should:

- Break content into manageable chunks
- Use the scaffold method to build information
- Reduce distractions
- Reinforce key points through repetition



From Exposure to Retention



The processing of getting the information when you need it

Common strategies:

- Use quizzes, scenario-based questions, and reflection prompts
- Provide feedback loops to reinforce correct retrieval
- Engage in active rather than passive recall

The process of maintaining information over time

It can be helpful to

- Use spaced repetition to revisit key concepts
- Organize content into logical chunks (chunking)
- Provide summaries and visual organizers (e.g., mind maps)

The processing of getting the information when you need it

Common strategies:

- Use quizzes, scenario-based questions, and reflection prompts
- Provide feedback loops to reinforce correct retrieval
- Engage in active rather than passive recall

***Training must support all three stages to be effective



Make Learning Stick

When CPKN builds courses we use:

- Quizzes
- Knowledge checks
- Engaging multiple senses
- Chunking
- Feedback loops
- Examples
- Etc .



CPKN's Research Arm

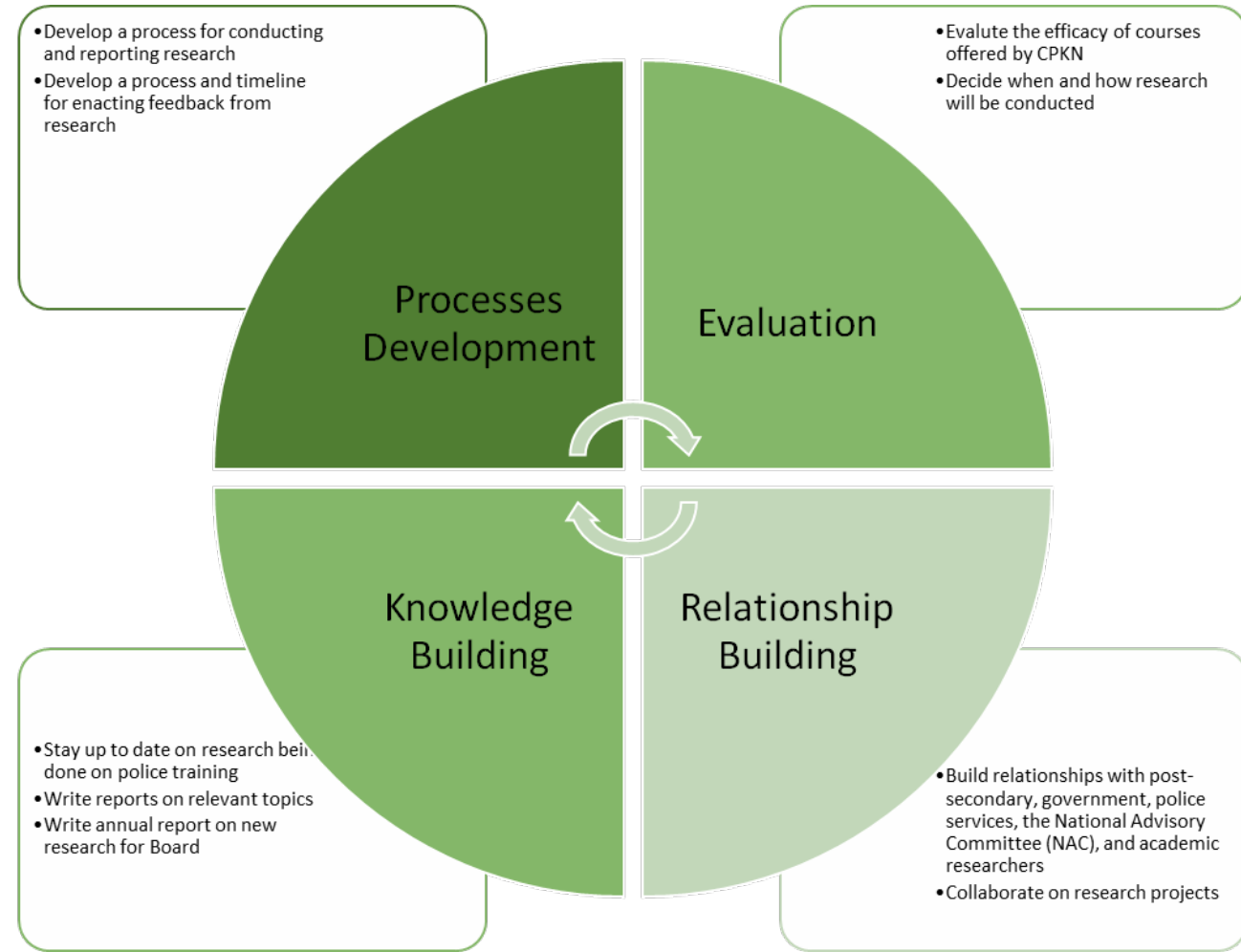


A Holistic Approach to Evaluating Training

The REF is built on four interconnected pillars:

- **Process Development**
- **Evaluation**
- **Relationship Building**
- **Knowledge Building**

Each pillar supports training quality and impact.



Process for conducting research

Establishing Research Protocols

Developing clear protocols will guide teams in conducting thorough research and producing comprehensive reports.

Continuous Improvement

The research process should evolve with input from team members to enhance its effectiveness and adapt over time.



Course Evaluation

Importance of Course Evaluation

Evaluating courses helps determine if they meet the intended learning outcomes and improve learners' competencies.

Feedback Mechanism

In the past feedback came in the form of surveys wherein students would report on whether they enjoyed the course – we still do this but now also look at what they are actually learning.



Course Evaluation

Part 1: Pre and Post Testing

Add in short questionnaire on learners knowledge which they complete prior to and immediately after completing the course



Course Evaluation

Part 2: Long Term Retention

Follow up after a predetermined amount of time to have learners redo the final test. This allows us to test how much people retain over time and how often the material needs to be refreshed.



Case Study – Border Awareness



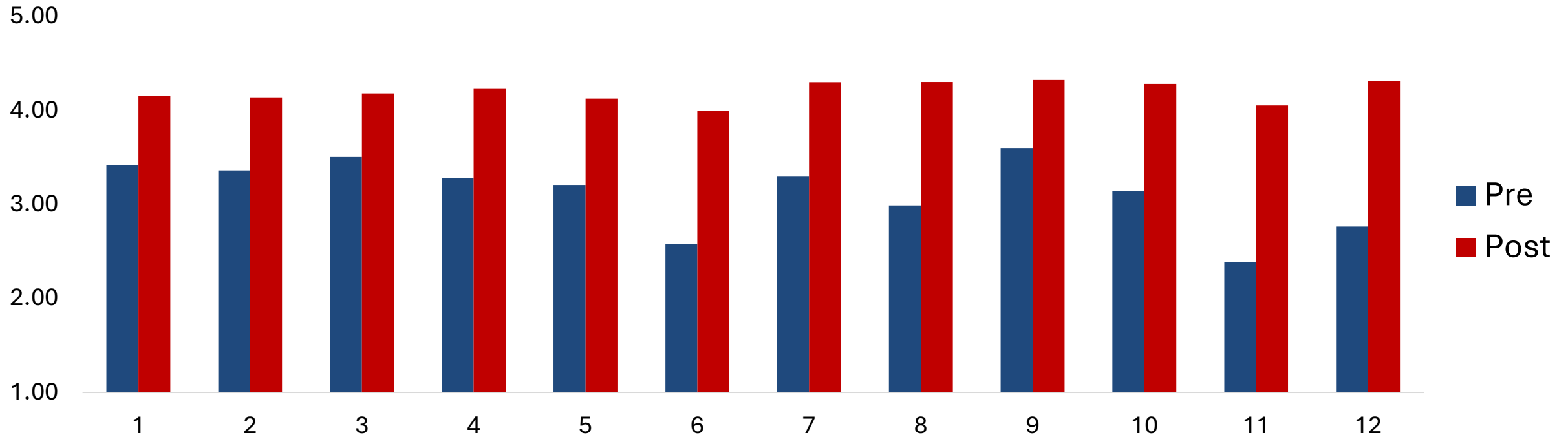
Case Study – Border Awareness

- 770 learners did pre-test
- 472 did post-test
- 12 questions to compare their understanding of key topics before and after taking the course



Case Study – Using a Trauma-Informed Approach

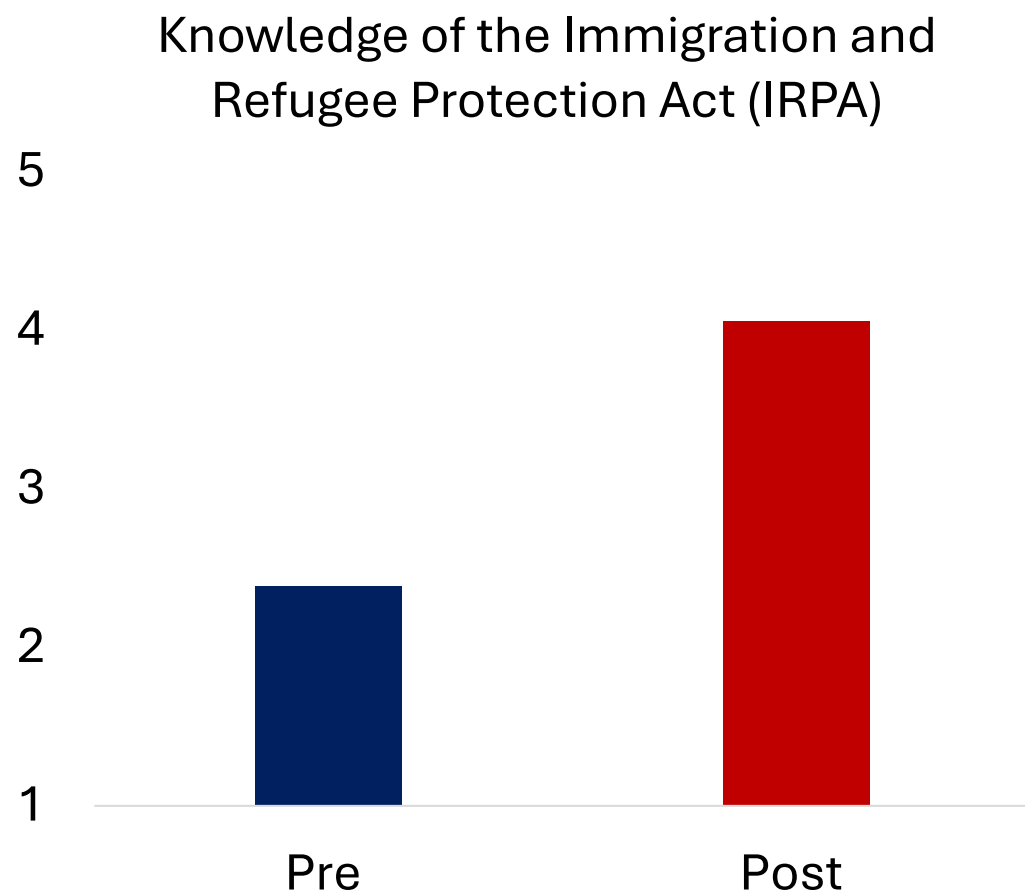
Border Awareness Pre and Post Testing



On all 12 questions **statistically significant ($p < .001$) increase** after taking the course compared to before.



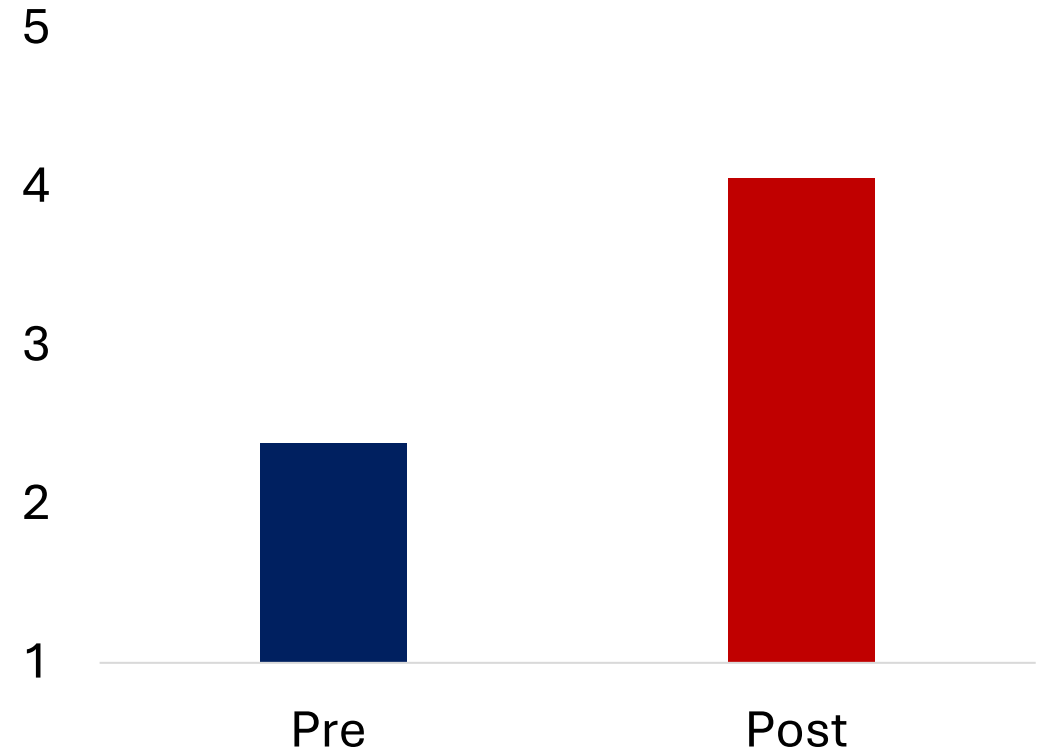
Case Study – Border Awareness



Case Study – Border Awareness

“As a new member to the OPP family this training was excellent. It captured all the main points, highlighting awareness and the challenges of maintaining a secure border.”

Knowledge of the Immigration and Refugee Protection Act (IRPA)



Knowledge Building

Annual Literature Review

Conduct and disseminate an annual review of new research that has been done in lay language, ensure the people who need it most have access and we can stay on top of upcoming trends.



Knowledge Building

Annual Literature Review 2025

4 Key themes identified:

- Mental health and wellness of police
- Militarization and use of force
- Social media impacts on police-public relationship
- Technologies for policing



Knowledge Building

Conducting Research

Where needed, we conduct our own environmental scans, focus groups, user groups, surveys, etc. to gather information and ensure we are providing the best information possible.



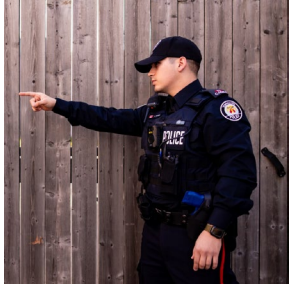
Case Study – XR Research Report



- **Pros of XR technology**
 - Realistic Training Simulations
 - Enhanced Preparedness
- **Cons of XR technology**
 - Cost
 - Technical Issues
 - Sifting through the noise



Case Study – XR Research Report



Focus groups and interview

Hosted interviews and focus groups with services of all sizes across the country.



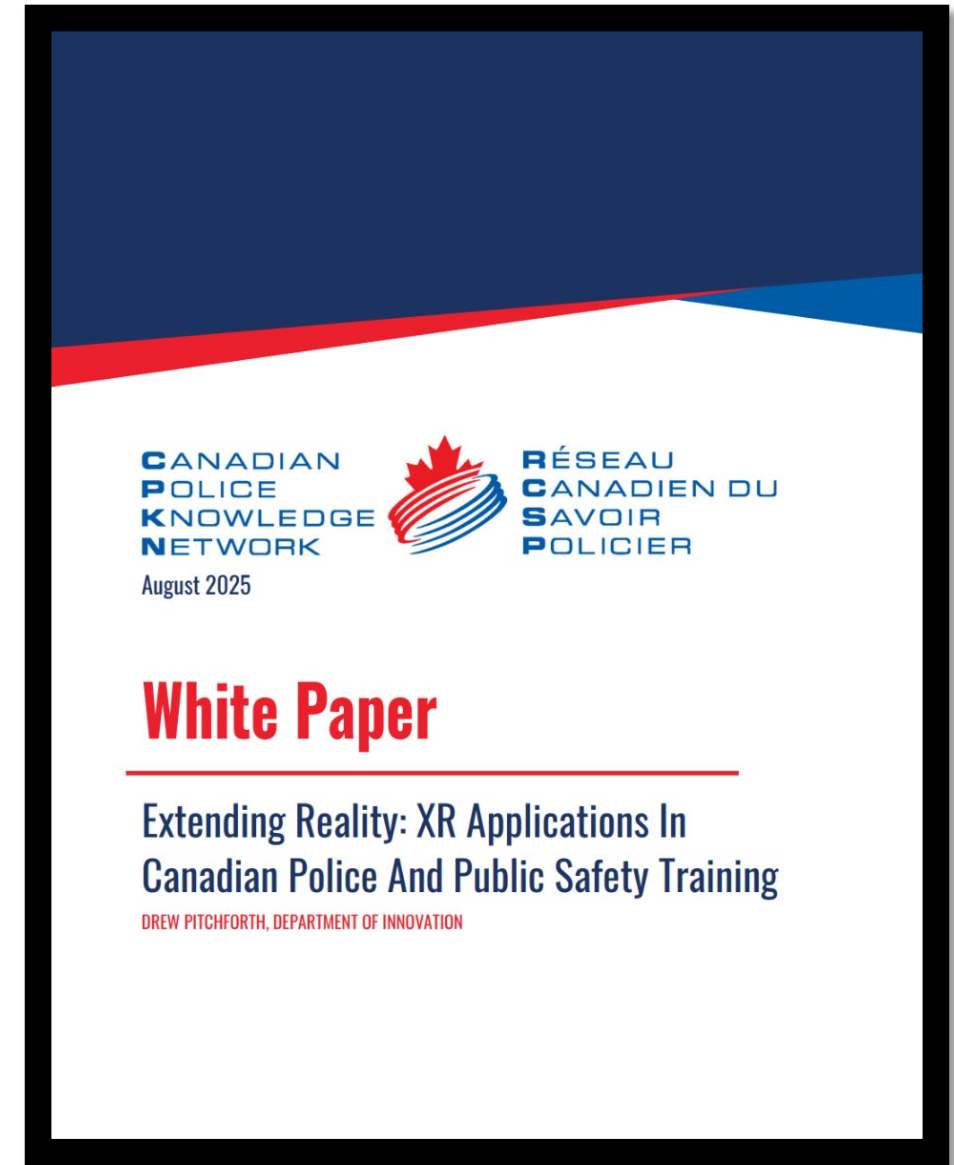
Analyze and share

Analyze data – what's working, what's not, where can we help and drafted into a formal report shared with network.

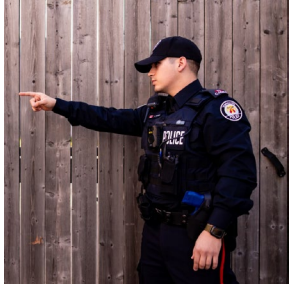


Case Study – XR Research Report

- How XR technology is being used
- Implementation benefit, supports, and challenges
- Training benefits and challenges
- Recommendations



Case Study – XR Research Report



Focus groups and interview

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Analyze and share

Analyze data – what's working, what's not, where can we help and drafted into a formal report shared with network.



What is next?

Technology is always advancing, stay on top of what's coming next while navigating what is here now.



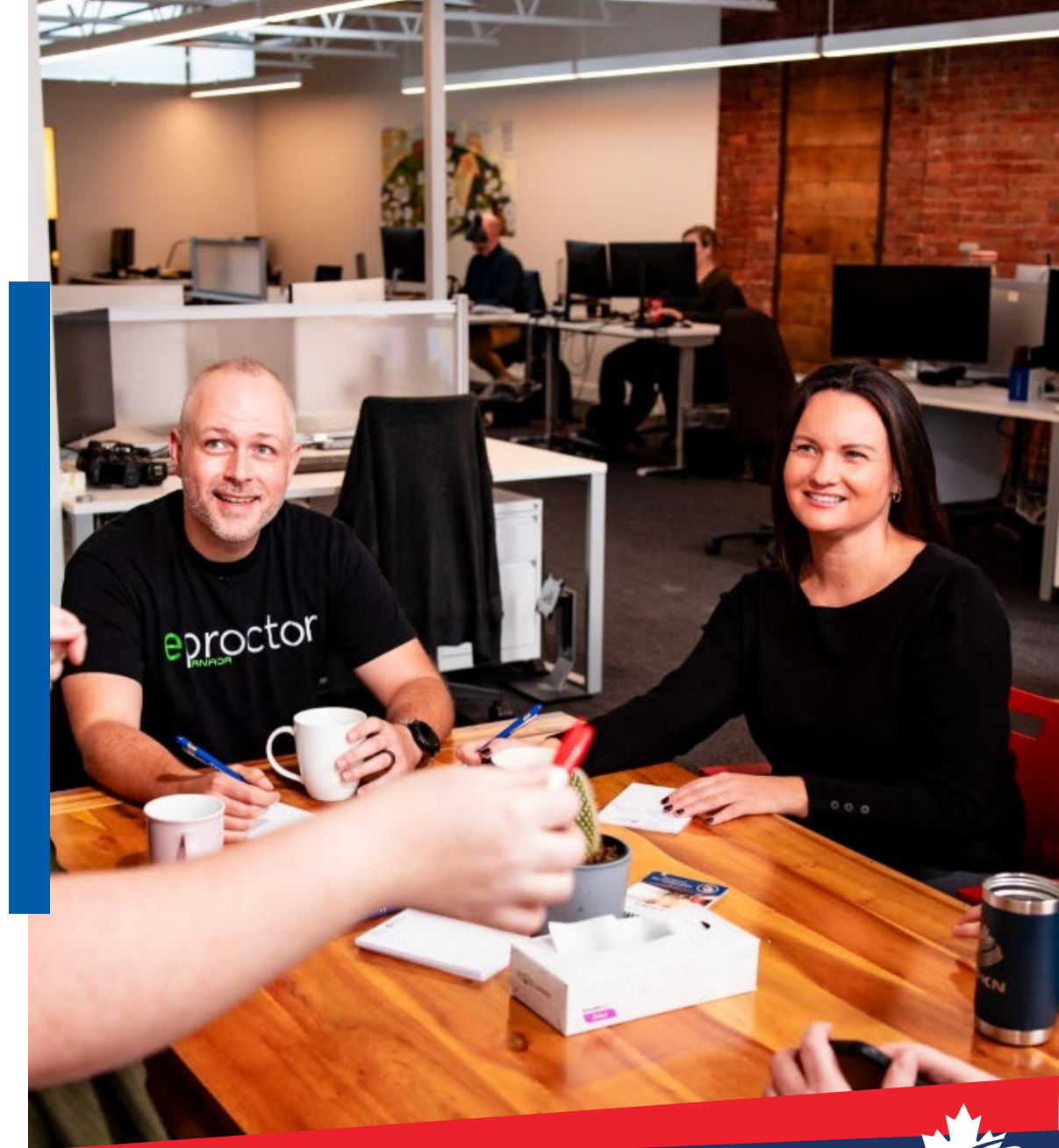
Relationship Building

Information Exchange

Relationships ensure that we stay updated on best practices and innovations. Also helps raise awareness of initiatives and training programs within the academic community.

Avoiding Isolation

Develop our network and look at how we can help to share resources across the country.



What we've learned

Insights so far...

- Still a newer process for us
- Evaluation must be embedded, not bolted on
- Collaboration leads to better content and stronger uptake
- Data is only useful when it informs action
- The REF helps us stay agile and learner-centered



Try it!

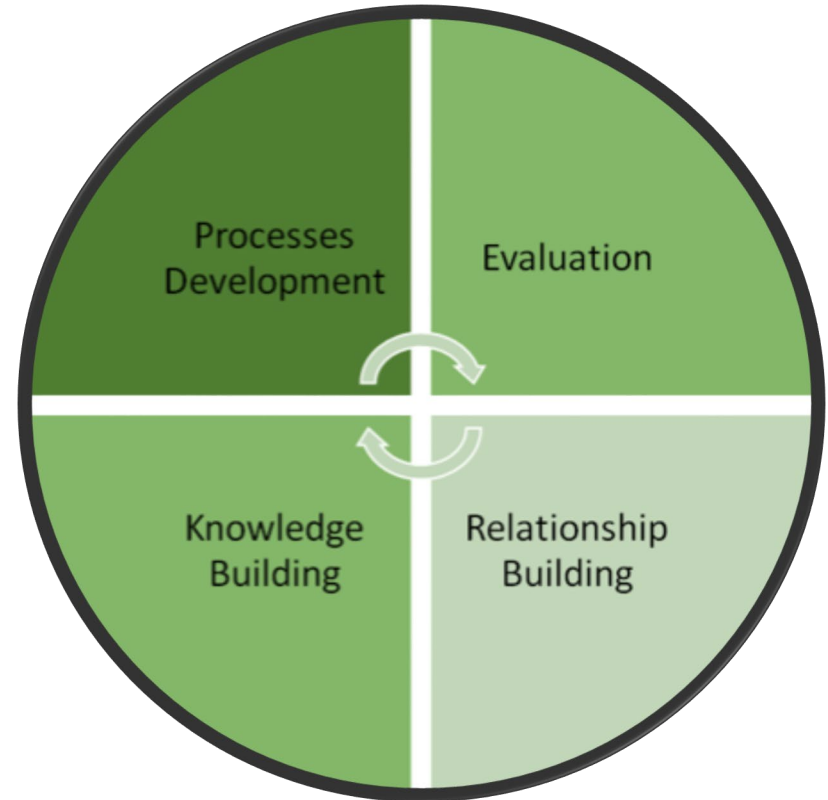


Imagine This Scenario...

You've launched a new training program that is on a high-priority topic. Given how important the topic is, you need to make sure it's effective.

In small groups or pairs, discuss:

- How would you apply the REF pillars to this situation?
- What would you do first?
- What challenges might you face?



Wrapping up

Key Takeaways

- Our research arm helps ensure training is effective, evidence-based, and responsive
- The REF not just a tool – it's a mindset for continuous improvement
- If you want to embed research into your own courses or want us to help reach out!!



Questions?

