

Chapter 9

Implementing Assessment for Learning in Canada: The Challenge of Teacher Professional Development

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Abstract In recent years, educational assessment policies in Canada have expanded to include explicit mandates towards assessment for learning (AfL). These mandates emphasize the continuous use of assessments to support student learning through an integrated approach to teaching and assessment. In this chapter, we explore the emergence and implementation of AfL practices and policies in the education systems of several English-language provinces, with a specific focus on the Ontario context. We focus our argument on the critical role of in-service teacher learning for successful AfL policy implementation. Based on a three-year professional learning project in Ontario, we describe and analyze structures to support teachers' integration of AfL within their classroom contexts. Our findings highlight the value and role of responsive, scaffolded, and embedded structures that move teachers toward greater AfL integration. The chapter concludes with a discussion of implications for future professional learning and for policies supporting greater AfL integration in classrooms and schools.

9.1 Towards AfL Integration in Canadian Schools

An enduring challenge for education systems is to enact policies, programs, and practices that will optimize the likelihood of student academic success. In 1998, Black and Wiliam captured the interest of educators when they summarized evidence that (a) systematic formative assessment enhanced student achievement, (b) the practice of formative assessment in classrooms could be significantly improved through professional learning, and (c) trustworthy examples of how to

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implement and improve the practice of formative assessment were already available. At the same time, they identified a significant problematic in using assessment to promote learning: ‘We acknowledge widespread evidence that fundamental change in education can be achieved only slowly—through programs of professional development that build on existing good practice’ (p. 2).

In response to Black and Wiliam’s (1998) seminal summary of research, other scholars have further explored the benefits of formative assessment on teaching and learning (e.g., Davies 2007; Harlen 2006; Volante 2006). Formative assessment has evolved into principles characterized by the expression Assessment for Learning (AfL). AfL can be regarded as ‘the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go, and how best to get there’ (Assessment Reform Group 2002, p. 2). Given the mounting evidence that formative assessment supports student learning, educational systems have begun to emphasize the role of assessment in relation to teaching and learning within assessment policies.

The evolution of AfL policy in Canada began in the 1980s with a general movement towards using formative assessments to better guide the teaching of students to meet educational expectations across diverse learning needs. In this setting, formative assessment became an essential tool for informing teachers’ instructional practices and for promoting differentiated teaching and learning. At the same time, educational jurisdictions were subjected to increasing calls for accountability. This required teachers to explicitly demonstrate that their efforts were helping to ensure that students were achieving important educational outcomes (Klinger et al. 2008; Ryan 2002; Volante 2007). The foundations for these accountability efforts were commonly linked to educational outcomes, as measured through large-scale assessments. Given the emphasis on assessment, a similar focus began to evolve at the classroom level, resulting in an increased emphasis on formative assessment strategies. The increased attention on classroom and large-scale assessments highlighted the need for teachers to develop their assessment literacy.

Assessment literacy continues to be a core competency for teachers across the nation (Council of Ontario Directors of Education 2006; Stiggins 2002; Volante and Earl 2013), and the value of instituting policies, developing resources, and offering professional development opportunities that support AfL practices continues to grow. As identified in both professional standards and current research, teachers are required to be assessment literate professionals: educators with the knowledge of how to construct, administer, and score reliable assessments and communicate valid interpretations about student learning and achievement (Popham 2004; Stiggins 2002). Assessment literacy ultimately involves integrating assessment practices, theories, and philosophies throughout the processes of teaching and learning. At its most progressive stage, educators within Canadian schools are now creating an assessment culture where the student and teacher learn together in a collaborative relationship predicated on AfL. Nevertheless, it is not clear that these progressive practices are becoming the norm in the majority of classrooms and schools or that in-service teachers are given the professional learning opportunities

they need to develop assessment expertise and implement AfL within their classrooms.

Systemic implementation of new educational practices is a challenge in Canada because education falls under provincial jurisdiction. Each of Canada's 10 provinces and 3 territories is responsible for implementing educational policies and curricula. Hence, the development of AfL-centered policies has not been uniform across the country. Several English-speaking provinces have recently developed policies that aim to promote AfL as a fundamental component of teaching and learning (e.g., Alberta Assessment Consortium 2005; British Columbia Ministry of Education 2004; Ontario Ministry of Education 2010). For example, British Columbia's Accountability Framework promotes 'evidence-based, data-driven decision-making with a focus on assessment for learning' (British Columbia Ministry of Education 2002, p. 1). The British Columbia policy parallels others that articulate an appreciation of how AfL adoption can increase student engagement and support students' growth towards valued educational outcomes. Another example is evident in the Western and Northern Canadian Protocol for Collaboration in Education, which represents Ministries of Education in Western and Northern Canada. This group of provinces and territories published a document in 2006 entitled *Rethinking Classroom Assessment with Purpose in Mind*. The document describes assessment as follows:

Assessment *for* learning, assessment *as* learning, and assessment *of* learning all serve valuable, and different, purposes. It is not always easy, however, getting the balance right. If we want to enhance learning for all students, the role of assessment *for* learning and assessment *as* learning takes on a much higher profile than assessment *of* learning. (Manitoba Education 2006, p. 14)

Across provincial assessment policies, there is an emerging emphasis on the value and benefits of integrating assessment for and as learning into classroom teaching and learning (see www.caffn.ca for complete listing of policies). These policies emphasize the continuous use of assessment to support not only teachers' instructional practices but also students' learning, through an integrated approach to assessment, teaching, and learning.

Given the diverse geographic spread and the degree of provincial autonomy of educational systems across Canada, in this chapter we focus specifically on the AfL policies and practices within the province of Ontario. In Ontario, there has been a substantial effort to support AfL implementation and adoption. In 2010, the Ontario Ministry of Education issued its provincial assessment policy entitled, *Growing Success: Assessment, Evaluation, and Reporting in Ontario Schools*. The Growing Success document explicitly details the significance of AfL by encouraging teachers to 'provide students with descriptive feedback and coaching for improvement' (Ontario Ministry of Education 2010, p. 28). This policy document further articulates the following essential components of AfL that teachers are required to integrate throughout their teaching practice:

- plan assessment concurrently and integrate it seamlessly with instruction;
- share learning goals and success criteria with students at the outset of learning to ensure that students and teachers have a common and shared understanding of these goals and criteria as learning progresses;
- gather information about student learning before, during, and at or near the end of a period of instruction, using a variety of assessment strategies and tools;
- use assessment to inform instruction, guide next steps, and help students monitor their progress towards achieving their learning goals;
- analyze and interpret evidence of learning;
- give and receive specific and timely descriptive feedback about student learning;
- help students to develop skills of peer and self-assessment. (Ontario Ministry of Education 2010, pp. 28–29)

However, despite the presence of assessment policies focused on AfL, teachers still require significant professional learning support to shift their pedagogical practice towards an AfL orientation. Ongoing efforts to provide such meaningful professional learning highlight the critical need for classroom-embedded, in-service teacher learning opportunities to mobilize new educational policies into effective instructional practices (e.g., Borko et al. 2008; Darling-Hammond and Richardson 2009).

In recognition of the need for more effective models of in-service learning opportunities to support teachers' integration of AfL practices, the Ontario Ministry of Education in partnership with two school boards engaged in a two-year professional learning project aimed at Building Capacity in Assessment for Learning (BCAfL). This BCAfL project represented a partnership with the purpose to support shared and complementary goals: (a) purposeful professional learning about AfL, and (b) enhanced capacity to effectively implement AfL across school board classrooms. The conception of AfL adopted in the BCAfL professional learning project was predicated on the work of Black and Wiliam (1998), which was later formalized as AfL by the Assessment Reform Group (2002) and other scholars (e.g., Stiggins 2002; Black and Wiliam 2006; Wiliam et al. 2004). Representatives from the Ontario Ministry of Education worked collaboratively with the two school boards and external researchers to engage in research that would document the professional learning gains affiliated with this project. The specific purpose of this research was to examine how professional learning structures within the project supported teachers' learning towards greater implementation of AfL policies within their classroom practices. Our findings highlight components of the BCAfL professional learning project that positively supported teachers' learning and implementation of AfL. Overall, these findings support the need for responsive, scaffolded, and embedded structures for teacher learning that explicitly target key AfL strategies within a collaborative framework of learning. Our chapter concludes with specific recommendations for future research and practice aimed at greater AfL integration.

9.2 The Professional Learning Project in Ontario

The primary goal of the professional learning project was to support teachers' understandings and integration of AfL within their classrooms. Ultimately, by increasing teachers' capacities to integrate AfL, it was anticipated that students would subsequently develop the knowledge and skills to become more independent, self-monitoring learners leading to increased student achievement. In order to fulfill this primary goal, the two-year professional learning project engaged teachers in (a) eight large-group, centralized learning sessions focused directly on AfL concepts and practices; and (b) sixteen classroom-based instructional rounds to observe and explore the implementation of AfL (City et al. 2009; Marzano 2011). Both of these activities were feedback rich, providing opportunities for teachers to share their evolving understandings of AfL, set learning goals, co-plan AfL implementation strategies, and engage in assessment and monitoring tasks to track their own learning.

Specifically, the instructional rounds component involved observing peer teachers integrate AfL strategies within their own classrooms. The observations were not only guided by a focus of inquiry but also followed by a collaborative debriefing, which consisted of focused conversation about the observation guided by reflective questions and prompts. In preparation for an instructional rounds visit, teachers selected specific AfL learning goals and supported one another in planning for and implementing these goals to support students' learning and adoption of AfL strategies. Through peer observations and assessment consultant debriefing, teachers collaboratively engaged in learning about AfL within their local teaching contexts. Teachers worked directly with colleagues in their own school context, in other schools, and in the neighboring separate school board to engage in the large-group learning sessions and the instructional rounds visits. Further, the Ontario Ministry of Education and school board assessment consultants facilitated and supported these various professional learning opportunities. These support structures served to help teachers interpret AfL theory and policy within their practice. For example, personnel from the Ontario Ministry of Education guided teachers through brainstorming activities on what AfL could look like in their context of practice based on provincial policies and AfL principles. They further engaged teachers in planning lessons and tasks that integrated AfL throughout instruction and then engaged teachers in peer feedback opportunities on their work.

9.3 Collecting Evidence on AfL Professional Learning

As part of our collaborative research study about this AfL-focused professional learning project, evidence regarding teachers' changing conceptions and practices of AfL was collected over the two-year period across all teacher participants through varied data collection methods: (a) observations of professional learning

days, (b) classroom and instructional rounds observations, (c) two teacher surveys, and (d) teacher interviews. Data were collected from 88 teachers who represented various backgrounds and degrees of AfL exposure. Participants ranged from being first year teachers to those having over 20 years of teaching experience. Some teachers had participated in a previous professional learning program focused on AfL integration, but for the majority, AfL was a new concept. Teachers were split between teaching divisions (i.e., Elementary—Grades K-8, and Secondary—Grades 9–12).

Observations occurred during each of the centralized professional learning days. These learning days included direct instruction on AfL strategies and the instructional rounds approach, as well as co-planning periods so that teachers could jointly identify opportunities for the integration of AfL within their lesson plans. Observations also occurred during eight of the instructional rounds days with eight subsequent classroom visits. The focus of observation during these periods was on teachers' intended and enacted implementation of AfL strategies. At the end of each year of the BCAfL professional learning project, all 88 teachers were invited to complete an open-ended survey that asked them to describe their understandings of AfL, professional learning goals, implementation strategies, as well as the strengths and weaknesses of the project. At the end of each year, 15 teachers were interviewed to collect additional data on the effectiveness of the BCAfL professional learning project. These semi-structured interviews were approximately one hour in length, held in teachers' classrooms, audio recorded, and transcribed verbatim. Interview questions focused on BCAfL professional learning project components and teachers' previous experiences that supported and limited their learning and implementation of AfL within the project.

Qualitative data from the surveys, observations, and interviews were collectively analyzed using a standard thematic coding process (Patton 2002). From an initial analysis of data, a code list was generated and then codes were grouped into broader thematic categories. Codes with a high degree of co-occurrence (i.e., two or more codes used for same data) were collapsed into broader categories if they represented similar themes. All data were coded by two researchers, with an inter-rater reliability of 96 %. In cases where data were coded differently, raters discussed code assignment until consensus was reached. Naming of thematic categories was negotiated across two researchers in relation to participants' quotations and previous literature. For the purpose of this chapter, we identified five themes that directly related to policies and structures that support teachers' learning and integration of AfL within their classroom contexts.

9.4 Supporting Teacher Learning

Five themes became evident related to structures that supported teacher learning and implementation of AfL. These five themes highlight the value and role of responsive, scaffolded, and embedded structures that move teachers along an AfL

learning continuum. The themes are: (a) a networked model for professional learning, (b) direct instruction in AfL, (c) observing assessment in action, (d) engaging in a reflective feedback loop, and (e) supports that maintain momentum for teacher learning.

9.4.1 A Networked Model for Professional Learning

Teachers in the BCAfL professional learning project found the highly networked learning model that connected them from within and across schools and school boards beneficial. Throughout the project, teachers described the benefits of the ongoing discussions with peers within and outside their teaching contexts about pedagogical issues. Teachers consistently noted that they generated a variety of AfL ideas through these discussions, which became a source of support and resources to promote their AfL goals.

Within the networked model that characterized the BCAfL professional learning project, teachers emphasized structures that were required to maintain a coherent and generative learning experience about AfL. They sought resources that would help them see what successful practices looked like in the contexts of the subjects they taught, and a variety of exemplars that would address specific, yet common, dilemmas in AfL implementation. Specifically, teachers in this project wanted to discuss different AfL approaches, share ideas for ways of providing feedback to students (oral/written, mini-conferences, etc.), and develop methods to help students keep/record/remember/refer to their personal learning goals. One teacher noted, ‘we all struggle with some of the same issues. It is useful for us to talk about how to approach these challenges in our own classrooms.’ Teachers indicated that working and sharing ideas with colleagues were the most helpful practices in subsequently supporting their students’ learning. The result was that these teachers believed that working with partner schools and/or different school boards would be an important component of any professional learning project focused on AfL implementation. The centralized sessions in this project were also considered highly valuable for teachers to negotiate and discuss their various attempts at implementing AfL. There was a perceived value to hearing the experiences of others.

Within the BCAfL professional learning project, teachers emphasized the importance of administrative support in creating a culture of risk taking and learning in the classroom so that they could share their learning with their peers. ‘I can imagine it would be quite a challenge if you had a principal that really wasn’t on board.’ Another teacher continued, ‘because if you’re working without the support of administration, there’s less of a consensus amongst or a sense of collegiality in the implementation of assessment for learning that takes place.’ As teachers became more confident with AfL practices, they were also able to support and promote AfL at the school level with teachers who were not initially involved with the project. ‘Lead teachers have emerged and they are sharing our work with other teachers. This learning is spreading.’ Accordingly, a networked learning

approach precipitated a collaborative culture within the schools and the school boards, which focused on AfL. One teacher recognized this approach by stating: ‘If individuals are provided meaningful opportunities for collaboration with a focus on assessment for learning, then we will further develop a culture of learning/collaboration/shared understanding within our school board.’

Ultimately, the networked learning approach to professional learning contributed towards increased feelings of confidence and competence among teachers as leaders and as learners. ‘If we share our resources, ideas, and strategies as professional learners then we will become more competent in fostering a culture of self-sufficient and independent learners.’

9.4.2 Direct Instruction in AfL

Our work continues to highlight the value of instruction for teachers to develop new instructional knowledge and skills. Teachers consider direct instruction about AfL a critical component of their learning. These teachers began the BCAfL professional learning project with varying backgrounds in AfL, and the centralized learning sessions helped create a shared knowledge base across teachers. Direct instruction came largely from external experts linked to the project including school boards’ assessment consultants. These experts provided teachers with foundational knowledge and practices in AfL that they could explore more deeply during the instructional rounds observations. As one teacher pointed out, ‘I liked how assessment for learning strategies were used during our workshops that directly modeled for us how to use it in our own classes.’ Teachers suggested that learning and collaborating with peers was enhanced with the inclusion of external experts who not only discussed but modeled AfL for professional learning purposes. There was less focus on expecting the principal or school board personnel to be the ‘resident expert’ and more appreciation for the power of collaborative learning through centralized learning sessions. External experts added motivational and inspirational aspects to learning, especially in this context of AfL, a complex and deeply situational or contextual (e.g., embedded) design for professional learning.

For teachers who were new to the concept of AfL, the direct instruction was critical in ‘getting us started with understanding what it’s all about.’ However, even for teachers who already had many AfL strategies in their repertoire, further direct instruction helped them bring these methods together in a cohesive manner, with an awareness that these methods were all about AfL. Teachers felt they were becoming more purposeful in the strategies they employed in their classroom practices, and they were more readily able to identify, name, and justify AfL in their classrooms. As teachers’ foundational knowledge of AfL continued to increase, they also acknowledged that they were becoming more self-critical, thoughtful, and flexible in their instructional practices. As one teacher stated, ‘because I know more about assessment for learning, I can better tell when I’m doing it and when I could be doing it.’

The increased knowledge of AfL gained from direct instruction directly impacted teachers' planning. As most centralized learning sessions encouraged teachers to identify learning goals for themselves and their students around AfL, they began to use AfL language and priorities in structuring their teaching and learning plans. They ensured that formative assessment activities were embedded in lessons and that students had opportunities to respond to feedback. Teachers noted their increasing efforts to purposefully plan for and pedagogically align, 'using anchor charts,' 'co-constructing success criteria,' 'letting students write the learning goals,' and 'building in peer- and self-assessment activities.' It was evident across the data that direct instruction in AfL had positive impacts on teachers' foundational knowledge to use and plan for the effective use of AfL in their classrooms.

9.4.3 AfL in Action: The Role of Classroom-Based Observations

Observing AfL in practice through classroom-based observations (i.e., instructional rounds) was highlighted as a key structure that supported teachers' learning in this project. Teachers valued the opportunity to observe their colleagues' classrooms as a way to reflect on and improve their own teaching practices. One teacher noted:

I think the easiest way to improve is to watch someone else because they're going to do things differently than the way you would do it...and seeing those different tactics and strategies helps to keep you from standing still.

Teachers became more confident in their abilities to implement and integrate AfL practices in their classrooms by watching how other teachers were able to use AfL language and strategies in their instruction. Through classroom observations, teachers were also able to observe instances in which teachers struggled to fully integrate AfL. These challenges led to significant learning as teachers were better able to relate to one another through implementation challenges, jointly brainstorming methods for resolving challenges, and ultimately, moving towards a greater understanding of the nuances in implementing AfL. 'By watching other teachers try AfL, and seeing how there are difficulties, it brings us closer together. We can discuss our challenges and work to support each other.'

These teachers also found the debrief sessions after the classroom observations to be a key component to their professional learning in AfL. 'Instructional rounds were very useful. In particular, the debrief sessions during which we shared and discussed our observations.' Teachers embraced a professional collaborative inquiry stance throughout these sessions. They made a concerted effort to improve their classroom practices and appreciated the guidance and suggestions provided by other teachers. One teacher asserted, 'if you want to become better at assessment for learning, perhaps you need to be able to identify what worked and what didn't.' These debrief sessions provided a chance for 'people to come in and say, 'you know what? This was successful, but you could do this to make it better' and 'an

opportunity to ask those questions because it's risk free.' Key to the success of this process was the presence of a nonjudgmental environment that allowed teachers to feel comfortable giving and receiving feedback. The teachers were then very willing to engage in further conversations about AfL integration. Combined, the observations of practices and the end of day debriefs helped to 'close the gap between what I want the students to learn and what I actually think they're learning.'

While the instructional rounds were certainly valuable as a structure to support the integration of AfL in classrooms, our research suggests these instructional rounds may be less effective as an entry point for learning about AfL. We observed that the instructional rounds process was most beneficial for those teachers and administrators who already had a developing or foundational knowledge of AfL. Certainly, the assessment-related activities were richer in those classes in which the teacher had previous experience with AfL through prior school board initiatives. Similarly, the teachers observing instructional rounds classes seemed to benefit more if they themselves had a solid working knowledge of AfL. Previous exposure and experience with AfL, through direct instruction from experts during professional development opportunities, may help teachers become more comfortable having observers in their classroom and enable them to take greater 'risks' to expand their AfL strategies.

9.4.4 Reflective Feedback Loop

Teachers involved in the BCAfL professional learning project indicated that one of the greatest positive effects on their instruction and assessment practices came from personal reflection. They consistently expressed a desire for 'time to reflect' on the impact of AfL on their teaching and students' learning. As one teacher noted when asked to think about the impact of the project, 'It is surprising how everything really connects.' Teachers' involvement in the project enabled them to question 'things that I wouldn't have been questioning before...' and to 'have grown significantly in my professional learning.' The teacher data provided evidence of ongoing teacher growth and reflection about their instructional practices related to AfL, and this growth became a powerful element of change in teachers' professional practices. For example, teachers recognized they were experiencing implementation challenges in different classroom contexts and at different grade levels. 'All students were able to use success criteria to give feedback, however, I found that the junior and intermediate students became more skilled at this.' Another teacher pointed out, 'it's easier in elementary in this respect. In high school you only have four months, and the process requires the students to be here when you're generating the success criteria.'

In addition to reflecting on the teaching and learning occurring in their own classrooms, teachers also expressed a need for time to receive feedback on their reflections from colleagues. Personal reflection became more powerful when it was

shared with others, and feedback was given that responded directly to the teachers' initial reflections. Teachers expressed a need for release time to practice what they were learning and to discuss their personal reflections with their peers. 'Just as students need lots of opportunities to practise their skills, so the teaching staff needs the same opportunities to practice to increase their comfort level.' Reflecting on how the project had an impact at the school level also enabled leaders to make decisions that would continue to spread AfL learning at their school. 'Our plan is to extend this more formally next year and have those teachers train others on staff who are interested in adopting the AfL framework.'

The spread of AfL learning through this reflective feedback loop at the school level further promoted a culture of assessment and increased assessment leadership in schools. And this leadership was observed in others besides the school administrators. Teachers in the BCaFL professional learning project were taking on leadership roles, modeling assessment strategies, and leading conversations to share their learning about AfL. One teacher pointed out that 'at our school, a number of teachers have become "experts" in AfL practices... at staff meetings and informally, their knowledge and experience is shared with other teachers.' As more teachers became involved in the project, and developed a foundational knowledge and comfort with AfL processes and practices, they were able to share their learning and knowledge with others. 'Our whole staff has been involved in several different AfL inquiries that have allowed varying groups to develop their confidence in implementing AfL strategies.' As the pool of teachers who are knowledgeable and comfortable with AfL grows, so to do the opportunities to share, learn, and reflect together.

9.4.5 Supports for Maintaining Momentum

Teachers involved in the BCaFL professional learning project continually spoke of its value in providing opportunities to support and motivate their ongoing professional learning. These opportunities helped to maintain momentum, a key element for them in creating classrooms where AfL strategies would be embedded as a natural part of teaching and learning. While critical, this momentum was also hard to develop and maintain given the myriad of responsibilities teachers face. 'Momentum—I believe this has been the hardest thing to maintain. When everyone is on board it is much easier to keep focused.' Teachers described ideas for maintaining momentum moving forward: 'we've talked about some things like assessment for learning lunches, things to keep us fresh and motivated and to keep our momentum going.'

Teachers understood there was still much to learn and that they would require an accessible support network to assist them in implementing the program to achieve their professional learning goals. One potential advantage of having teachers at different places in their learning was the ongoing desire of the teachers to continue to observe and have discussions with teachers about AfL integration. One teacher

pointed out that ‘there are still teachers who are not using AfL in their classroom and when students transfer to the next grade we have to start at square one.’ Another stressed that there are ‘a number of very strong teachers who are involved in this project and who are available for assessment leadership in the school.’ These teachers looked for opportunities to model the use of AfL principles, and to share with other teachers, in order to maintain momentum in teacher learning. While it was evident that ‘pockets of learning cultures’ had developed with respect to AfL, for these ‘pockets’ to spread into a more systemic culture, the program as a whole and the teachers within the program would require ongoing support. There was a resounding sentiment that for AfL to become systemic, teachers, principals, and school board leaders would have to maintain momentum. They would need to not only deepen their learning with existing teachers in the BCAfL professional learning project but also spread the learning across schools and the school board. ‘We need to keep going and share our learning. Continuation is so important; it’ll embed the AfL process so much smoother if it doesn’t seem like it’s just all these separate pieces, if we keep at it.’

The integration of AfL at the student level (e.g., using success criteria, learning goals, peer feedback, self-reflection) also requires continued classroom support. Based on the teachers’ reflections, students made significant gains throughout the BCAfL professional learning project. Through continuous teacher efforts with AfL (e.g., prompting students to apply feedback), one teacher noted that, ‘if they don’t understand something I find that they’re willing to ask questions because they know it’s an opportunity to really develop; it’s not one shot.’ Another teacher said, ‘At the end they were conditioned to it and success criteria were just firing off. The feedback and the self-assessment all wrapped in nicely together.’ Overall, teachers observed students using feedback more effectively and becoming more comfortable using learning goals and success criteria through persistent attention to these AfL strategies. Teachers noted increases in students’ independence and ownership for their learning and changes in the sense of community in the classroom. Students were having learning-related conversations without teacher involvement and highlighting their growing ownership of their own learning. ‘All of a sudden they’re making the transition now into their learning activities that I am not a part of directly.’ It was evident that students were making significant gains, but as with the teachers, a commitment to providing continued support would be required for AfL to become embedded in students’ learning practices.

9.5 Implications for Professional Development and Policy

The search continues for models of effective professional learning (professional development) and for policies that result in changing teachers’ instructional practice. Certainly, there is general agreement that professional learning must be ongoing and embedded into teachers’ everyday practices. It also requires continued effort and exploration. Nevertheless, such professional learning is likely more

challenging when the focus is on aspects of teaching in which teachers are less knowledgeable and confident. Classroom assessment is one such aspect of concern for teachers, especially with the relatively recent introduction of concepts such as Assessment *for*, *as*, and *of* Learning. Teachers are now expected to integrate formative assessment practices, and at the same time, also help their students use this information to guide their own learning. The intentions of the BCAfL professional learning project were to use current models of professional development to help teachers begin to understand the complexities of classroom assessment, and begin to implement effective formative assessment practices in their classrooms. The centralized professional learning days coupled with the instructional rounds provided the opportunities to meet these intentions.

Our research findings from the BCAfL professional learning project support the use of embedded models of professional learning. Further, our work indicates that such models must develop a long-term strategy, especially when such learning requires the implementation of new and unfamiliar instructional and learning practices. In our case, we were attempting to implement new conceptions of formative classroom assessment. Derived from our findings are the following continued areas of development for future professional learning on AfL:

1. Develop a trusting professional learning environment to enable teachers to take the necessary risks to develop and refine their practices.
2. Recognize that teachers may be at different levels of understanding with respect to new practices, and that this will impact their comfort and confidence in the implementation of these practices.
3. Help teachers develop their fluency in terms of knowledge and practices with AfL strategies (e.g., sharing success criteria and learning goals).
4. Continue to focus on developing knowledge, skills, and practices related to feedback, and peer- and self-assessment, mainly by practicing these skills during professional learning sessions.
5. Ensure teachers, and subsequently students, recognize and can articulate the value of these practices to develop self-regulation skills to support their further learning.

Combined, these findings highlight the value of a collaborative professional learning structure that pairs teachers who are novice learners about AfL with those who are developing leadership capacity in AfL. Interestingly, even those teachers with more extensive AfL skills continued to see themselves at the beginning stages of implementing AfL practices, and were only becoming marginally comfortable promoting their knowledge beyond the confines of the project itself. Within the project, the collaborative structure provided a positive professional learning environment. These teachers looked forward to modeling the use of AfL principles and sharing with other teachers in the project. There was evidence throughout the data of ongoing teacher growth and reflection about their instructional practices related to AfL, and this growth became a powerful element for change in their professional practices. It was evident that ‘pockets of learning cultures’ had developed with

respect to AfL. Nevertheless, for these ‘pockets’ to spread into more systemic AfL practices and further learning, the project as a whole, and the teachers within the project, require ongoing resources and supports, including continued opportunities to observe and co-plan with other teachers. Specifically, there is a need to establish policies that both govern how assessment is practiced in classrooms (i.e., AfL integration policies) but also policies that shape assessment education requirements for teachers. Directing policy development towards these two ends will help facilitate greater integration of AfL in schools through focused and directed professional learning activities. Establishing AfL integration and assessment education policies at ministry, school board, and school levels will encourage a systemic approach to AfL implementation with a greater likelihood of AfL adoption. Further, these policies should consider the multiple roles and responsibilities required for a systemic shift towards AfL; this means, implicating school board administrators and consultants, school principals and department leads, and external support networks in service of teacher AfL learning.

More importantly, the sustainability of projects such as the BCAfL professional learning project also require an expansion plan to move the learning to other educators and schools beyond those involved in the initial project. Along with having the resources to support such expansion, there is likely a need for a communication strategy and policy structure to disseminate the developing knowledge and skills about AfL. Success stories from those involved in the professional learning can serve as a powerful incentive to encourage other teachers to begin to explore these new emerging practices in their own classrooms. While the teachers involved in this project may not yet see themselves as instructional leaders, their experiences and developing knowledge are critical to the sustainability and expansion of valuable professional learning initiatives. These are the teachers who must encourage other, often less interested, teachers not involved in the professional learning to explore these developing instructional practices. Leveraging existing teacher learning and building upon the stories of professional development projects, such as BCAFL, has the potential to shape meaningful policies aimed at teacher learning. Policy development at provincial and school board levels should respond to research on teachers’ preferred methods of professional learning and integrate these methods with an AfL orientation to teacher development. As evident through this research, when teachers practice AfL strategies in their own professional learning they generate a greater understanding of AfL principles and implementation strategies. Coupling AfL practices with provisions for professional development will yield assessment education policies with promising potential to shape teacher practice.

While our research focused on efforts to help teachers develop a foundational understanding of current conceptions and practices around AfL, the findings provide a sound foundation for the professional learning of complex teaching and learning practices. The extended collaborative nature of the project supported teachers’ learning about AfL. There was sufficient time to discuss and make changes to the model. As one example, our research resulted in refinements to the structure of the central professional learning days and the instructional rounds days.

These changes resulted in greater synergy and links between the two activities, while also providing further opportunities to explore and discuss AfL practices at deeper levels. Our remaining challenge, and the challenge for other professional learning efforts related to AfL, is the lack of evidence of long-term sustainability and impact on teachers' practices and students' learning. Such challenges can only be met through ongoing monitoring and review as articulated in school board and ministry level policies aimed at AfL implementation. In the case of the BC AfL professional learning project, we have little evidence regarding the impact of the project on students' learning. Such evidence could be obtained through continued observations of the classrooms of teachers involved in the project. Not surprisingly, as researchers, our desire would be to conduct these observations over an extended period along with the collection of other forms of data. Presenting additional empirically supported examples of AfL implementation is one step forward. We also see value in pursuing the development of systemic policies that support AfL integration in classrooms as well as assessment education for teachers, principals, and educational administrators. In particular, articulating a collaborative approach to assessment learning appears important, with clear roles for leaders and teacher learners. With directed professional learning efforts and targeted policy development, AfL integration across Canadian schools is possible.

References

- Alberta Assessment Consortium. (2005). *A framework for student assessment*. Edmonton, AB: Author.
- Assessment Reform Group. (2002). *Assessment for learning: 10 principles*. https://assessmentreformgroup.files.wordpress.com/2012/01/10principles_english.pdf. Accessed January 6, 2015.
- Black, P., & Wiliam, D. (1998). *Inside the black box: Raising standards through classroom assessment*. London: Kings College.
- Black, P., & Wiliam, D. (2006). Developing a theory of formative assessment. In J. Gardner (Ed.), *Assessment and learning* (pp. 81–100). London, UK: Sage.
- Borko, H., Jacobs, J., Eiteljorg, E., & Pittman, M. (2008). Video as a tool for fostering productive discussions in mathematics professional development. *Teaching and Teacher Education*, 24, 417–436.
- British Columbia Ministry of Education. (2002). *Accountability framework*. Retrieved from <http://www2.gov.bc.ca/gov/topic.page?id=DCC1C4815C65494E98F53969B67DA3B4&title=Accountability%20Framework>
- British Columbia Ministry of Education. (2004). *Classroom assessment and evaluation*. Victoria, BC: Author.
- City, E. A., Elmore, R. F., Fiarman, S. F., & Teitel, L. (2009). *Instructional rounds in education: A network approach to improving teaching and learning*. Cambridge, MA: Harvard Education Press.
- Council of Ontario Directors of Education. (2006). Consistency in classroom assessment. Retrieved from: <http://www.cpco.on.ca/ProfessionalDevelopment/Resources/CCA-Final.pdf>
- Darling-Hammond, L., & Richardson, N. (2009). Research review/teacher learning: What matters. *Educational Leadership*, 66, 46–53.

- Davies, A. (2007). *Making classroom assessment work* (2nd ed.). Courtenay, BC: Connections Publishing.
- Harlen, W. (2006). On the relationship between assessment for formative and summative purposes. In J. Gardner (Ed.), *Assessment and learning* (pp. 87–103). Los Angeles, CA: Sage Publications.
- Klinger, D. A., DeLuca, C., & Miller, T. (2008). The evolving culture of large-scale assessments in Canadian education. *Canadian Journal of Educational Administration and Policy*, 76. Retrieved from <http://www.umanitoba.ca/publications/cjeap/articles/klinger.html>
- Manitoba Education. (2006). *Rethinking classroom assessment with purpose in mind: Assessment for learning, assessment as learning, assessment of learning*. Winnipeg, MA: Minister of Education, Citizenship and Youth.
- Marzano, R. J. (2011). Making the most of instructional rounds. *Educational Leadership*, 68(5), 80–82.
- Ontario Ministry of Education. (2010). *Growing success: Assessment, evaluation, and reporting in Ontario schools*. Toronto, ON: Queen's Printer.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Popham, W. J. (2004). Why assessment illiteracy is professional suicide. *Educational Leadership*, 62(1), 82–83.
- Ryan, K. (2002). Assessment validation in the context of high-stakes assessment. *Educational Measurement: Issues and Practice*, 21(1), 7–15.
- Stiggins, R. (2002). Assessment crisis: The absence of assessment for learning. *Phi Delta Kappan*, 83(1), 758–765.
- Volante, L. (2006). Reducing bias in classroom assessment and evaluation. *Orbit*, 36(2), 34–36.
- Volante, L. (2007). Educational quality and accountability in Ontario: Past, present, and future. *Canadian Journal of Educational Administration and Policy*, 58. <http://www.umanitoba.ca/publications/cjeap/pdf%20files/volante.pdf>. Accessed January 6, 2015.
- Volante, L., & Earl, L. (2013). Standards, accountability, and student assessment systems: An international overview. *Education Canada*, 54(3). Retrieved from: <http://www.cea-ace.ca/education-canada/article/standards-accountability-and-student-assessment-systems>
- William, D., Lee, C., Harrison, C., & Black, P. (2004). Teachers developing assessment for learning: Impact on student achievement. *Assessment in Education: Principles, Policy, and Practice*, 11(1), 49–65.