

# 2020 ABE Mathematics Working Committee Meeting

## Minutes from Annual Meeting

### BRITISH COLUMBIA COUNCIL ON ADMISSIONS AND TRANSFER (BCCAT)

Thursday/Friday, 5 and 6 March 2020  
*Kwantlen Polytechnic University (Richmond Campus)*  
 8771 Lansdowne Road, Richmond, B.C.  
 Melville Centre for Dialogue— Room 2550A



Co-Chairs: Robert Ferro, Yukon College  
 Costa Karavas, Vancouver Community College  
 Vice-Chair: Michael Nelligan, Coast Mountain College

British Columbia Institute of Technology	BCIT	Winona Cordua-von Specht (Thursday)
Camosun College	CC	Catherine Frost Pooja Gupta
Capilano University	CAPU	Richard Brand
College of New Caledonia	CNC	Dino Gigliotti (video conference on Thursday)
College of the Rockies	COTR	Deb Heal
Douglas College	DC	Florica Alexandru
Kwantlen Polytechnic University	KPU	Alina Rapa
Langara College	LC	Nora Franzova
Native Education College	NEC	Fouzia Qasim
Nicola Valley Institute of Technology	NVIT	No Representative
North Island College	NIC	Tony Trudel
Northern Lights College	NLC	Jeanette Landry
Coast Mountain College	CMTN	Michael Nelligan
Okanagan College	OC	Mike Rutten
Selkirk College	SC	Kate Tait
Thompson Rivers University	TRU TRU-OL	Izabela Mazur Bruce Irving
University of the Fraser Valley	UFV	Greg St-Hilaire (Friday)
Vancouver Community College	VCC	Costa Karavas Alison Woods
Vancouver Island University	VIU	Carol Ramey
Yukon College	YC	Robert Ferro

## Thursday, 5 March 2020

9:05 – meeting called to order

1. Opening remarks and introductions
2. Approval of Agenda
  - **M/S/Carried**
3. Review Purpose of Meeting
  - a. Re-articulation of courses – primarily Provincial Algebra and Trigonometry
  - b. Review outcomes of Provincial Calculus
4. Approval of minutes of March 7-8, 2019 meeting at Douglas College, Coquitlam BC
  - **M/S/Carried**
5. Action items resulting from minutes of 2019 meeting
  - a. **Previous Action Item – Co-chairs will bring forward, for clarification at the Steering Committee, what the requirements are for approval of an institution's governance body prior to re-articulation and the associated timelines.**

The feedback was that whatever is required at each institution by their Education Council (EDCO) is fine for the articulation committee; therefore, courses that are being re-articulated don't have to go through EDCO unless the institution requires it.
  - b. **Previous Action Item – Co-chairs will bring forward the idea of creating an ABE equivalent to Foundations of Mathematics 12 to the Steering Committee to inquire about options for funding.**

BCCAT has a freeze on funding. Hopefully we will learn more about funding opportunities at this year's meeting.
6. Updating members list and transfer guide
  - a. Robert Ferro circulated an updated members list and recent transfer guide to confirm current active courses.
7. Textbook list—Excel file project—Tony Trudel, NIC
  - a. Presented list of current textbooks used by each institution
  - b. Converted into Excel spreadsheet using sliders
  - c. Will be looking to help to fill in missing information
  - d. Question to group – is this a useful document? General feedback was yes.
  - e. Tony Trudel suggested Google Docs as a way to have a live document except that it can't use sliders
  - f. Office 365 as a possibility? – Richard Brand will help with this
8. Reports/Updates (Reports should be submitted electronically to members before the meeting dates.)
  - a. Adult Literacy Fundamental Committee Report—Melinda Worfolk, CNC
    - Robert presented this document

- b. Joint Annual Meeting of Institutional Contact Persons (ICPs), Chairs, and System Liaison Persons (SLPs) Report—Costa Karavas, VCC
    - BCCAT website has this document for reference
    - Keynote – Indigenization
      - i. Large project 2016-2018 – report with open-source materials
      - ii. Not about content – list of questions to consider for indigenization
    - BCCAT presentation
      - i. How can ABE be included in the transfer guide?
    - Details from JAM report can be found in attached document in Appendix A
9. Discussion of K12/ABE Comparison Report from 2019: “Adult Basic Education in British Columbia: An Investigation of the Possible Impacts of the Ministry of Education’s New K-12 Curriculum Changes” by Kyle Beres, April 2019.  
 Motion moved at Steering Committee Meeting, April 2019: ABE will maintain an 80% fit with the K-12 curriculum.
- a. Costa Karavas presented and led a discussion about the possible impacts of this to ABE Math.
    - Likely won’t see the effects for a few years once we begin to see students who have gone through the new K-12 system.
    - Still worth spending time contemplating the impacts.
    - Steering committee has asked each working group to discuss and make a plan
    - Working committees can begin work to:
      - i. maintain 80% similarity
      - ii. create/review goals and overarching outcomes
      - iii. review K-12 curriculum for comparison/familiarity
      - iv. consider indigenizing curriculum
    - Thoughts that if there are issues from receiving institutions around concerns with ABE credentials that more effort would be warranted. At this point, there doesn’t seem to be an issue.
    - Up to receiving institutions to decide which new K-12 courses are accepted (for example what will the transferability of History of Math 12 be?)
    - Generally, at the upper levels there doesn’t seem to be compatibility issues. More so in the intermediate level.
    - At what point will Universities require other courses that ABE currently don’t offer, such as Geometry 12 or Statistics 12?
    - Determined that it would be best to wait to see if/when this occurs.
    - This input from Universities over time should help direct our approach.
    - Each institution should monitor this and bring new information to the committee each year.
    - Mentioned that as governments change so do approaches to education. Suggestion to hold off making changes yet to see what the results of the changes are.
    - Agreed with the idea of creating overarching outcomes that cover some of the K-12 Big Ideas.
    - Status of indigenization? Camosun (Pooja Gupta) discussed the approach that they are taking. Focus on welcoming environment, circle classes to meet elders and discussing concerns and experiences, layout of classes, evaluation of courses...

- Indigenization of math conference at UBC last year. Fouzia Qasim reflected on ideas from that conference. Questions for students: what are your first memories of numbers, where did you learn, who from? Activity of writing numbers in various languages. Ex. Fishing with father, numbers of fish, how did they keep track. How did you know how much fish to store for the winter? How to prepare food for large groups? How do indigenous students feel in mixed classrooms with international and domestic students?
  - Idea to get a guest speaker to next year's meeting who has experience with indigenization. **ACTION ITEM: Costa will look into funding to support this.**
  - Mention of conference recently at UFV that focused on indigenization with a speaker from Saskatchewan.
  - Concern raised with waiting too long to make these changes. Suggest next year when we review Intermediate Algebraic learning outcomes to include more flexible outcomes. Question as to whether these changes are required to articulated learning outcomes in order to incorporate more creative approaches.
10. Articulation/re-articulation of math courses and considerations of any possible Revisions (*This year is the year for re-articulation of Provincial—Algebra and Trigonometry courses*).

(Dino Gigliotti (CNC) by video conference)

- Provincial-algebra and trigonometry
  - Math 050 – CNC
    - Some discussion about minor wording suggestions.
    - **Motion to recommend the articulation of Math 050 from CNC.**
    - **M/S/Carried**
- Advanced-foundations
  - Math 043 – CNC - Advanced Foundations
    - **Motion to recommend the articulation of Math 043 from CNC.**
    - **M/S/Carried**

**Lunch catered by KPU in room 2550**

**Joint Meeting (room 2550)**

11. Joint “super meeting” with Mathematics, English, IABE, and Computers articulation committees.
- BCCAT Update— Mike Winseman, BCCAT
    - Options for ABE in the transfer guide
    - External review recently completed
    - Course-to-course search was the main feature used on site
    - Questions – how would you like to see improved?
    - Common response was more transfer from outside of BC/Canada
    - ABE inclusion?
    - Currently link to ABE articulation guide from BCCAT transfer site

- Can we list the ABE courses in the regular searchable transfer guide?
  - Different model since all courses meet standard articulation guidelines
  - Last year launched a new system which will make it easier to include a variety of systems
  - TCS (transfer credit system) expanded to include other courses including outside BC/CAN
  - Can also handle ABE courses
  - Looking for feedback on whether this is desirable
  - Changes would need to happen to communication models
  - Would the articulation guide still exist? Yes or modified...
  - Questions around the process as to whether the Registrar offices need to be involved? They would likely need to be involved in a similar capacity to the current courses involved with the TCS
  - All to be discussed...
- b. ABE Steering Committee Report—Colin Gilker and Lisa Lewis (not present), Co-chairs, ABE Steering Committee
- New K-12 curriculum – Kyle Beres
  - Requested each working committee address this topic and brainstorm ideas to move forward
  - Math Committee – idea of creating overarching goals for ABE instead of creating new learning outcomes
  - English Committee – felt this whole process to be a daunting task
  - Recommendations from report
    - 80% similarity
    - Attend post-secondary articulation meetings to ensure ABE still meets requirements
    - Hire to complete a comparison of all ABE courses
    - Consistency in the articulation handbook
    - ABE include overarching goals
    - All courses get reviewed with an indigenous lens
    - Equivalency table is revised
    - Repeat study to compare in 3-5 years
    - Workflow diagram for course comparison and timeframe for work to be completed
- c. Ministry Update
- Did not occur

Resume Math Working Group meeting

## 12. James Howell—Vretta—Assessment for Learning to Reduce Math Anxiety

- Resource coordinator from Vretta based in Ontario
- Vretta – Canadian-based resource company specific to Math
- Vision – A world where everyone enjoys math
- Started with personalized learning – interactive voice activated pedagogical tool
- Published textbooks

- College Student Achievement Project – research project on math and success – Based in Ontario
  - Goals to improve student retention
- Three steps to tool – Elevate My Math
  - Identify skills that require mastery
  - Achieve mastery
    - Interactive – detects students’ performance and either adds more practice/lessons or truncates to customize
  - Assess learner gains
    - Dynamic assessments
    - Dashboards and monitoring tools for administrators
    - Used for streaming, assignments, or as learning tools
- Teacher candidate course – to improve confidence in prospective teachers
- Online and offline environment options
- Began using OpenStax
  - Modify and customize resources
- James is available to discuss options for supporting ABE Math courses with their products at our institutions

13. Articulation/re-articulation of math courses and considerations of any possible revisions  
- continued

*(This year is the year for re-articulation of Provincial—Algebra and Trigonometry courses).*

- Intermediate-developmental
  - None submitted
- Intermediate-algebraic
  - None submitted
- Advanced-algebraic
  - MATH 061A and 071A—NEC
    - These courses originated as a single course and are now being re-articulated as two distinct courses. Together they meet the requirements of Advanced Algebraic
  - Math 061A
    - Small wording change from “Graph” to “Use a table of values to graph”.
    - Missing outcome – “Use systems of equations to solve applied problems”.
    - Need to add a link to the articulation.
  - Math 071A
    - Two outcomes on the same line – need to add bullet “simplify complex fractions...”
    - h) needs to be replaced with a bullet for proper formatting
    - Need to add a link to the articulation.

- **Motion to conditionally recommend articulation of MATH 061A and MATH 071A from NEC based on the above changes being completed by April 1, 2020 and outlines being resubmitted to co-chairs.**
  - **M/S/Carried**
- d. Advanced-Business / Technical
- **BMTH 041 - CAPU**
    - Changes that need to occur - Learning outcome #3 needs correct formatting of exponents, add reference to square root equations and that a, b, and c are real numbers for all equations.
    - **Motion to conditionally recommend articulation of BMTH 041 from CAPU based on the above changes being completed by April 1, 2020 and outline being resubmitted to co-chairs.**
    - **M/S/Carried**
- e. Advanced-developmental
- **MATH 1150—LC**
    - Determined to be missing trigonometry entirely so will review learning outcome requirements and bring the course forward next year
    - **Motion NOT to recommend the articulation of MATH 1150 from LC due to the missing learning outcomes**
    - **M/S/Carried**
- f. Advanced-foundations
- **MATH 0520—TRU**
    - **Motion to recommend the articulation of MATH 0520 from TRU**
    - **M/S/Carried**
- g. Provincial-algebra and trigonometry
- **MATH 097—CC (approved in 2019)**
    - Link date to be changed to 2019-2020
    - Learning outcome 3b – should read logarithmic equations not functions
    - **Motion to recommend the articulation of MATH 097 from CC**
    - **M/S/Carried**

16:15 – meeting adjourned until Friday 9:00

## Friday, 6 March 2020

9:05 – meeting called to order

14. Articulation/re-articulation of math courses and considerations of any possible revisions  
- continued.

- BMTH 053 and 054—CAPU
  - **Motion to recommend the articulation of BMTH 053 and BMTH 054 from CAPU**
    - **M/S/Carried**
- MATH 0501 and 0502—CMTN
  - **Motion to recommend the articulation of MATH 0501 and MATH 0502 from CMTN**
    - **M/S/Carried**
- MATH 090—COTR
  - **Motion to recommend the articulation of MATH 090 from COTR**
    - **M/S/Carried**
- MATH 1112—KPU
  - Learning outcomes incomplete – all learning outcomes need to match the ABE 2019-2020 articulation guide for Provincial Algebra and Trigonometry – a link to this document is required in the outline ([bctransferguide.ca/search/abe](http://bctransferguide.ca/search/abe)) – a complete list of outcomes to be listed on outline
  - **Motion NOT to recommend the articulation of MATH 1112 from KPU due to the missing learning outcomes**
    - **M/S/Carried**
- MATH 050 – NLC
  - **Motion to recommend the articulation of MATH 050 from NLC**
    - **M/S/Carried**
- MATH 083 and 093—NEC
  - Need to add the year 2019-2020 to Math 083 and Math 093 and reference to articulation guide ([bctransferguide.ca/search/abe](http://bctransferguide.ca/search/abe))
  - Learning outcomes missing from Sequences and Series
  - Formatting needs to be revised
  - **Motion to conditionally recommend articulation of MATH 083 and MATH 093 from NEC based on the above changes being completed by April 1, 2020 and outline being resubmitted to co-chairs.**
    - **M/S/Carried**

- MATH 012—OC
  - **Motion to recommend the articulation of MATH 012 from OC**
    - **M/S/Carried**
- MATH 60—SC
  - Link should be changed to [bctransferguide.ca/search/abe](http://bctransferguide.ca/search/abe) (this edit was completed at meeting)
  - **Motion to recommend the articulation of MATH 60 from SC**
    - **M/S/Carried**
- MATH 0633—TRU OL
  - Recommendation to include the link ([bctransferguide.ca/search/abe](http://bctransferguide.ca/search/abe)) and the year within the body of the outline
  - **Motion to conditionally recommend articulation of MATH 0633 from TRU-OL based on the above change being completed by April 1, 2020 and outline being resubmitted to co-chairs.**
    - **M/S/Carried**
- MATH 092 & 093—UFV
  - Equivalent to MATH 096 which is already on the grid
  - Link needs to be updated to 2019/2020 – [bctransferguide.ca/search/abe](http://bctransferguide.ca/search/abe)
  - **Motion to conditionally recommend articulation of MATH 092 and MATH 093 from UFV based on the above change being completed by April 1, 2020 and outline being resubmitted to co-chairs.**
    - **M/S/Carried**
- MATH 0983 and MATH 0993 - VCC
  - Course outline is missing the link and the year ([bctransferguide.ca/search/abe](http://bctransferguide.ca/search/abe))
  - **Motion to conditionally recommend articulation of MATH 0983 and MATH 0993 from VCC based on the above change being completed by April 1, 2020 and outline being resubmitted to co-chairs.**
    - **M/S/Carried**
- MATH 065 and 066—VIU
  - Equivalent to MATH 067
  - MATH 065 has mention of MATH 067 in error in the Learning Outcomes section – needs to be changed to MATH 065
  - Learning Outcome 4. B should read logarithmic equation not functions
  - Edits completed in the meeting
  - **Motion to conditionally recommend articulation of MATH 065 and MATH 066 from VIU based on the above changes being completed by April 1, 2020 and outline being resubmitted to co-chairs.**
    - **M/S/Carried**
- MATH 067—VIU
  - Equivalent to MATH 065 and MATH 066

- **Motion to recommend the articulation of MATH 067 from VIU**
    - **M/S/Carried**
  - MATH 060—YC
    - **Motion to recommend the articulation of MATH 060 from YC**
      - **M/S/Carried**
- h. Provincial-calculus
  - None submitted
- 15. Review of Provincial Calculus learning outcomes
  - a. Decided to leave outcomes as they are
  - b. Only three institutions currently have Calculus 12 on the grid
- 16. Errors or omissions in current transfer guide to correct
  - a. Transfer guide edit required - Advanced Foundations - #4 – Quadratic Functions –  $ax^2$  should be  $ax^2$
  - b. References to Yukon College should all be changed to Yukon University
  - c. Discussion around Provincial Algebra and Trigonometry including Absolute Value Inequalities in the Algebra Review Unit since that topic is not included in the learning outcomes of pre-requisite courses – decided to leave it as is.
- 17. Judy Larsen (not present – presented by Costa Karavas instead)—Adults Learning Mathematics (International) Conference (ALM27)
  - July 6-9, 2020 in Vancouver
  - Hosted by VCC
  - Aiming to attract sponsors to minimize the cost to participants
  - Themes are inclusion and diversity – Indigenous focus
  - Emphasis on pedagogy
  - Can submit proposals for presentations
  - See website for more details
- 18. Carol Ramey—editing an open source book for BC Open Textbooks; questions for the group: Advanced Algebra text (<https://openstax.org/details/books/intermediate-algebra>) adapting at VIU.
  - a. In this text quadratics and polynomials are introduced (Chapters 5-7), then there is a roots unit (Chapter 8), then graphing and unfactorable quadratics are covered (Chapter 9).
    - Question of whether the order should be changed – small section on roots first and the all the Quadratic topics together.
  - b. In Chapter 8: Roots and Radicals, the text is very formal about the  $\sqrt{x^2}$   
 $= |x|$ .
    - Question as to whether this should be maintained.
  - c. Carol asked that any feedback be emailed to her.
- 19. Tony Trudel, NIC—"Virtual Reality with a Dose of Math"
  - Excited about sharing the technology world of VR as an education tool

- Alison mentioned the use of VR to exhibit the challenges of various visual disabilities (glaucoma, macular degeneration, etc)
- Challenge with communicating during distance courses (students asking questions and responding to those questions)
- Google tilt brush is one tool for education applications
- When it comes to VR – don't judge a book by its cover
- Tools to draw and pickup – create circles – create coordinate systems – importing images from students (photos of questions) – draw responses in the whole space
- Interacting with students real time (on a computer or even a phone)
- Zoom was the best platform for interacting with students
- Educators in VR International Summit – 2 weeks ago – well attended – free – no travel involved – life-changing experience
  - Website has information on all the presentations
  - Recorded many of the presentations – available on Tony's PowerPoint to be forwarded to all committee members
  - Exploring Altspace – can join with laptop or VR set up
  - Exploring Engage – headset specific – VR education/corporate platform
- Questions or comments direct to Tony

20. Krista Lambert—Project Manager, Health, ECE & ABE ZTC Programs, BC Campus—OER math textbooks

- Open education – initiatives to improve access to educational resources
- Working on how to include access codes for problem sets as an open resource
- Began with open textbooks in 2012
  - \$15,000,000 saved
  - 297 books available across all disciplines
  - 148,000 students have used open textbooks
  - Go to [open.bccampus.ca](http://open.bccampus.ca) to find all the available options
  - ABE category includes EDCP, Math, English, and Science
  - ZTC – formerly Zed Cred – Zero Textbook Cost
    - Zero cost for textbooks throughout whole credential
  - Funded 18 projects that all should be ready by fall 2020
  - Advanced Business / Technical Math coming
  - Intermediate Algebraic Math coming
  - Intermediate Algebra and Trigonometry is ready – designed for Intermediate Algebraic level
  - Can edit in Press Books
  - Can purchase printed versions - \$60 in colour - \$20 in black and white (example cost for Intermediate Algebra and Trigonometry)
  - College print shops can print directly
  - Tony Trudel mentioned that MyOpenMath is a free exercise building platform that is very useful

21. Discussion on indigenization of mathematics curriculum

- a. Math in a Cultural Context—"Making a Circle from a Square: Using the Four Winds," from University of Alaska Fairbanks

- b. Google “Math in a cultural context” for more information
22. Long-range plans (two to three years into the future)
- a. Recap schedule for re-articulation of courses
    - For 2021: review learning outcomes for intermediate-algebraic
    - For 2021: rearticulation of provincial-calculus courses
  - b. Possible training events or professional development opportunities for future meetings
    - Conference in May at UBC – Indigenization of Math
23. Elections for co-chairs/vice-chair of ABE Mathematics Working Group
- **Motion to nominate Robert Ferro and Costa Karavas to continue to act as co-chairs**
    - **M/C/Carried**
  - **Motion to nominate Michael Nelligan to continue to act as Vice-Chair**
    - **M/C/Carried**
24. Selection of next meeting location for 2021 (this date may be already decided at joint meeting)
- March 4-5, 2021 recommended. Co-chairs will bring date forward to steering committee.
  - Question of having next meeting in Victoria – pros and cons discussed.
  - English committee had a volunteer from VCC offer to host.
25. Summary of new business, next year’s items, and wrap-up
- Fulfilled all the meeting objectives
- 13:00 Meeting adjournment
- **Motion to adjourn**
    - **M/S/Carried**

**Report on Adult Literacy Fundamental Working Group Articulation meetings  
Oct. 24 and 25, 2019  
Vancouver Community College, Broadway Campus, Vancouver, BC**

Both of our current ALF co-chairs, Faith Shields and Julia Dodge, were on sick leave, so former co-chairs Melinda Worfolk and Leanne Caillier-Smith stepped in as replacements.

This year, the Adult Literacy Fundamental Working Group focused on three things:

- articulation of 18 courses from four institutions: Selkirk, North Island, and Vancouver Island University.
- working as a committee on reformatting/revision of the Fundamental Math Learning Outcomes to ensure all the outcomes are written in outcome language and group them under appropriate headings

Our Math Learning Outcomes subcommittee presented the approved proposal to BCCAT for reformatting/ revising the current Fundamental Math Learning Outcomes. This is a similar project to last year's reformatting/revision of the Fundamental English Learning Outcomes. When we first examined the Fundamental English Learning Outcomes, we found out that many of them were actually objectives as written, not outcomes at all. The project was fairly labour intensive, so we applied for and received funding from BCCAT. Our Math subcommittee applied for and received funding to do something similar for Fundamental Math, and additionally to create new workbooks based on these revised outcomes.

As a group, we worked on the Level One math outcomes, formatting them into a table like this (this is just a sample):

<b>Level 1 Outcomes:</b>	<b>Skills:</b>	<b>Sample practice tasks:</b>
<i>Students will be able to . . .</i>	<i>In achieving this broader outcome, students will demonstrate that they can also...</i>	<i>Students can develop/practice the skills needed to achieve this outcome by...</i>
1. Evaluate 2-digit expressions using addition and subtraction, without carrying or borrowing/trading	Read and write whole numbers up to 100	Counting by multiples of 2, 5, and 10.
2. Identify place value to 100	Recognize vertical and horizontal format for adding and subtracting.	Show the relationship between manipulatives and numbers to 20
3. Round whole numbers to the nearest 10, 100, 1000.	Count by multiples of 2, 5, 10, up to 1000.	

**SUMMARY OF JOINT ANNUAL MEETING OF ARTICULATION COMMITTEE CHAIRS,  
SYSTEM LIAISON PERSONS (SLPS) AND INSTITUTIONAL CONTACT PERSONS (ICPS)**

**1 NOVEMBER 2019**

**SUBMITTED FOR ABE MATH WORKING GROUP MEETING MARCH 5-6, 2020, KPU.**

Report prepared by Costa Karavas (co-chair ABE Math Working Committee, VCC). Some information taken from session descriptions and BCCAT website <https://www.bccat.ca/articulation/jam>

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**1. Keynote Speaker Dianne Biin: Indigenizing Curriculum in the Post Secondary System.**

- What is Indigenization.
- What stops us from engaging, collaborating, reconciling, and adapting and integrating? (Fear of the Unknown, Fear of Change, Fear of Losing Control and Power, Resisting Process, Rejecting and Asserting Control).
- Indigenization Project 2016-2018. Funded by the Ministry of Advanced Education, Skills and Training and BCcampus. Collaboration with over 50 people to design, write, edit and place into open textbook repository.
- Leaders and Administrators Curriculum Framework
  - Indigenization benefits all members of the institution
  - Recognizing the responsibility to work with Indigenous Peoples and communities
  - Reflecting Indigenous ways of knowing and doing.
  - Respecting primacy of place and presence in language, ceremony and protocols
  - Taking responsibility for learning and modelling cultural appropriate practice.
  - Recognizing, validating and resourcing Indigenous approaches to engagement, community-based programming and learning, research and student service functions
  - Developing and resourcing policies that include Indigenization rather than adding on as 'initiatives' or 'pilots'.
  - Embedding Indigenization in all plans (strategic, financial, student engagement services, educational), and at governance and education tables.
- What can educators do to support the learning of all students? Often educators turn to learning activities as a first step in Indigenization. However, including or adapting learning activities without changing other aspects of the curriculum is not a holistic approach to Indigenization, and in some cases can result in trivializing and misappropriating those activities. <https://opentextbc.ca/indigenizationcurriculumdevelopers/chapter/integrating-indigenous-epistemologies-and-pedagogies-into-curriculum-design-and-development/>
- Indigenization is not about content. Consider the following questions as an articulation member wanting to Indigenize courses:
  - Does the course goal include holistic development?

- Do the learning outcomes emphasize cognitive, emotional, physical, and spiritual development? (life-long learning)
- Have you included learning activities that are land-based, narrative, intergenerational, relational, experiential, and/or multimodal? (Indigenous pedagogy)
- Are there opportunities for learning in community, intergenerational learning, and learning in relationship to the land? (outside the walls)

## **2. New Functionality of the Transfer Credit System (TCS) and Articulation**

### **Maintenance, by Mike Winsemann, Director Transfer and Articulation, BCCAT.**

- Changes are in the works to facilitate the creation of greater pathways and transparency for transfer students, including those BC students that take courses elsewhere, and transfer students outside of BC who want to pursue studies in BC. The project is to provide prospective students and their advisors a transfer credit search tool for courses completed in BC, Canada, & internationally.
  - According to the Federal Government, there were over 150,000 international students enrolled in BC PSEC and K12 in 2017. In 2016/17, international students represented 13.7% of BC PSI headcount. 42% are enrolled in BC Research Universities.
  - Standardization of unassigned credit
  - Use of TCS workflow for all articulation activities with the post-secondary institution (importing external tables). Pilot project with UBC.
  - Reduced duplication and redundancy and additional features, maintenance challenges
  - New version of the TCS in under development

## **3. BCCAT's 30th Anniversary Retrospective, by Jim Hamilton, co-chair, BCCAT**

<https://www.youtube.com/watch?v=bWlRSexAtRE&feature=youtu.be>

## **4. Re-Visioning the BC Transfer Guide, by Jennifer Kook, Manager, Technology Services, BCCAT**

- Course-to-course, Block Transfer, Degree Partnerships, Program-specific AP & IB, Associate Degrees
- BC transfer history from 1995 to today and beyond
- Expanding (Transfer credit specialists & administrators, International PSIs, Private education sector, global educational mobility networks, Provincial and federal organizations, etc.)
- External Review: opportunities to improve BC Transfer Guide such as user experience, site usability and accessing info.
- EnviroScan: accuracy, actionability, interaction cues, clarity, findability, understandability, responsiveness,

recognition

- Stakeholder Consultation, Challenging areas, Access and Mobility

**5. Managing your Moodle Site, by Colin Gilker (CU) and Mirabelle Tinio (Langara College)**

- How to add participants and manage roles.
- <https://onlinelearning.kpu.ca/login/>
- Uploading files, formats of the Moodle site, folders and subgroups.

**6. Setting the Strategic Direction for Transfer and Articulation, by Mike Winsemann, Director Transfer and Articulation, BCCAT**

- Indigenization, Internationalization, Impact of K12, Academic Integrity, Articulation Maintenance, Technological changes, Expansion of the BC Transfer System.

**7. Sustaining and Expanding Educational Pathways, Future Directions by Rob Fleming, Executive Director and Co-chair BCCAT**

- BC Transfer System today comprises of 25 BC public colleges (11), institutes (3) & universities (11), two out-of-province public Canadian institutions, 12 authorized private and out-of-province institutions, 66 Articulation Committees.
- Expanding BC's Transfer System:
  - I. Access and Mobility Demographics: Expanding Policy and Practice Research
  - II. Diverse Curricular Models: Supporting New Pathway Frameworks
  - III. Institutional Efficiencies: Leveraging TCS workflow and database
  - IV. Information Access: Intra/Inter-provincial and international BCTG
  - V. Global Mobility: Extending national and international networks