

Theory to Practice

Student engagement with aviation industry in facilitating SMS

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Agenda

The BCIT vision and mandate

The learning process: Theory to Practice

- **Curriculum**
- **Connection**
- **Commitment**

The student's experience



BCIT's vision

Integral to the economic, social,
and environmental prosperity of
British Columbia

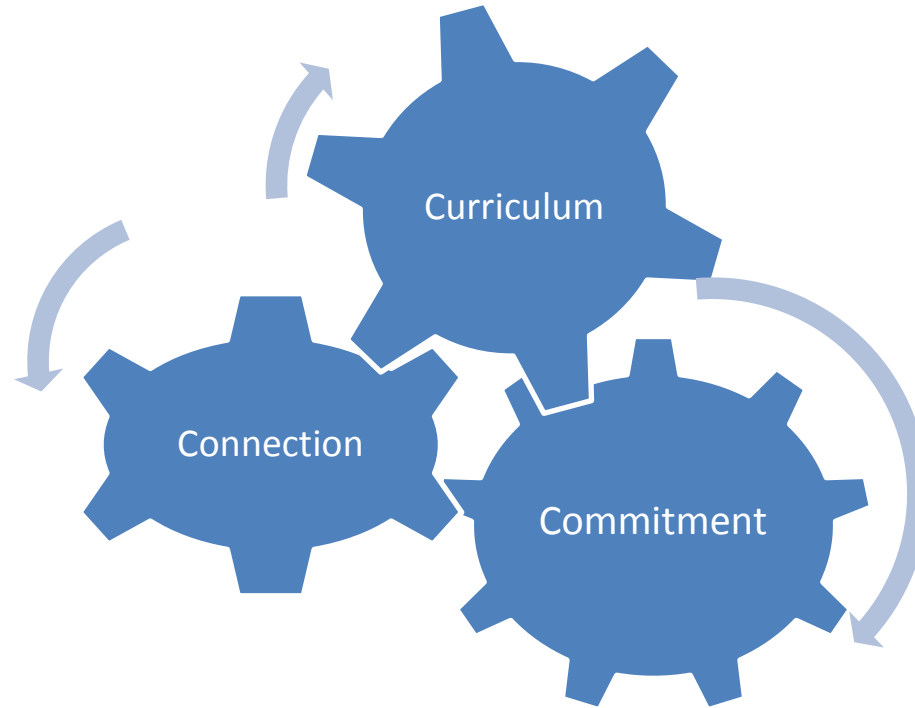


BCIT's Mandate

- Experiential and contextual teaching in a constantly evolving workplace environment



Theory to Practice



Curriculum



SMS Courses	Hours of study
Introduction to SMS	45 hours
Aviation Safety & Risk Management	60 hours
Emergency Management 1 & 2	90 hours
Regulatory : standards and recommended practices	60 hours
Quality and Services at Airports	45 hours
Human Factors	15 hours
TOTAL HOURS	315 hours



Connection



Workplace Practicum	Hours
Term 2 Workplace experience <ul style="list-style-type: none">• Airports	90 hours
Term 3 Workplace experience <ul style="list-style-type: none">• Airports	150 hours plus
Projects related to SMS <ul style="list-style-type: none">- Create Hazard Risk Registry- Revise operations manuals- Create then implement safety checklist- Inspect airfield- Identify gaps in airside safety- Prepare recommendations	



Student projects

YVR (Ellie and Nicole)

1. Completed Operational Audits
2. Developed and reviewed Operational Audit Checklists
3. Assisted in planning YVR's Safety Week event
4. Reviewed, updated and closed off safety hazard reports.



YLW (Kristian)

1. Conducted airside inspection
2. Recorded findings from airside inspections
3. Developed actions to mitigate

Student projects

YPK (Jihoon & Amra)

1. Conducted an airside audit
2. Applied the hazard risk model to each area of risk
3. Developed a hazard risk registry for airside operations
4. Presented findings to the airside management group

YNJ (Stephen)

1. Developed an airport infrastructure checklist in compliance with TP312E and CARS
2. Conducted airport infrastructure audit
3. Identified and reported hazards
4. Uploaded findings into SMS system (Airport Workflow)



Commitment to SMS

What did the students say?



Ellie and Nicole

YVR practicum

“My view of SMS changed drastically..... SMS is not only a systematic approach to creating a safe airport environment, but that it is a way of thinking which requires cross-company commitment to create an effective and integrated safety culture.

My experience with SMS at YVR surpassed my textbook understanding and emphasized the importance of "making safety a habit," (Jason McArthur).....it led to a change in my behavior and attitude towards managing safety on a daily basis down to every process and procedure.....the passion of staff in the SMS department opened my eyes to a new way of thinking."

Ellie Huey



YVR practicum

“When I performed a vehicle auditit changed my attitude towards FOD and how even a small thing like a broken taillight on a vehicle could pose a hazard to nearby aircraft.

I have greater situational awareness and these experiences have changed how I go about my daily activities.

I now ask myself , “What could be a potential outcome of my own actions? Am I Identifying risk? What ways can I mitigate?”

Nicole Gaudet

Stephen & Kristian

YNJ practicum

BCIT gave me **the foundation of SMS....** During my practicum, I experienced how every sign, light, marking, and marker must be a specific size or color, **all for the purpose of safety....if any of these did not meet the standards then the issue is investigated, documented, and mitigated.**

BCIT has **forever changed how I view safety** at any airport, particularly in regards to **Safety Management Systems.**

Stephen Van Dolder

YLW practicum

“During my five weeks at YLW, I gained a mindset of **continuously searching for any hazards and risks** that may occur in the airfield...taking appropriate mitigation actions reduce the risks long before it becomes an incident or accident.”

Kristian Cu



The way forward

Pacific Coastal Airlines (PASCO)

Quality and Safety Assistant

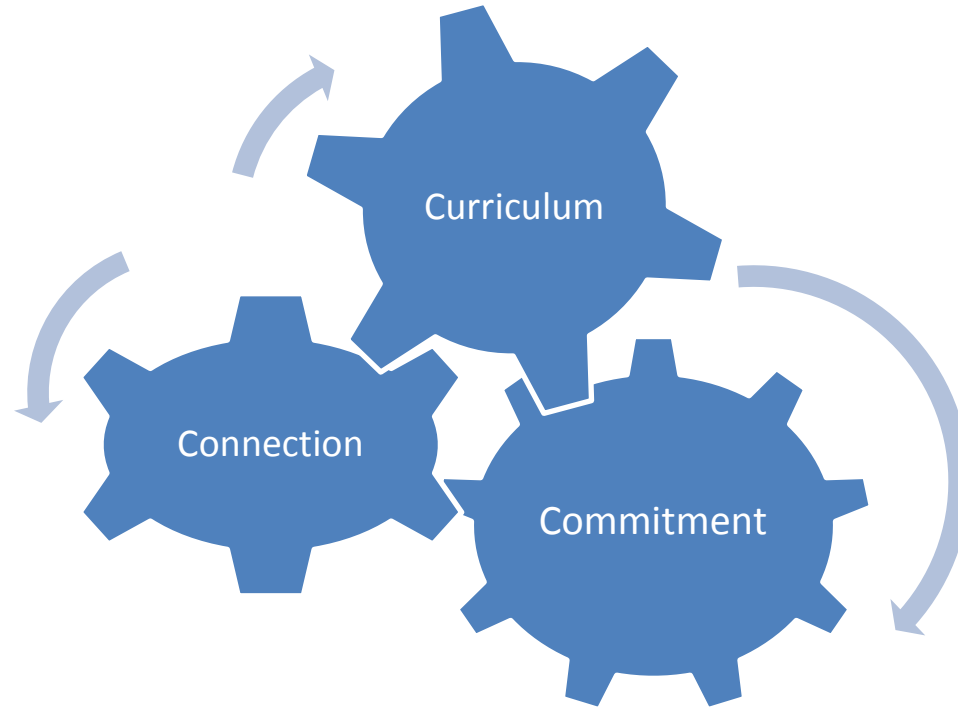
- Develop safety surveys
- Assist with SMS functions and investigations
- Update SMS report information



Pitt Meadows Regional Airport (YPK)

A liaison role between airside and airport management that focuses on managing and maintaining SMS compliance

Theory to Practice





Thank You

Questions?

