

2017 ABE Mathematics Working Committee

Minutes from the Annual Meeting

Held at Vancouver Community College (Downtown Campus, Room 828), March 2nd and 3rd, 2017

Co-chairs: Robert Ferro (Yukon College) and Costa Karavas (VCC)

Attendees:

Institution	Abbreviation	Representative	Email address
British Columbia Institute of Technology	BCIT	Winona Cordua-von Specht (Mar 2 nd)	wcordua@bcit.ca
Camosun College	CC	Pamela Johnson Patrick Montgomery	johnsonp@camosun.ca montgomeryp@camosun.ca
Capilano University	CU	Richard Brand	thomasb@capilanou.ca
College of New Caledonia	CNC	Dino Gigliotti	Gigliottid1@cnc.bc.ca
College of the Rockies	COTR	Deb Heal	dheal@cotr.bc.ca
Douglas College	DC	Hilary Rourke	rourkeh@douglascollege.ca
Kwantlen Polytechnic University	KPU	Jim Beaton	Jim.beaton@kpu.ca
Native Education College	NEC	Manav Bhanot	mbhanot@necvancouver.org
Nicola Valley Institute of Technology	NVIT	No representative present	
North Island College	NIC	Danita Schmidt	Danita.schmidt@nic.bc.ca
Northern Lights College	NLC	Jeanette Landry	jlandry@nlc.bc.ca
Northwest Community College	NCC	Stella Webster	swebster@nwcc.bc.ca
Okanagan College	OC	Mike Rutten	mrutten@okanagan.bc.ca
Selkirk College	SC	Karen Shoniker	kshoniker@selkirk.ca
Thompson Rivers University	TRU TRU-OL	John Salvatore Derek Knox	jsalvatore@tru.ca dknox@tru.ca
University of the Fraser Valley	UFV	Judy Larsen (Mar 3 rd)	Judy.larsen@ufv.ca
Vancouver Community College	VCC	Costa Karavas Alison Woods	ckaravas@vcc.ca awoods@vcc.ca
Vancouver Island University	VIU	Lisa Lewis	lisa.lewis@viu.ca
Yukon College	YC	Robert Ferro	rferro@yukoncollege.yk.ca
Guests – at WG meeting (March 2 nd)			
ABEABC President		Angie Lof	anglof@gmail.com
Guests – at combined meeting (March 2 nd)			
Committee Coordinator, BCCAT		Ruth Erskine	rerskine@bccat.ca
Co-chair, ABE Steering Committee		Allison Alder Colin Gilker	aalder@selkirk.ca cgilker@capilanou.ca
Presenter – at combined meeting (March 2 nd)			
VCC		Bob Aitken	baitken@vcc.ca

- Welcome and Introductions.** The chairs called the meeting to order at 9:02, and a special welcome was given by a community elder and VCC Dean concurrently to several of the working

groups in room 828. Individual introductions were made by all to welcome new and returning committee members.

2. **Approval of the Agenda.** The agenda had previously been circulated via email, and was amended to include the following of courses for articulation (advanced algebraic)

- a. MATH 045 – CNC
- b. MATH 052/053 – SC
- c. MATH 1099 – KPU
- d. MATH 0420 – DC

Motion: To approve the amended agenda. M – Jim Beaton (KPU), S – Danita Schmidt (NIC).
CARRIED (unanimous).

3. **Appointment of vice-chair and minute-taker.** The vice-chair (Alison Bowe, CC) was unable to attend the meeting. In Alison’s absence, Patrick Montgomery (CC) volunteered to take notes and prepare minutes.

4. **Review of Purpose.** Robert Ferro reminded the committee of three main purposes for the committee.

- a. Exchanging information and enhancing cooperation and coordination among institutions in ABE math.
- b. Promoting course and program equivalency: this year, we have the re-articulation of advanced algebraic math courses.
- c. Contributing to the facilitation of inter-institutional transfer credit agreements.

5. **Approval of minutes from the last meeting (March 3-4, 2016).** One amendment for the minutes was noted by Danita Schmidt (NIC) that the table on page A18 had the incorrect cost range, and should read \$90 to \$285.

Motion: To approve the amended minutes. M- Lisa Lewis (VIU), S – Danita Schmidt (NIC).
CARRIED (unanimous).

6. **Action items from 2016 meeting**

- a. Paragraph 8, p.3 (ask the steering committee for advice on making a recommendation concerning MoE acceptance of ABE course equivalencies). Robert and Costa discussed this point with the committee, and felt that uncertainty remained about the closure of this item, based on what the area of actual concern is. Costa will seek clarification from the Ministry as to what the articulation criteria will become for the revised 10-12 curriculum.
- b. Paragraph 11, p.5 (that the steering committee be requested to advise the committee on how to ensure consistency for hyperlinks to the ABE Articulation Guide learning outcomes, when they are included on institutions’ approved course outlines.) Result: institutions should either restate the learning outcomes, or provide a link with an effective date. This question will also be brought up at the April steering committee meeting for clarification as there is anticipated variance resulting from unique institutional requirements for course approval forms. The committee had a short discussion providing suggestions to the co-chairs as to how best to update course approval documents (options: list outcomes, insert hyperlink, make reference to the articulation guide by year).

7. **Updating members list and transfer guide.** Robert Ferro (YC) circulated updated members list (printed on orange paper) and transfer guide (green paper). These were circulated to the

committee members for corrections and verification that the information for each institution is correct.

- a. Danita Schmidt (NIC) asked about the existence of a list of hours per course. This is a historical document that was informal and shared amongst the committee. Robert Ferro (YC) pointed to the pdf version on the Moodle site (textbook hours list 2009.pdf, listed under the Docs for 2014 Meeting website), and invited committee members to update their information as needed. Costa Karavas (VCC) suggested creating a word document to permit population of information by committee members.

Action item: Costa Karavas (VCC) will prepare a document for data collection and population.

- b. Jim Beaton (KPU) asked any members without access to the Moodle site to see him for help.

8. **Reports/updates.**

- a. BCCUPMS Meeting Report. A summary of the report was read by Costa Karavas (VCC), amplifying several points for the committee. The report is attached as Annex A to these minutes.
- b. ALF report. Jim Beaton (KPU) spoke to the report which contained comments on some of the common themes (AUG funding changes and their impact, increased attendance by international students, enrollment in ABE.) The committee engaged in a short discussion about AUG funding, and how things were working at several institutions, with a reference to past tuition funding formulas. The chair noted that if time permitted on day 2, then this discussion could be brought back as new business. The report is attached as Annex B to these minutes.
- c. Ministry Update. This report was postponed as Tegan Tang was not anticipated to be available to attend the meeting.
- d. BCCAT-JAM report. Robert Ferro (YC) emphasized points in the report, noting the award to Hilary Rourke (DC). The report is attached as Annex C to these minutes.

9. **Report from subcommittee on ABE Provincial Foundations level.** (John Salvatore, TRU). John gave some background and history of the request submitted to the ministry with a set of recommendations. The response from the ministry (Nicole Arklie notes, point 3) deferred the proposals with the delay in the implementation of K-12, and that this item would need to be revisited once the ministry publishes the provincial curriculum. Costa Karavas (VCC) noted that there was a discussion about whether we should wait, or seek articulation on existing curriculum guidelines. Roundtable discussion as to institutional interest in articulating a course that corresponded to the Foundations 11/12 stream, and institutional input was given to the chairs as to how some schools are working with FOM 11/12. John recommended that we wait and then prompt the ministry post-election to follow-up, with a suggestion to request equivalency status. **Recommendation: send an email, with a request to obtain equivalency status for the new format to come. (Action item: John Salvatore (TRU)).** The co-chairs thanked the committee for their substantial effort and work towards solving this problem.

10. **Consideration of possible revisions to curriculum in courses.** The chair asked the committee whether there were any changes that should be brought forward. For example, Costa Karavas (VCC) noted sequences and series in Prec11. With no revisions submitted, Costa Karavas (VCC) invited the committee to send him an email during the year if any items come forward.

11. **Preliminary discussion of review of learning outcomes for Advanced Developmental.** Robert Ferro (YC) noted that this discussion was perhaps best tabled until day 2, and discussion postponed until then.
12. **Special Guest: Angie Lof, President ABEABC (ABE Association of BC).** Angie reminded the committee of an upcoming annual conference for April 27-28, 2017 at the Harrison Hot Spring resort, with ABEABC looking to both increase membership and get input from institutions. Conference cost is \$250 for both days, with \$125 for a single day (excludes the networking dinner) and 30% discount on accommodations onsite. Two keynote speakers: Jan Unwin (transition from ABE into higher level courses and workforce) and Ted Johnson (motivational). Notice for Call for Proposals for workshops closes 25 March. Angie was thanked by the chairs, and left handouts for the committee.
13. **Group Meeting.** A group meeting of the four articulation committees was held (Room 112) with three components. Allison Alder (co-chair, ABE steering committee) presented an annual report, Ruth Erskine (Committee Coordinator, BCCAT) presented a report, and Bob Aitken (School of Instructor Education, VCC) gave a presentation based on a research briefing note, "Impact of Cognitive Sciences Research on Training and Learning."
14. **Articulation/re-articulation**
 - a. **Intermediate-developmental**

Motion: To approve the articulation of MATH 070 (OC). M – Lisa Lewis (VIU), S – Pam Johnson (CC). CARRIED (unanimous).
 - b. **Intermediate-algebraic**

Motion: To approve the re-articulation of MATU 0310 (DC). M- Mike Rutten (OKC), S - Derek Knox (TRU-OL). CARRIED (unanimous).

Motion: To approve the re-articulation of MATQ 1089 (KPU). John Salvatore (TRU) addressed some questions on course content, regarding solving rational equations (introduction), and the missing portion on trigonometry (a problem of a corrupted file page cut-off). Due to the missing information, this item was tabled.

Motion: To approve the re-articulation of MATH 0401 (TRU-OL) subject to co-chair approval of revised course outline. M – Lisa Lewis (VIU), S – Jeanette Landry (NLC)
Discussion: Would like to see a note that links to current year specific learning outcomes. CARRIED (unanimous).

Motion: To approve the articulation of MATH 037 (VIU). M - Karen Shoniker (SC), S - Jim Beaton (KPU). CARRIED (unanimous).
 - c. **Advanced-business/technical.**

Motion: To approve the articulation of MATH 044 (VIU) subject to a modified introduction line on the Trigonometry learning objective and approval by the co-chairs.

M - Richard Brand (CU), S - Hilary Rourke (DC). CARRIED (unanimous).

d. Advanced-developmental

Motion: To approve the articulation of MATH 080 (OC). Mike Rutten (OC) spoke to the course outline, as some of the course learning objectives were re-organized slightly within the list of outcomes. A typo was discovered (para 2.e was relabelled as 2.f) and there was concern about inconsistent language in the optional topic (Geometry). Tabled to 3 Mar.

Meeting adjourned for the day at 4:32 p.m.

Meeting called to order at 9:00 a.m. on Friday, March 3rd 2017. The co-chairs invited comments from the committee, and the committee engaged in some general discussion about yesterday's progress prior to restarting the agenda.

e. Intermediate-algebraic

The motion for MATQ 1089 (KPU) was picked up from the table. Jim Beaton (KPU) noted difficulties with the course outline form, and therefore he was unable to repair the missing section on the form due to local restrictions.

Motion: To approve the re-articulation of MATQ 1089 (KPU) subject to an updated version sent to the committee by email from KPU (Jim Beaton). M - Lisa Lewis (VIU), S - Judy Larsen (UFV). CARRIED (unanimous).

f. Advanced-developmental

Motion: To approve the re-articulation of MATU 0410 (DC). M - Lisa Lewis (VIU), S - Mike Rutten (OC). CARRIED (unanimous).

Motion: To approve the articulation of MATH 080 (OC). (This motion was taken up from the table). M - Hilary Rourke (DC), S - Derek Knox (TRU-OL). CARRIED (unanimous).

g. Advanced-foundations

Motion: To approve the re-articulation of MATH 0520 (TRU). M - Alison Woods (VCC), S - Derek Knox (TRU-OL). Discussion: John Salvatore (TRU) spoke to this course outline, which contained a link to the 2016-17 ABE guide. CARRIED (unanimous).

During post-motion discussion: It was noted that the submitted information for MATH 0520 was a course outline, and not in the format that was sent to TRU Educational Programs Committee (EPC). This raised concern about what forms the working committee should be articulating (the course outline given to students, or the official

course approved document from the institution), and where the course outline would be held and available. Costa Karavas (VCC) reminded the committee that this discussion paralleled a previous one about creating a standard course outline, and that the past standard from the past was to enable some flexibility to avoid confusion created by old course outlines, long forms, etc. The committee's knowledge and wisdom is relied upon to be able to interpret the individual characteristics of a course outline with broader perspective and understanding. Some members of the committee were concerned that we should be considering only course approval forms approved by the institutional education council, and not the course outlines sent to the students.

Motion: Recommendation to the co-chairs that submitted course outlines from institutions shall be those approved by the institution's educational governing body. M - Hilary Rourke (DC), S - Alison Woods (VCC). CARRIED (unanimous).

Motion: To rescind the previous articulation approval of MATH 0520 (TRU). M – Costa Karavas (VCC), S - Pamela Johnson (CC). CARRIED (16 F, 1 A).

h. Provincial – algebra and trigonometry

Motion: The two new courses from TRU (MATH 0520 and 0630) will be considered by electronic vote. M - Lisa Lewis (VIU), S - Jim Beaton (KPU). Discussion: Given the previous discussion and motion, there is concern about the format presented, as it was a course outline, and not an official format. CARRIED (16 F, 1 A)

i. Advanced business/technical

Motion: To approve articulation of MATH 044 (NLC) (Jeanette Landry, NLC, submitted paper copies reviewed in situ.) M - Derek Knox (TRU-OL), S - Deb Heal (COTR), CARRIED (unanimous).

j. Advanced-foundations

Motion: To approve articulation of MATH 0862 (Part 1) and MATH 0872 (Part 2) (VCC) provisionally subject to VCC EdCo approval (Alison Woods (VCC) submitted paper copies reviewed in situ.) M - Alison Woods (VCC), S Richard Brand (CU). Discussion: Alison Woods introduced the course, with the learning outcomes referred to by the URL to the ABE guide. These courses have not been approved by VCC EdCo yet, anticipated to be approved. CARRIED (unanimous).

k. Advanced Algebraic. As there are several (14) motions in this category, the chairs suggested partitioning analysis through subgroups for closer focus. The committee self-chose four subgroups which worked independently for approximately an hour, then subsequently reconvened as a committee of the whole. Before reconvening, Jim Beaton (KPU) asked to add an agenda concerning the creation of modules for various courses

that were for the advanced algebraic and shared throughout the province. This led to a discussion of teaching resources and shared modules/videos. The committee was referred to Anna Kuczynska's (UFV) website and videos for use from her weebly site (Anna-kuczynska.weebly.com) for MATH085. Costa Karavas (VCC) suggested a subcommittee that could look more closely at the shared online resources. Discussion also ensued about how to get practice exercises (such as ALEKS or WebWorks, or other practice exercises). Richard Brandt (CU) suggested a future agenda item to create a review of what type of online courses are offered, leading to an informative discussion.

Motion: To approve articulation of MATH 061 & 071 (NEC), MATH 085 (UFV), MATH 040 (NLC), MATQ 1099 (KPU), MATH 011 (OC), MATH 045, & 046 (VIU), MATH 047 (VIU). M - Pamela Johnson (CC), S - Danita Schmidt (NIC). CARRIED (unanimous).

Motion: To approve the following courses subject to minor changes:

- BMTH 043 & 044 (CU) subject to bullets in BMTH 043 for section 2f and 2g added, and 3(m) and BMTH 044 needs sections added in 7 a-e.
- MATH 080 (COTR) with the change of reference to handbook to 2017, add 3l and 7a.
- MATH 52 & 53 & 050 (SC) pending approval by SC EdCo
- MATH 045 (CNC) pending approval by CNC EdCo
- MATH 0523 (TRU-OL) pending addition of a hyperlink to the ABE handbook
- MATH 0861 & 0871 (VCC) with an addition of a hyperlink to the ABE handbook to both course forms

M - John Salvatore (TRU), S - Dino Gigliotti (CNC), CARRIED (unanimous).

Motion: To invite NCC to resubmit MATH 0401 and 0402 next year for articulation. M - Jeanette Landry (NLC), S - Richard Brandt (CU). Discussion: It was noted that the course descriptions MATH 0401 and 0402 are missing a link to the course outlines and learning objectives. CARRIED (unanimous).

Motion: To approve articulation of MATH 072 (CC) subject to the corrected link to the ABE guide being updated, and Dean's approval obtained. M - Lisa Lewis (VIU), S - John Salvatore (TRU). CARRIED (unanimous)

Motion: To invite CC to resubmit MATH 073 (CC), MATH 137, and MATH 139 for re-articulation subject to inserting the link to the ABE in the learning outcomes. M - Jeanette Landry (NLC), S - Stella Webster (NCC). CARRIED (unanimous).

Motion: To invite TRU to resubmit MATH 0510 for articulation. M - Karen Shoniker (SC), S - Deb Heal (COTR). CARRIED (unanimous).

Motion: To invite TRU to resubmit MATH 0630 (Provincial-algebra and trigonometry) for articulation. M - Lisa Lewis (VIU), S - Jim Beaton (KPU). CARRIED (unanimous).

Motion: To approve articulation of MATH 0520 (TRU) (advanced-foundations). M - Richard Brandt (CU), S - Derek Knox (TRU-OL). Discussion: This course was approved, then rescinded previously. A new form was found which answered the previous concerns. CARRIED (unanimous).

15. **New items.** With the main body of articulation and re-articulation complete, several items were addressed by the committee, in a more informal discussion/motion format.

Motion: To recommend an amendment to the ABE guide as follows:

- p. 120 typo, header of para 7. “Radical Expressions Radical and Equations” should be “Radical Expressions and Equations”.
- P. 114 add the header “Learning Outcomes”
- Changes to the table on p.37-39 as corrected on the paper handout circulated amongst the committee, and agreed to by the co-chairs

M - Derek Knox (TRU-OL), S - John Salvatore (TRU). CARRIED (unanimous).

Discussion (John Salvatore) regarding learning centres, following an institutional discussion and idea that came forward at TRU (Williams Lake), with the idea of creating f2f and online support for students to work through a stand-alone learning package. Several institutions (VCC, NWCC, Camosun, and Capilano University) have tutor centres staffed by CUPE or students to tutor on an as needed basis. Costa Karavas (VCC) noted that the needs of every institution are slightly different. John welcomed comments to be sent by email if anyone has ideas.

Discussion on Advanced-Developmental learning outcomes (see agenda item #2).

- CNC, VIU and COTR offer courses in this stream.
- COTR noted that unit analysis should be part of this course, but this is also covered in Foundations.
- Costa Karavas (VCC) suggested that this be added as an optional topic to the course.
- Jim Beaton asked about the optional addition in 8(c) p.129 concerning solving non right-angle triangles.

Motion: The committee recommends rephrasing the format in the ABE guide so that a subheading “optional outcomes” be used for 8 b and c p. 129, and 3h p. 127. M - Jeanette Landry (NLC), S - Deb Heal (COTR). CARRIED (unanimous)

Motion: That the ABE guide amend the heading “Rational Expressions” to “Rational Expressions and Equations” for paragraph 4 header p. 128 and “Radical Expressions” to “Radical Expressions and Equations” paragraph 7 p. 128. M - Karen Shoniker (SC), S - Jim Beaton (KPU). CARRIED (unanimous).

Discussion on AUG funding. Costa Karavas (VCC) noted the extensive discussion at the steering committee and comments in the reports on the Ministry update by Tegan Tang provided last year from May 2016. Members are referred to the minutes for details of this discussion. Costa Karavas (VCC) noted there are individual and creative solutions occurring in each institution. Jim

Beaton (KPU) noted that the committee has an implied role of advocating for our students (in addition through the Deans and administrative leadership) and it would be appropriate to discuss for the steering committee. Costa Karavas (VCC) supported this sentiment. Discussion followed about how to best state support for students, request further analysis, and support Deans and administrators. Costa Karavas (VCC) noted ministry statements from previous discussions that AUG funding will be there for students who need it, and also that informal research is that AUG funding model is more expensive than tuition-free models.

Motion: Investigate the effectiveness of AUG vs the tuition-free model in terms of student access, barriers to education, cost effectiveness, social mobility, student retention, transition to further study and job opportunities, and continue to lobby for upgrading students. M - Costa Karavas (VCC), S - Deb Heal (COTR). CARRIED (unanimous).

Discussion on subcommittees for textbook and delivery. Jim Beaton (KPU) will head up a subcommittee, and Judy Larsen (UFV) is interested.

Motion: The ABE Steering Committee considers the inclusion of the link (<http://www.bctransferguide.ca/site-search?q=abe>) as a sufficient reference to learning outcomes for articulation purposes. M - Richard Brand (CU), S – Lisa Lewis (VIU). Discussion: BCCAT maintains a website of past guides. Costa Karavas (VCC) noted that BCCAT is a 3rd party, and not under the direct control of the Ministry, and perhaps a better site should be sought under the ministry’s umbrella. Concern was raised about the intentions of BCCAT website plans, as to whether they will maintain the library online in the future. The co-chairs should take this forward to the steering committee to obtain guidance, and share this problem with other WGs, as this is a larger problem. CARRIED (unanimous).

16. **Wrap up discussion, summary and administration.**

- a. Long-range plans were reviewed for the next several years, and the previous Re-articulation schedule (see 2016 minutes, para 6) was reviewed.
- b. Robert Ferro (YC) invited ideas for training and professional development.
- c. Election of co-chairs:
Motion: To re-elect Robert Ferro (YC) and Costa Karavas (VCC) as co-chairs. M – Patrick Montgomery (CC), S – Hilary Rourke (DC). CARRIED (unanimous).
- d. Election for vice-chair of ABE Mathematics Working Group.
Motion to re-elect Alison Bowe (subject to individual concurrence) to vice-chair. M – Robert Ferro (YC), S – John Salvatore (KPU). CARRIED (unanimous).
- e. Selection of next meeting location for 2018. Costa Karavas (VCC) noted that next year’s meeting may be at Capilano, in concert with English to create a “super-meeting” but this has yet to be confirmed. Discussion that the lower mainland institutions do need to coordinate a schedule for hosting, subject to the Steering Committee’s request to keep the meetings within this location. Richard Brand (CU) suggested that they should be able to host, and this is put forward as a suggestion. The steering committee will discuss this further and decide. Dates recommended as March 1-2, 2018.
- f. Summary of new business and wrap-up. Next year’s focus:
- 2018 Re-articulation of Advanced Developmental courses

- 2018 Review of Learning Outcomes for Advanced (Bus/Tech) & Foundations
- 2019 Re-articulation of Advanced (Bus/Tech) & Foundations courses
- 2019 Review of Learning Outcomes for Provincial (Algebra and Trigonometry)
- 2020 Re-articulation of Provincial (Algebra and Trigonometry) courses
- 2020 Review of Learning Outcomes for Provincial (Calculus)
- 2021 Re-articulation of Provincial (Calculus) courses

17. **Motion** to adjourn at 2:37 p.m. M - Manav Bhanot (NEC), S - Hilary Rourke (DC). CARRIED (unanimous).

REPORT ON THE BRITISH COLUMBIA COMMITTEE ON THE UNDERGRADUATE PROGRAM IN MATHEMATICS AND STATISTICS

held at Columbia College
MAY 17 – 19TH, 2016
presented by Costa Karavas (VCC)

1. Institutional reports were presented from Mathematics and Statistics departments.
2. Keynote Speaker Glen Van Brummelen (Quest University Canada) gave a presentation on “Triangles Before Logarithms: Trigonometry in the Lost Century”.
3. Rob Fleming from BCCAT presented on transfer and articulation activities at BCCAT.
 - i. Ongoing work of integrating the ApplyBC services (Ministry) with expanded Education Planner services (BCCAT) incorporating information on the entire student journey in a unified Education Planning and Application Service (EPAS) website.
 - ii. Associate Degree: The final report of the new Associate Degree Development Committee was approved by Council, forwarded to the DQAB and is awaiting review. Revisions to the current associate of Arts and Science framework are awaiting ministerial consent.
 - iii. Dual Credit Forum at Camosun in April 2016 showcased examples of how BC post secondary institutions, schools and school districts are working together to successfully transition secondary students to post-secondary education.
 - iv. Inter-Provincial Transfer Forum was held at the Harbour Centre on September 21st and brought together over 100 delegates from across Canada to attend presentations and workshops on the ground-breaking work of enabling inter-provincial transfer.
4. Core outcomes and Inter-provincial transfer
 - i. The Core Linear Algebra project is looking into identifying and creating core and optional learning outcomes that all institutions can use for robust transfer. Similar work was established for Calculus I and Calculus II transferability.
 - ii. Articulation of Science Calculus I and II between British Columbia and Alberta has been created. Typically 1st year calculus (two semester courses) can transfer. Students who wish to transfer only one course should contact the receiving institution.
 - iii. Proposal for articulation agreements between Alberta and BC for Introductory Statistics transfer credit.
5. Ministry of Education -Nicole Arklie
Presentation of B.C.'s Redesigned Curriculum. Details can be found in

http://www.bced.gov.bc.ca/irp/transforming_curriculum.php

Feedback was provided on grades and reporting. Concerns were raised on how can teachers provide students with high quality courses in the absence of controls or provincial exams.

6. Tara Robertson, CAPER(BC)- CAPER-BC | Centre for Accessible Post-secondary Education Presented on Making Mathematics Accessible to Visually Impaired Students.

7. Open source textbooks.

ALF Articulation Working Group Report

October 20-21, 2016

Gurinder Bains and Rahim Reyimjan

1. Institutional Reports

A few common themes emerged from these reports.

AUG: Many ABE instructors view AUG as a barrier, particularly for fundamental students. Some students simply find the application process overwhelming and avoid it. Also, fundamental level students are frequently denied funding if they require more than a term to complete their courses, which presents a problem because these students usually need more time than the allotted term to learn new skills. To address this problem, some institutions are splitting up their fundamental courses; for example, instead of offering just one level 6 English course, one institution is offering three sequential level 6 English courses.

Tuition-Related Ideas: Some institutions offer top-up funds for students who find themselves above the income cutoff thresholds; some funds are more generous than others. The Vancouver Island University representative mentioned that her institution has waived the \$38.55 application fee for ABE students. The College of the Rockies representative said that her institution offers completion awards to students who do not qualify for AUG: upon successful completion of an ABE course, students are refunded part of their tuition.

Student Demographics: Due to the low income threshold cutoff levels for AUG (despite the 2% increase this year), instructors across the province are finding themselves dealing with students who have higher needs, which, in turn, is increasing faculty workloads. And because post-secondary ESL programs seem more interested in accommodating international rather than domestic students, many ABE classrooms are being inundated by domestic ESL students.

Enrolment: Generally, enrolment in ABE classes is either holding steady or dropping. A few institutions saw drops in ABE English classes due to lowering of English entry grades.

Resources and Curriculum: Many instructors were very enthusiastic about the ALF English Readers. Diana Twiss of Decoda recommended Decoda's library and librarian (Tina Chau) as excellent resources.

For some books, the library carries class sets. Instructors who work closely with indigenous students are interested in indigenizing student assessments and curriculum. One instructor said that she had used the novel *Keeper'n Me* by Richard Wagamese with great success in her intermediate and advanced level classes.

Learning Outcomes vs Skills: Julia Dodge (UFV) said that the curriculum committees at UFV would not pass her ABE English course outlines due to the “wheelbarrow of skills” listed in her learning outcomes sections. She suggested that we cluster skills listed in the articulation handbook under learning outcome headings; these headings will then replace the handbook’s long lists. Addie Dawson (Northern Lights College), Betsy Alkenbrack (Capilano University), Melinda Worfolk (College of New Caledonia), and Julia Dodge have formed a committee and expect to have these headings completed by the end of the year, if not earlier.

2. Guest Speakers

Jan Unwin (Ministry of Education): Changes to the K-9 curriculum have been implemented this year. Changes to the 10-12 curriculums will take place over a three year period, beginning with Grade 10 first. Students will be given literacy and numeracy assessments in the upper grades (see <https://curriculum.gov.bc.ca/graduation-info#grad-table>). In addition to transcripts, students will graduate with an e-portfolio, which will enable them to showcase extra-curricular abilities/skills. Jan Unwin expressed strong support for post-secondary ABE programs, saying that many of us have long implemented the ideas that the province is now introducing to the public school system.

Some ABE instructors were concerned about the pressures the new system would place on students, particularly with regard to the e-portfolio. Others brought up failed attempts at similar educational overhauls in New Zealand and Australia. Jan Unwin countered that BC had two advantages: a) teachers are leading the changes in BC, and b) the public school system is working closely with post-secondary institutions in both designing and implementing the change.

Allison Alder (ABE Articulation Steering Committee): Allison discussed the need to work closely with financial aid officers in order to ensure that deserving students received AUGs. While FAOs can make judgement calls when someone’s situation does not fit with AUG guidelines, many FAOs are reluctant to make such calls. Further, students receiving AUG funding may be taxed on it, yet these students do not receive any educational tax credits. Allison plans to draft a letter to send to the federal government, advocating for change.

Ruth Erskine (BCCAT): The grades 10-12 curriculum development process is in feedback mode. Articulation committees are being asked to comment on the current curriculum draft by the end of the term.

EducationPlannerBC has incorporated ApplyBC and TranscriptsBC services into its site in order to provide a more user-friendly experience for students interested in pursuing a post-secondary education. Dual credit programs continue to be of interest both within BC and in other provinces.

Tegan Tang (Ministry of Advanced Education, Education Officer: ABE, CALP, and PLAR): Tegan Tang spoke extensively about the province’s CALP programs, which she views as a success. Towards the end of her talk, she was asked if the provincial government would make ABE courses tuition free again,

particularly since the budget for administering and providing AUG is double what it was when courses were tuition free and fewer students are able to access our courses.

Diana Twiss (Decoda): To motivate learners, Decoda now provides virtual badges to students. Also, Telus is helping Decoda provide digital literacy programs by offering low income single-parent families affordable internet services.

Shantel Ivits (VCC, ALFE Open Texts): The creator of the ALFE Open Texts, Shantel Ivits discussed his views about the role discomfort plays in education. One of the instructors observed that although some of the readers contain controversial topics, students generally found the tone of the readers “invitational.”

Summary of Joint Annual Meeting of Articulation Committee Chairs, System Liaison Persons (SLPs) and Institutional Contact Persons (ICPs)

10 November 2016

Submitted for ABE Math Working Group meeting March 2-3, 2017

Some information gleaned and taken from BCCAT website at: <http://www.bccat.bc.ca/articulation/jam/>

1. **Opening Panel Session: The Evolving BC Transfer System—The View from the Registrar's Office.** Kate Ross, UBC; Stephen Salem, NWCC; Karen McCredie, Capilano
 - What effect have changes to institutional mandates and functions of all institutes as senders and receivers had on your institution or its role in the BC Transfer System.
 1. Student exchanges encouraged, therefore transfer credit important
 2. Colleges in small regions allows people to start degree from home
 3. New pathways created
 4. There is still a residency question in the transfer system
 5. Need to make it easier for student and faculty member so transfer doesn't sit on desk of faculty member
 - How have institutional initiatives (eg. Internationalization) affected your institution or the BC Transfer System?
 1. Strong initiatives, plays well into transfer system and allows students alignment with programs
 2. Course to course transfer is easier
 - How will proposed literacy and numeracy exams in the graduation program change the way post-sec operates?
 1. more career planning; students in K-12 will be more aware of selves
 2. Some institutions potentially to look at whole record, gr 10-12, looking at the program record, average, and how it fits in program; more holistic approach
 3. No longer just one English class, there are 5 English courses
 4. Some don't want to do lots of testing (assessment) as those can be barriers
 5. What does mastery mean?
 6. It will take time to see what impact exams will have on new system.

2. **Session for Chairs and SLPs by John FitzGibbon, Associate Director, Transfer & Articulation and Ruth Erskine, Committee Coordinator at BCCA.** Best Practice in Managing Articulation Committees. Panel discussion with Stephen Sallaway, Tanis Sawkins, Yolina Denchev, and Robert Ferro.
- Each panelist give a presentation on the best practices they use for their articulation meetings.
 - John FitzGibbon presented a document outlining themes and issues raised at 2016 articulation committee meetings attended by BCCAT staff. The two-page document is included at the end of this report.
3. **BCCAT Transfer Awards Ceremony**
- Rising Star Award: Alisa Webb, Associate Dean of Students, Collage of the Arts, UFV
 - Transfer and Articulation Community Leadership Award: Hilary Rourke, ABE Instructor and Articulation Steering Committee Member, Douglas College. Congratulations, Hilary!
 “Hilary Rourke has been an integral part of the articulation process since its inception. She has served on the ABE Articulation Steering Committee for over 24 years! She has shown exceptional leadership skills. Her competence and hard work led the committee through some very important work in the transfer system. Her diligence and enthusiasm for the committee was always felt, and it meant the whole committee worked hard for the betterment of ABE in the province.” - Mary Shier, ABE Instructor, College of the Rockies, and Articulation Steering Committee Member and Education & Career Planning (EDCP) Working Committee Chair
 - Leadership Award: Lesley Andres, Faculty Member/Professor, Educational Studies, UBC
 - Franklin Gelin Lifetime Achievement Award: John D. Dennison (1929-2016), BCCAT Co-chair (1993-1999), and Professor Emeritus, Administrative, Adult and Higher Education, UBC
4. **Panel Discussion: The Academic Administrators' Perspective.** Susan Rhodes, SFU; Eric Davis, UFV; Neil Coburn, Selkirk
- This session had the panelists answer three questions:
 1. How do they see their institution's role and BC Transfer System changing as a result of changes in institutional mandates over the past few years?
 2. How have institutional initiatives (internationalization, indigenization, MOE curricular changes) affected your institution and BC Transfer System?
 3. Are there other systemic influences that are impacting your institution's role in BC Transfer System and in what ways?
 - Some interesting answers:
 1. Not yet certain how new K-12 system will impact admissions
 2. New learning outcomes leads to questions about teaching practices
 3. Accreditation, many are from US bodies, do we need Canadian versions? Can we do things better?
 4. Learner-centered teaching—there is a shift from context-based to skills-based
 5. In some areas there is a revisioning of liberal education and less about acquiring a body of knowledge

6. Indigenization, there is increased use of indigenous faculty without conventional credentials
7. More interdisciplinary curriculum is happening
8. “Scope creep”—new programs, these are new and competing programs that are at the same time still transferable to other institutions
9. Need to do some work with articulation framework so students have a pathway to continue; need better triangulation of course articulation. Ex. If institution A accepts institution B’s course and institution A also accepts institution C’s course, then we need institution B to accept institution C’s course and vice-versa.

5. Future Directions by Rob Fleming

- There is a diverse “credit landscape” where there are 7 models, with the latest being in Nova Scotia
- Factors that are influencing Pan-Canadian transfer
 1. Skills and post-sec employment outcomes
 2. Internationalization and Canada
 3. Expanded access for indigenous, international and mature learners
- Quality assurance bodies are diverse across the country and there is a credential framework. There is also a diversity of learners and curriculum.
- There are directions to explore and to facilitate transfer pathways
 1. ARUCC and PCCAT transcript and transfer guide