

Sheet Metal and Architectural Articulation Meeting Minutes

June 27 & 28, 2017 8:00am – 3:00pm

June 21

Present:

Conner Hofler	RCABC
Roger Hagan	BCIT
Stephen Sallaway	BCIT
Bob Pascuzzi	SMWTC
Jim Miller	Camosun College
Antonio Henriques	Okanagan College

Regrets:

Brian Coey	Camosun College
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Guest Speakers:

Colleen Rogan	ITA
Vern Weber	ITA
Steven Moore	Okanagan College

8:00 am

- AH- welcome and introductions of members present.
- AH- asked for a moment of silence in memory of Ken McDonald, instructor and colleague. Everybody remained in a short silence.
- AH- approval of 2016 Articulation minutes.
M/S/C
- AH- Review, discussion and approval of proposed 2017 articulation agenda.
M/S/C

Steven Sallaway's report on the purpose of the articulation and the CAT meeting:

- SS talked about the purpose of the articulation—establishing educational opportunities for students by facilitating students' transferring credits among the institutions so harmonization fits the purpose; exchanging information and enhancing cooperation among institutions; promoting course programming equivalency; fast understanding the course objectives; exchanging the requirements for entering the program, textbook and material; discussing the new development of the program; identifying the common issues and the program development; discussing the potential changes in courses and the institutions that

might affect transferring relationship; and identifying the significant transferring issues and forward these issues to BCCAT attention.

- SS indicated BCCAT reflected the transferring credits among institutes, including academic and trades courses.
- SS reported for BCCAT that British Columbia Association of Trades and Technical Administration, the dean and associate dean of trades meet three times a year.
- SS- Participants are from trades training, ITA groups, industry representatives. Three groups have been divided: one group on funds measure and capability, one group working on funding purchases, and one on flexible programs.
- SS talked about April's project—government apprenticeship technical training, 870,000 dollars was put in. They developed alternative delivery methods to all types of trades. They had tried to bring in the online learning but students wanted to go to school.
- SS suggested that once the SLP position for the trade of Sheet Metal needs to be filled, the articulation members could recommend people for the project through their dean.

Antonio Henriques's report on Ottawa RSOS workshop and Pan Canadian Harmonization Conference:

RSOS Report.

Attended RSOS work shop in Ottawa from Sunday Feb 26th 2017 to Friday March 3rd 2017.

In attendance were 5 instructors 4 employers and 8 SME from various provinces and territories from Sunday 26th to Thursday 2nd.

BC representatives included 1 employer, 1 SME and instructor.

Quebec had a SME in attendance until Thursday the 2nd.

Schedule was as followed,

Sunday

- Welcome and Introductions
- Overview of workshop, roles of participants and questions
- Overview of proposed structure of occupational standard.
- Recommendation of 7200 hours of apprenticeship training.
- Recommendation of 8 weeks per level of in school training.
- Jurisdictions to adjust ratio of in-class and on-the-job training requirements.

Monday

- Initial revisions to structure (review the need for more or less major work activities).
- Described content requirements for major work activities (learning outcomes, essential skills, evidence of attainment etc...)
- Break out groups formed with at least one representative from each trade group.

- Break out groups were allocated major work activities.
- Break out groups developed content until Wednesday March 1st

Wednesday

- Beginning of full group review of document
- Incorporate final changes
- Assign development of psychomotor and cognitive taxonomy

Thursday

- Continued and completion of full group review of document, incorporate final changes.
- Review draft occupational description, summary of essential skills profile and occupational trends
- Wrap up of the standard development
- Farewell to the employer group and Quebec Participant

Friday

- Additional instructors joined the group (3)
- Introduction of Canadian Council of Directors of Apprenticeship (CCDA) harmonization initiative
- Leveling of exercises (major work activities and sub tasks) for harmonization of apprenticeship technical training

April 6th Review of RSOS sequencing of training topics webinar

- 6 suggested changes identified by BC webinar participants
 1. Specialty Products Installation should be added to level 3 as well.
 2. Uses GMAW to all 4 levels
 3. Uses SMAW from level 3 to level 1
 4. All 5 pattern development techniques should be added to all 4 levels
 5. Leak testing, air balancing, commissioning should be included in level 3 as well as level 4
 6. Installation of specialty products should be moved to level 3

Pan-Canadian Webinar May 23rd and June 20th 2017

- Consensus/Decision on items identified by each jurisdiction of the proposed sequencing.
- 6 suggestions by BC as follows.
 1. Specialty Products was added to level 3 and in context for level 4
 2. GMAW was added to all 4 levels
 3. SMAW was moved to level 2
 4. All 4 pattern development techniques added to levels 1-3 and in context for level 4.
Computer technology for pattern development only in level 4

5. Leak testing, air balancing, commissioning is now in level 3 as well as level 4
6. Installation of specialty products moved to level 3 and in context for level 4

Going Forward

- ITA representatives to advise Articulation group on the next steps.

General Discussion

- Harmonization discussed by all articulation members
- Implementation, review intervals, jurisdictional effects, program outline changes.
- ITA presenters to speak to items later in the day.

9:45 Break time

BCSkills Contest

- AH mentioned that Okanagan College first-time participated in BCSkills contest this year.
- JM read the letter from Bryan and would forward it to everyone after meeting and questioned the reason why some students could not finish the project.
- BP believed to look at the steps of projects that makes the marks instead of simply putting the mark to completion of the project.
- RH- the committee would not decide but provide the suggestions on assessment of the contest—whether finishing the project counts.

Steve Moore's address to welcome everyone to the meeting

- SM welcomed all the guests to Okanagan College and brand new trades facility.
- SM indicated that the Sheet Metal program have been brought into the main campus from leased space last year. Kelowna campus is the largest foundational training center among the four campuses in trades and apprenticeship, partnership with Nicola Valley in Merritt and Kamloops. Brand new sheet metal program. SM welcomed and appreciated everyone's effort in training the students in Trades and Apprenticeship.

Vern Weber and Colleen Rogan's reports

Colleen Rogan's Presentation

- CR started to review the stages of RSOS and harmonization and VW would talk about the results of Red Seal and SLE exam later.

- CR indicated that Harmonization is a federal initiative instead of ITA initiative. CR introduced herself as the Program Standards Manager of ITA and VW as the Program Development Officer. In 2014 all program developments came into ITA.
- Harmonization is a national initiative. It was requested by industry. The strategy for harmonization is led by Canadian Councilor Directory Apprenticeship, endorsed by the Form of Labour Market Ministers. Sheet Metal worker is in phase 3 of harmonization. Phase means the collection of trades that's been harmonized. Phase 3 is for implementation in September 2018.
- CR-four basic priorities for harmonization: harmonize the trade name; same total training hours; same number of training levels; consistent sequence in training.
- AH--How critical is it if the jurisdictions don't meet the criteria? CR answered that all the jurisdictions would be documented.
- CR made examples of Ontario school of trades which receives funds only from membership fees feels challenging to meet the changes for harmonization. They are working toward the criteria within the next couple of years.
- CR mentioned two stages to harmonization: consultation, ESDC drives the process and RSOS to develop the standards; and program development stage—ITA drives the process.
- In September, 2016, they started to harmonize sheet metal worker. ESDC (Employment Social Development Canada) gathered all the information from all of the jurisdictions and came up with a proposal and did industry consultations in October and November of 2016. They came up with an action report that was sent back to ESDC who put together in Red Seal Occupational Standard Workshop to come up with the sequencing of the content in February to March 2017. The training provider and industry were invited to identify the real red flag items and it was sent back to ESDC. They had red flag report webinar in June 2017 with all of the jurisdictions to come up with the final sequencing.
- CR mentioned that there was no changes in levels, but total hours were changed from 6400 to 7200.
- VW indicated about the second step—RSOS documents from webinar would be sent back to jurisdiction once again for review and expect to hear back from them at the end of September to receive the RSOS documents and feedback on November.
- SS mentioned about the challenging part to Red Flag from the webinar because it's lack of the details and information.
- CR mentioned about the transition planning and the invitation would be sent to the deans by emails inviting participate the meetings.
- Transition planning is moving the current students to the harmonized program. In transition planning, they do gap analysis, working the instructor to figure out the gaps among programs, missing or overlapping information, drafting scenario, gathering feedback and what the challenges are, webinar and review draft scenario; finalize the transition plans, and present the plans on website for discussion.

General Discussion

- Harmonization discussed by all articulation members
- Implementation, review intervals, jurisdictional effects, program outline changes.
- Potential dates and availability for fall meetings

Vern Weber's presentation on Red Seal exam results and SLE exam results

- VW showed the results of SLE level 1 indicating average high score in GAC of level 1; the score is up a bit in level 2; very high score in level 3.
- Red Seal exam: High pass rate. (BC pass rate)
- Architectural sheet metal exam results, higher than previous years, continuing to increase.

Questions and Discussions

- VW- addressed the questions gathered by AH from all committee members, Questions are about transition and were covered in CR presentation, e.g. what does transition look like for student's part way with their apprenticeship or how harmonization is launched? ---all of these questions will be gone through the transition process with everyone.
- AH asked if new SLE rate is being made to reflect the RSOS.
- CR answered centrally that they would develop SLE prior to implementation the program but with no students have gone through the harmonization program. Facilitators connect with the students who write the exam and will talk about the questions.
- CR addressed the last question—students who just failed their technical training by 65 to 69, are they failing their technical training or/and their SLE combined? Is it blended mark? Instead of going back to technical training, they wait for the challenging exam.
- Antonio confirmed and indicated that the students keep trying challenging exam to 70 and they come back, pass SLE, achieve the credit for that level.
- BP-mentioned if the students pass SLE regarding to what their in-school mark was, if they fail, they can have in-school mark for 50%, and SLE for 55%, challenge the exam to get 70% to achieve the credit for that course. If they can pass the SLE, they get credit for the level.
- CR indicated the rewriting process and procedure after the second failure, they would need to be contacted by the apprenticeship advisor who would coached them to rewrite the exam until they pass.
- RH- questioned why the students were given the second chance to write SLE if they failed the technical training.
- CR suggested that the assessment department was working on making the process of level challenge more productive, needing employers' permission to challenge, and etc.
- RH-said that students need to wait for 30 days to challenge if they fail the exam.
- SS if a student is really far behind, would the instructor be obliged to tutor and help the student? CR said it's up to the instructors.
- CR suggested it would be blended mark for rewriting the exam.
- VW will email the notice to committee on November (RSOS workshop review).

12:00 Break for Lunch

BCSkills Contest

- AH mentioned that Okanagan College first-time participated in BCSkills contest this year.

- JM read the letter from Bryan and would forward it to everyone after meeting and questioned the reason why some students could not finish the project.
- BP believed to look at the steps of projects that makes the marks instead of simply putting the mark to completion of the project.
- BP-the committee would not decide but provide the suggestions on assessment of the contest—whether finishing the project counts.
- BP addressed several issues: BC pointed out the single theme was not on the sheet, the scope document on the internet and BP would send out the correct sheet; finishing completion is part of assessment because everything is broken down; investigate if the sheet is out dated.
- RH asked if everybody agrees with the test's percentage mark be distributed as 40% for the layouts, 50% for the project and 10% for welding. **M/S/C**
- SS believed that theme was not updated online.
- BP asked if there's any changes on the project next year.
- Roger suggested if diameter is smaller then it's more difficult to reduce the whole size. So no recommendations to change on the dimension of the project.
- B/P-2018 6 competitors for the contest: 2 from OC, 1 from Camosun, 1 from BCIT, 2 from SMWTC. **M/S/C**
- RH discussed about age limit for the BCSkills contest.
- SS suggested the students win from SkillsBC and they can go to national competition.
- SS mentioned if it's fair to send students at different levels and different years.
- BP didn't want to set age restrictions
- RH-suggested to set the restrictions on the students need to finish the first year to be qualified for the competition.
- AH asked for everyone's opinions on welding, sheet metal arc welding.
- BP suggested to keep the project the same. **M/S/C**

Antonio Henriques leading the tour of Okanagan College Trades facility.

- Mock house cubicles
- Appliance Lab
- Future mock house site and rendering
- Sheet Metal Shop

Adjournment at 3pm.

June 28th

8:00-Coast Capri-Breakfast Meeting

9:15 Okanagan College

Reports from Training Institutions.

- Reports are attached at the end of the meeting minutes' report

10:15 Time allotment vs weighting Discussion

- BP-weighting based on time allotment is only a starting point.
- RH-all topics have equal importance.
- AH-to research other jurisdictional outlines for weighting vs time comparison.
- AH-In school training time needs to be increase.
- BP-Industry support present for more training for each level.

11:00 Break

11:15 Election of Chairs

- Change of Chairs for next year, AH to Chair and BC to remain Co-Chair. **M/S/C**

11:30 Next year's agenda:

- It will be hosted by RCABC, Tentative dates to be around the same time. June 27, 2018 with Tony and Brian as co-chairs who will apply for the funding for the articulation meeting.
- Supplier tour a possibility.
- Following year's articulation meeting in 2019 will be hosted by Camosun College.

12:00pm Motion to adjourn 2017 Articulation Meeting.

- **M/S/C**

SHEET METAL WORKERS TRAINING CENTRE

ARTICULATION REPORT

Historically over the last few years the Training Centre has offered around 14 classes per year for an average of 170 students. In 2015 the number increased to 192 students. In 2016, there were 231 students (including 62 graduates)

During 2016, the Training Centre scheduled 17 classes and ran all 17 classes.

In 2017, there are 20 classes scheduled (3 of which are ASM). We expect each class to run full. There is now over 330 apprentices in our system.

We are officially into continuous triple classes for the near future. Schooling schedules now run from 7am until 10pm. The doors open at 5:00am and stay open to 10:30pm. All three instructors and each class takes a 2 week turn at afternoon shift.

We have continued to train instructors for the future by having them teach our weekly evening tutoring sessions and some of our upgrading courses. We have 3 part time instructors on tutoring rotation and have recently added a part time welding instructor for our continuing education classes and to spend time with our apprenticeship classes fine tuning different welding processes with each student.

The Continuing Education Program in 2016 was again a success. We developed and ran two 24 hour courses on metal lagging and jacketing in preparation for some possible future work in the industry

The other courses: Welding, AutoCAD, Lost Skills, Stainless Steel, and Hoisting and Rigging continue to be well attended and as always they are free for our apprentices and journeypersons to enrol in. Our biggest problem for continuing education classes is the scheduling of them and having an instructor available to teach them. This of course is due to the triple classes and afternoon shift.

Updated equipment in 2016 included a spot welder, a treadle shear and a continued development of the field installation mock up. A new button punch machine was added as well as a new welding machine; continuing the upgrade and replacement of the welding equipment at the facility.

Okanagan College

Sheet Metal Articulation Report

2016- 2017 Training:

- Two classes of Level 1's.
- One class of Level 2's.
- One class of level 3's.
- One class of Level 4's.
- One ELTT Foundation Class.
- 4 women in trades intakes
- 2 Secondary School Gateways

Going Forward

- One class of Level 1's
- Two classes of level 2's
- One class of Level 3's
- One class of Level 4's
- Involvement in the Women in Trades Program will continue.
- Involvement in the Secondary School Gateway Programs will continue.

New equipment

- **Five Miller 150 STL GTAW/SMAW**
- **Five Miller 141 GMAW**
- **One Weidemann CNC Rotary Turret Punch**
- **One Duro Dyne Mach III Pin Spotter**
- **One Duro Dyne Hand held Pin Spotter**

End of Report

Camosun College Articulation Report

June 27th-28th 2017

We have had a tough year, with the loss of Ken, but are doing well and back on track. One of our apprentice awards was changed this year to honor Ken and was given to Kevin DeOlivirera. Some of you might remember him from Skills BC competitions. He is a very fit candidate for such an award.

I have moved into the program leader role and, as you all know by now, we have hired Jim as our 2nd instructor. I will let him tell you about himself!

We ran 2 foundations classes this year again with August and January intakes. Numbers were down a little for the January intake with only 9 registered.

We ran 5 intakes of apprentices, 2 level 1 classes, and 1 each of the other 3 levels.

Numbers are way up for apprentices. We are fully booked until 2019.

We have added a 6th intake for next fall to accommodate the long waitlists.

Employment is very strong on the island. We can't supply enough people to companies who have been contacting us.

The new shop is running smooth and we have been using our CNC router in our apprentice's classes. We have the students design projects using Design2Fab and AutoCAD software. We then import the file to our CNC router and draw the pattern out. We haven't implemented the plasma table yet, but the skill set is the same.

Unfortunately, no new equipment to report on.

RCABC School Report (Articulation 2017)

Currently there are 194 ASM apprentices registered to the RCABC.

Proposed ASM Training Schedule (2017 – 2018)

September	-	Level One
November	-	Level Three
January	-	Level Two
February	-	Level Three
April	-	Level One

Previous ASM Training Schedule (2016 – 2017)

September – Level One

- 12 students (1 Fail)
- 75% SLE Pass (84% High; 47% Low; 71% Average)

November – Level Three

- 16 students
- 100% CofQ Pass (90% High; 72% Low; 82% Average)

January – Level Two

- 10 students
- 50% SLE Pass (75% High; 54% Low; 67% Average)
- Introduced 3-piece colonial gutter

February – Level One

- 16 students
- 75% SLE Pass (91% High; 61% Low; 78% Average)
- Introduced hip-roof mock-ups and parallel roof jack

April – Level Two

- 10 students
- 80% SLE Pass (91% High; 59% Low; 76% Average)
- Introduced y-branch pipe fitting

Updates:

ASM Instructor has achieved their M.Ed. and I.P. in Roofing. Currently completing their SM apprenticeship.

The Program Coordinator and the Roofing Instructors left the RCABC. New employees have been hired.

RCABC is instituting tuition fees (approximately \$600).

Approximately \$250,000.00 is being spent over the next 2 years on improvements to the REF facilities.

BCIT Sheet Metal Program Report

June 27, 2017

The apprentice classes are full for 2017. The enrolment for 2018 at this time seems a little lower with the exception of level 1 which is full in Feb 2018. Industry is still looking for workers to hire.

The Foundation program is experiencing lower than normal enrollment at the time of this report. We will not know the actual enrollment until sometime in August.

The Sheet Metal department is continuing to introduce basic fabrication skills to the Millwrights Foundation classes. In 2017 there will be 4 classes of Millwrights that will spend 2 weeks for each class in the Sheet Metal Shop.

In 2017 there will be 8 classes of Trades Discovery that will come through the Sheet Metal department.

Alyssa Deville won Gold in the Skills BC Sheet Metal competition. Alyssa was a level 1 apprentice with Erich Moeller as her Instructor and then her coach for the Canada skills competition. Alyssa and Erich went to Winnipeg to compete in the Skills Canada competition. Alyssa did not place in the medals but enjoyed the whole experience and looks forward to competing next year.

BCIT SOCE has moved forward with an internal Safety review and the recommendations that were made are being carried out. The Sheet Metal shop fared quite well most of the safety issues were around physical guarding for shears and press brakes. Lock out procedures, safe working procedures and equipment manuals are now posted by every machine that is required to have them. First Aid procedures are displayed in 4 locations throughout the sheet metal shop and the full policies regarding first aid procedures are posted in the tool room. The Gallant Rotobelt machine is now fully guarded and maintained by an outside contractor. More work is required for a proper welding exhaust system but on hold for now until a review of the entire building is completed. An engineering report has been compiled on all the SOCE racking including the racks in the sheet metal shop. All 3 metal racks have been approved for 800 Kilos per shelf which is more than we would ever use. The 4th rack used for angle iron, round stock etc. it requires 2 additional braces to be installed. A safety committee has been formed and consists of all the chief instructors and some of the associate deans within the SOCE. Monthly meetings are held and ongoing safety discussions continue. Minutes of these safety meetings are posted on a bulletin board in the sheet metal shop.

The Sheet Metal department is utilizing the CNC plasma machine in apprentice training more and more. The department has added a new software called PractiCAM it far exceeds SDS and was given to BCIT free of charge. All instructor computers and student labs are now set up with both SDS and PractiCAM with SDS being phased out as soon as possible. Instructor training is being arranged in the fall.

The Sheet Metal department has acquired the following new equipment.

1 - Hypertherm PowerMax45 plasma cutter

2 - Tennsmith 4816 box and pan brakes.

2 – Tennsmith V4812 hand brakes.

End of report