**Professional Learning Communities and Student Achievement:**

**Correlating School Culture with Student Performance**

The introduction of professional learning communities as an educational reform took place under the premiership of Bernard Lord in 2003. Three years later, in 2006, when the government changed, Premier Shawn Graham continued to support professional learning communities as a way of reforming schools and improving student performance. In 2010, when David Alward became premier, the focus on PLCs as a reform decreased substantially and resources were shifted to the expansion of inclusive education (UDL). The decrease in resourcing PLCs was further impacted when in January 2012 the Minister of Education restructured New Brunswick’s school districts by reducing the number from 14 to 7. This action combined the nine Anglophone districts into four and the five Francophone districts into three. The amalgamation of school districts combined with the enthusiastic expansion of inclusion as a major part of the new government’s agenda overshadowed the efforts and successes that the former school districts had achieved regarding PLCs.

Between 2005 and 2010, Dr. Brien and I had developed and introduced a school-based instrument that identified the extent to which schools operated as PLCs. We had gathered data from and provided detailed reports to 50 New Brunswick schools. This led to a publication that highlighted the barriers and strengths associated with PLC implementation (Williams, Brien & LeBlanc, 2012). We then focused our research on a subset of 5 high schools and examined the relationship between PLC operations and student achievement. Midway in this last study the districts were amalgamated and we were forced to abandon our research. We did, however, develop a paper that analyzed the relationship over a two year period. That paper, which we bring to this conference, was first introduced at BELMAS – Edinburgh in 2013. In it we outline the patterns we found as we compared PLC operations and student achievement results. Today we would like to share the progress we have made using a revised methodology developed to reinstitute our research.

Between 2005 and 2011 while Dr. Brien and I were conducting our research another very important development occurred. Colleagues with whom we were conducting PLC research at the ministry level were strategically incorporating the operational expectations for schools as PLCs into the provincial school review process. The school review process requires each school to be assessed over a three year cycle. This leads to a report that is generated by the assessment branch of the ministry to assist each school with the development of growth goals. Fortunately, the school performance assessment is mandated by the provincial ministry and therefore has not been relegated to a lower priority as a result of the new political agenda.

In 2013 an informal review of the 138 items that are used to assess school performance determined that approximately 80 percent of the items related to tenets of a professional learning community. This meant that data on schools, both archived and still being generated, if proven to be descriptive of PLC operations, might now be available to us. Over the next five months a team of school reviewers from the ministry worked with Dr. Brien and I to extract from the 138 items, those that captured the essential tenets of a PLC. At present, using a factor analysis on 65 items that the team deemed most promising, we have identified seven factors that are aligned with the tenets of a PLC. Our next step will be to compare the patterns created with these factors to the patterns created by the school instrument developed by Dr. Brien and I. We will do this by gathering data from our school instrument for schools that appear to score low, moderate and high on the seven factors from the school review instrument.

The second variable that our BELMAS/CCEAM paper studied was student achievement. Our review of the literature showed that in most studies student achievement was defined by a standardized test scores from an external assessment of student work. Taking our lead from Lambert (1998) we chose to define student achievement as more than standardized test scores gathered by the ministry once a year. We chose to gather teacher grades in a select sample of courses over the four years students were in high school. Gathering teacher assessment scores for each student, although possible, had proved difficult in our subset study. The method we used is outlined in our 2012 paper. To recap the process, we drew final course grades from a provincial database that contains every final teacher-grade for every student in the five high schools. The difficulty came from the need to maintain confidentiality and to work through district technicians on an assessment program that was being impacted by the district amalgamation process. These difficulties were overcome when we entered into a research partnership with the evaluation branch of the ministry of education.

Our new partnership with ministry colleagues proved fortuitous in two ways - first they were the individuals responsible for school reviews, and second they are also responsible for maintaining and analyzing the provincial database that contains all student achievement data gathered from school records. Working with colleagues who were responsible for both the school review and student achievement data sets turned out to be mutually beneficial, overcame the confidentiality issues, and will enable us to expand our study to all high schools in the province.

Our focus for the next two years will be on high schools because this is the level at which student achievement data is stored uniformly. Over the next year a new system for gathering and storing achievement data for all grades levels will be implemented. By the time we have our analysis of high school data operating seamlessly we expect that the province will have converted to a single system for gathering and storing student achievement data from K-12. Then we should be able to expand the scope of our research to include all schools and all students.