



THE TEACHER LEARNING AND LEADERSHIP PROGRAM: RESEARCH REPORT FOR 2014-15

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THE TEACHER LEARNING AND LEADERSHIP PROGRAM:

RESEARCH REPORT FOR 2014-15

BACKGROUND

Launched in 2007, the Teacher Learning and Leadership Program (TLLP) is a joint initiative through partnership between the Ontario Teachers' Federation (OTF) and the Ontario Ministry of Education with shared goals to:

- support experienced teachers to undertake self-directed advanced professional development;
- develop teachers' leadership skills for sharing their professional learning and exemplary practices; and

- facilitate knowledge exchange for spread and sustainability of effective and innovative practices.

Following completion of our initial research study of the TLLP (Campbell, Lieberman & Yashkina, 2013), we were invited to submit a proposal for a longitudinal study, beginning in 2013-14. We provided a report of findings and work in progress during 2013-14 (Campbell et al., 2014).

This Research Report provides a progress update on work conducted and in progress during the 2014-15 year of research.

1

RESEARCH QUESTIONS AND METHODS

2

Developing from the research questions provided by the Ministry TLLP team, the research questions for the current study are:

1. What is the impact of TLLP projects for:
 - a. Teachers' professional learning (TLLP teacher leaders, TLLP project teachers, teachers beyond TLLP project)?
 - b. Teachers' knowledge, skills and practices (TLLP teacher leaders, TLLP project teachers, teachers beyond TLLP project)?
 - c. Teachers' leadership skills and experiences (TLLP teacher leaders, TLLP project teachers, teachers beyond TLLP project)?
 - d. Other adults affected by the TLLP projects (school and district staff, school and district administrators, parents, community members, others as relevant)?
 - e. Student engagement and learning?
2. How is learning being shared beyond the TLLP project team?
 - a. What approaches to sharing learning are being used?
 - b. How does the sharing of learning affect participants?
 - c. What approaches appear to support the spread of knowledge and changes in practice?

- d. What approaches appear to support implementation and sustainability of improvements in practice?
 - e. What successes can be identified?
 - f. What challenges are encountered? And how can they be mitigated?
 - g. What is unique about the TLLP approach for knowledge exchange and sharing of successful practices?
3. What longer-term impact from participating in TLLP projects can be identified (for TLLP teacher leaders, for TLLP project team members, for schools, for districts and for other participants affected)?

The methods being used in the longitudinal research study are:

- a. Continue analysis of TLLP cohort data for approved projects and for Final Reports (Cohort 5 onwards)
- b. Observe TLLP Leadership Skills for Classroom Teachers and Sharing the Learning Summit
- c. Survey of all TLLP Projects' Teacher Leaders
- d. Mini Pre/Post Surveys of TLLP Participants
- e. Provincial Knowledge Exchange: Monitoring Sharing of Knowledge and Practices Through a PKE Log
- f. Support Teacher Leaders to Write Vignettes
- g. Case Studies: PKE Projects
- h. NING and Social Networking Analysis
- i. Focus Groups with Ministry and OTF Provincial TLLP Leaders
- j. Reviews of relevant research literatures

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RESEARCH CONDUCTED AND FINDINGS FOR 2014-15

Below we provide an update on progress for each of the methods and analyses proposed and contracted for the period 1 April, 2014 to 31 March, 2015.

3.1

LEARNING FROM PREVIOUS AND CURRENT TLLP PARTICIPANTS ACROSS ONTARIO

In this section, we provide findings from a provincial survey conducted with former TLLP teacher leaders, plus vignettes written by TLLP teacher leaders about their experiences.

3.1.1

PROVINCIAL SURVEY

In 2014, we designed a survey of all TLLP teacher leaders from Cohorts 1-7 to investigate teachers' experience with TLLP and impact, spread and sustainability of TLLP projects and changes in practice provincially. The survey questions were designed in collaboration with the Ministry of Education and OTF in 2013-2014. The survey was administered in October-November 2014 via SurveyMonkey.com. An invitation letter with a link to the survey was emailed to all former TLLP project leaders (Cohorts 1-7) or 566 recipients. Since the contact list for the TLLP leads has not been updated for previous cohorts, email addressed for at least 51 recipients turned out to be no longer valid. Several follow up emails were sent to decrease non-response bias and increase response rate. As a result, out of 515 recipients

(that we assume had received a survey invitation), 243 completed the survey. In other words, the response rate for this survey is 47% which is good, considering that an average response rate for online surveys is merely 30% (the Division of Instructional Innovation and Assessment at the University of Texas at Austin, 2007). Our sample is representative of various TLLP population criteria such as Cohorts, school boards, panels, project sizes and themes (see next section) and its size was sufficient for all intended calculations.

DEMOGRAPHIC INFORMATION

We asked respondents for information concerning their current position and their teaching experience.

Current position

Out of 243 survey respondents, the majority (70%) were regular classroom teachers. Fewer respondents identified themselves as formal teacher leaders (8%), special education teachers or coordinators (5%), various resource teachers, program coordinators, librarians, guidance counsellors, and board consultants. Eight respondents were school administrators, and one respondent was a superintendent.

Table 1: Current Position

What is your current position?	#	%
Classroom teacher	171	70.4%
Formal teacher leader	20	8.2%
Special Education teacher/ coordinator	13	5.3%
School administrator	8	3.3%
Other	44	18.1%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

Teaching experience

The majority of respondents (79%) have more than ten years of teaching experience. This is not surprising as the purpose of the TLLP is to support “experienced teachers whose choice of career is classroom” (Ontario Ministry of Education, n.d., a, p.3). Over time, the definition of eligible experienced teachers became “teachers who are beyond the induction stage” (Ontario Ministry of Education, n.d., b, p.4). As a result, 20% of the survey respondents have less than ten years of teaching experience, although less than 1% had fewer than six years.

Table 2: Years of Teaching Experience

How many years of teaching experience do you have?	#	%
0-5	1	0.4%
6-10	45	18.5%
11-20	126	51.9%
>20	65	26.7

PROJECT DESCRIPTION

Cohort

Unsurprisingly, the more recent the TLLP project experience was, the more project leaders participated in the survey (see Table 3). Nevertheless, all Cohorts are represented. 29 respondents indicated participating in more than 1 Cohort. While the majority of those were involved in a TLLP project twice (22 respondents), 4 respondents were involved three times, 2 respondents four times and 1 respondent indicated being involved in a TLLP project for 5 years!

Table 3: TLLP Cohort

What year(s) did you participate in the project?	#	%
Cohort 1: 2007-2008	16	6.6%
Cohort 2: 2008-2009	19	7.8%
Cohort 3: 2009-2010	25	10.3%
Cohort 4: 2010-2011	36	14.8%
Cohort 5: 2011-2012	39	16.0%
Cohort 6: 2012-2013	65	26.7%
Cohort 7: 2013-2014	75	30.9%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

School board

Even though the projects from the French boards are underrepresented in the survey data, they are proportional to the number of the actual TLLP projects conducted.

Table 4: School Board

During the course of the project, what board did you work at?	#	%
French Catholic	13	5.3%
French Public	8	3.3%
English Catholic	105	43.2%
English Public	106	43.6%
School Authority	5	2.1%

Project team size

A wide range of TLLP team sizes is represented. The number of people on a TLLP team ranged from 1 to 90, with an average of 4.5 persons per team. The majority of projects (61%) were small-team projects which involved 2 to 4 people. Almost one quarter (23%) of survey respondents were leaders of medium and large size teams, while about 10% of respondents represented single-person projects.

Table 5: TLLP Project Team Size

How many people were on your TLLP team?	#	%
1 person - single	25	10.3%
2-4 people - small team	147	60.5%
5-10 people - medium team	55	22.6%
>11 people - large team	9	3.7%

Budget size

A wide range of budget sizes is represented. More than one quarter (26.3%) of the respondents reported receiving less than \$10,000 from the Ministry for their TLLP projects, and close to 40% received between \$10,000 - \$20,000. Only a few projects (1.6%) received over \$50,000.

Table 6: TLLP Project Budget Size

What was your budget for the TLLP project?	#	%
< \$10,00	64	26.3%
\$10,000 - \$20,000	96	39.5%
\$20,000 - \$30,000	39	16.0%
\$30,000 - \$40,000	21	8.6%
\$40,000 - \$50,000	3	1.2%
> \$50,000	4	1.6%

Panel

Both types of grade levels (elementary and secondary) as well as cross-panel projects are represented in the survey data. The majority of the projects were focused on the elementary grades.

Table 7: Panel

What grade level did your project focus on?	#	%
Elementary	140	57.6%
Secondary	70	28.8%
Both	27	11.1%

Project theme

A wide range of themes is represented in the data. The most prominent themes are Technology (41%), Differentiated Instruction (37%), Literacy (27%), and Math Literacy (27%). This is consistent with what we have observed and reported before (Campbell et al., 2014). While the Ministry theme list is quite comprehensive, 40 respondents indicated some other themes not covered in the list. The most popular one was 21st Century Skills (creative learning, inquiry-based learning, digital citizenship, higher order thinking and critical thinking). We suggest adding this theme to the list. Other mentioned themes were English language learners, health issues, student discipline, student engagement, inclusion, religious education, and environmental education.

Table 8: TLLP Project Theme (Rank Order)

What were the themes of your project?	#	%
Technology	99	40.7%
Differentiated Instruction	89	36.6%
Literacy	65	26.7%
Math Literacy	65	26.7%
Student Assessment	43	17.7%
Student with Special Needs	25	10.3%
PLC	18	7.4%
French	17	7.0%
Media Literacy	12	4.9%
Arts	11	4.5%
Sciences	10	4.1%
Transition Years	9	3.7%
Community and Parental Engagement	8	3.3%
Aboriginal Education	7	2.9%
Mental Health	7	2.9%
Social Justice	5	2.1%
Gender-Based Learning	4	1.6%
Other	40	16.5%
• 21st Century Skills	11	4.5%
• English Language Learners (ELL)	5	2.1%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

TEACHERS' PROFESSIONAL LEARNING

We examined teachers' professional learning in terms of activities undertaken and benefits reported by TLLP teacher leaders.

Professional learning activities

TLLP enables teachers to be the leaders of their own professional learning and development. In Table 9 we can see that TLLP participants chose to take professional learning into their own hands and engage in collaborative learning, planning, and teaching, and critically look at their own teaching as well as student learning; they also reviewed research conducted by others as well as conducted their own research. Activities associated with more traditional forms of professional development – such as attending workshops and conferences, enrolling in courses, and working with external experts – were also present but to a much lesser extent. TLLP members also involved the community and parents to reach their project goals.

Table 9: Professional Learning Activities (Rank Order)

What activities/strategies did you/your TLLP team engage in to improve your knowledge/skills/practice?	#	%
Teacher collaborative learning group	167	68.7%
Professional dialogue	164	67.5%
Self-reflection	155	63.8%
Analysis of student data/work	141	58.0%
Literature/research review	138	56.8%
Planning	131	53.9%
Action research	118	48.6%
Workshops/courses	113	46.5%
Networking (including online)	102	42.0%
Co-teaching	95	39.1%
Conferences/seminars	83	34.2%
Working with a specialist/expert	68	28.0%
Working with the community/service organizations	19	7.8%
Other	16	6.6%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

Teacher learning benefits

As a result of the TLLP-related professional learning activities discussed above, all of the TLLP members reported improvements in their knowledge, skills, and/or practice. Over three quarters (78%) of the respondents reported improvements in their knowledge and understanding; and three-quarters (75%) of respondents reported improvements in their instructional practices. This tells us that teachers did not only acquire new knowledge but they also successfully incorporated that knowledge into their teaching. Almost three quarters (73%) of the respondents reported improvements in communication and collaboration between teachers. Over half of the TLLP members felt more inspired to teach and try new things and more self-confident about their practice. Half of the respondents reported improvements in their technological and assessment skills. A third of the respondents also improved their classroom management skills, and a quarter became better researchers as a result of participating in a TLLP project. “Other” benefits included improved relationships with students, parents, community, and other teachers. A number of leadership skills were named; these will be discussed separately in the following section.

Table 10: Teacher Learning Benefits (Rank Order)

How did your learning and practice improve as a result of your engagement in the TLLP project?	#	%
New knowledge/Improved understanding	189	77.8%
Improved instructional practice	182	74.9%
Improved communication/collaboration between teachers	177	72.8%
Greater energy/inspiration	140	57.6%
Increased self-efficacy	132	54.3%
Improved technological skills	121	49.8%
Improved assessment skills	117	48.1%
Improved classroom management skills/practice	79	32.5%
Improved research skills	56	23.0%
Other	19	7.8%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

TEACHER LEADERSHIP

Originally, the TLLP Final Reports required to be submitted by projects did not include a section specifically to report on teacher leadership. We have previously recommended that a section on teacher leadership be included (Campbell et al., 2013) and this has been acted on by the Ministry and OTF in the redesign of the TLLP Final Report from 2013 onwards. However, in the absence of historical reporting about teacher leadership in the Final Reports, we decided to include this as a key area within the survey to ask current and former TLLP teacher leaders about the effects of TLLP on their leadership skills, recognition and potential career.

Effects on teacher leadership

Very encouragingly, only 3% of the survey respondents indicated that their involvement in the TLLP project had no effect on their leadership. The biggest effects are observed in the development of facilitation and presentation skills (74%) and project management skills (70%). About half of the respondents reported improvements in communication, interpersonal, and problem-solving skills. Close to 40% reported effects on change leadership. Conflict resolution skills were also reported, although less frequently (23.5%). Among “other” effects, the respondents mentioned improved connections and networking skills, increased ability to acquire new information and resources, and better understanding of themselves as a leader as well as of available leadership opportunities. In total, an impressive 97% of participants reported improvement in their teacher leadership skills.

Table 11: Effects on Teacher Leadership (Rank Order)

What kind of effect did your involvement in the TLLP project have on your leadership skills?	#	%
Improved facilitation and presentation skills	179	73.7%
Improved project management skills	171	70.4%
Improved communication/listening skills	132	54.3%
Improved interpersonal skills/relationship building skills	129	53.1%
Improved trouble-shooting/problem solving skills	115	47.3%
Improved change leadership skills	96	39.5%
Improved conflict resolution skills	57	23.5%
Other	9	3.7%
None	7	2.9%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

Formal recognition

A majority of the respondents (62%) received some kind of formal recognition for their participation in the program. While most of that recognition came from the TLLP leaders' own schools (41%), the respondents received recognition at the district level (29%) and outside of their own school and district as well (24%). The recognition came in different forms: for some it was very formal, such as an award (e.g. the Spirit of Hope Award from the St. Joseph Hospital Foundation in Hamilton for being a leader in Mental Health or the Premier's Award for Safe and Accepting Schools), or a letter of commendation from the board; for others it was less formal, such as a thank-you letter/card from the superintendent or a workshop participant, a feature article/column in a professional publication or a school board newsletter, a recognition as a TLLP expert (a member of a TLLP committee at the board or a TLLP Q&A panel at the TLLP Summit); or an invitation to present at a provincial or board level conference or a workshop; letters and emails from interested teachers; spread of the implementation of the innovation among colleagues; and/or positive verbal feedback from others.

Table 12: Level of Formal Recognition

What kind of formal recognition have you received?	#	%
None	93	38.3%
From my department/division	41	16.9%
From my school	100	41.2%
From my district	71	29.2%
From the colleagues outside my school/district	57	23.5%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

Career advancement

Career advancement is not an explicit goal of the TLLP. According to the Ministry of Education website (n.d.), the TLLP is for “experienced teachers whose choice of career is the classroom” (p.3). Nevertheless, 40 survey respondents (17%) indicated that their assignment (position or level of responsibility) has changed as a result of their involvement in the TLLP. Many respondents (40%) felt that while TLLP was not the sole factor that helped their career advancement, it had an indirect contribution to their change in position or responsibility by enriching their résumé and encouraging them to explore leadership roles. Most TLLP leaders who did get new assignments became formal Teacher Leaders or board consultants, such as program coordinators, literacy coaches, resource teachers, educational consultants, instruction coaches, department heads. Eight respondents indicated that they were either already in a school administrative role or candidates for the position.

KNOWLEDGE EXCHANGE

Level of learning sharing

One of the main goals of TLLP is to share knowledge outside of the immediate TLLP team. All of the survey respondents stated doing so. Table 13 lists the levels of sharing reported in the survey. Less than a quarter of the projects (22%) shared their learning at only one level – most of those shared within their own school(s) (9% of all the respondents), nearby schools (3%), or their own school board (9%). The rest of the respondents claimed to share their TLLP-related learning or practice at more than one level.

Over three quarters (77%) of the projects shared their learning within their own school(s); and 88% of those projects shared outside their schools as well. In about half (49%) of the respondents’ projects the sharing happened across nearby or family schools and in 16% of projects within the local community. Almost two thirds (64%) of the respondents reported sharing their learning or practice within their own school board and 21% across other school boards. 36% of the project leaders took their learning sharing outside of their school boards. In 26% of the projects knowledge was shared at the provincial level. 25 projects (10%) shared their learning or practice at the national or international level in the following ways:

- national conferences (e.g. Canadian Society for the Study of Education Conference);
- international conferences and symposiums (at least 11 projects: e.g. American Educational Research Association Conference and Action Research Network of the Americas Conference in the USA, DISES conference (Council for Exceptional Children) in Portugal);
- online (through social media such as Twitter and project or professional organizations websites);
- publications (e.g. chapters in pedagogical guides, an article for a national symposium on school libraries).

Table 13: Level of Learning Sharing

What was the level(s) of your knowledge/practice sharing?	#	%
Within own school(s)	188	77.4%
Across nearby schools/family of schools	120	49.4%
Within local community	38	15.6%
Within own school board	156	64.2%
Across other school boards	51	21.0%
Within province	62	25.5%
National/International	25	10.3%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

Audience for sharing learning and practices

In almost all cases (96%), the audience for sharing was teachers. In over half (52%) of the projects, learning or practice was also shared with school administrators. District administrators, students, parents and community were among the audiences for TLLP-related learning sharing in some projects as well. In addition, the respondents mentioned school librarians, trustees, teacher candidates, professors and researchers, union representatives, Ministry of Education officers, and general public among other audiences.

Table 14: Audience for Learning Sharing (Rank Order)

What was the audience(s) for your learning/practice sharing?	#	%
Teachers	233	95.9%
School administrators	127	52.3%
Students	75	30.9%
District administrators	55	22.6%
Parents	49	20.2%
Community	19	7.8%
Other	16	6.6%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

Methods of sharing learning and practice

All of the project leaders who answered the question on the methods of learning sharing reported using at least one method to share their learning or practice and 94% of respondents indicated using more than one of the methods listed in Table 15.

The top four methods of sharing reported are workshops/PD sessions (77%), staff meetings (61%), use of online media (51%), and teacher professional learning groups (44%). The same four methods were observed to be most often used during the analysis of the Final Reports as well (Campbell et al., 2014). While workshops have remained the top choice for TLLP-related knowledge sharing throughout the years, the use of online media gained more popularity in recent cohorts, according to both the survey and Final Reports' data. The top online media method reported in the survey is the TLLP group on NING (24%), which is not surprising since sharing on the NING was strongly encouraged for Cohort 6 and became one of the program's requirements in Cohort 7. Besides NING, TLLP project related learning and practice was shared by: posting information and resources on school/board (19%) and other educational organization websites (5%); developing a project-dedicated website (15%); blogging (15%); creating project-related groups on social networks (12%); engaging in discussions on online forums; and using online multimedia tools such as YouTube to post project-related videos.

While online media helped TLLP members to reach audiences outside of their immediate professional circles, so did provincial, national, and international conference presentations (43%), and publications in professional journals and magazines (6%). It is very encouraging to know that a locally developed project has the potential to impact teaching and learning worldwide. One survey respondent stated: "Our website receives between 8000 to 10000 visits per month. We were shocked by the response and it really did feel like we were helping other teachers."

In-person professional collaboration was one of the key ways to share knowledge and practice as well. TLLP members shared their learning through professional learning groups or communities (44%), visiting each other's classrooms and modeling the innovation (43%), and mentoring (37%).

Moving beyond their professional community, projects also shared their TLLP knowledge and activities with their wider local communities as well, via school newsletters, community events, local newspapers, and TV and radio programs.

Table 15: Methods of Sharing Learning and Practice (Rank Order)

What methods have you used to share your learning and/or practices?	#	%
Workshops/PD sessions	186	76.5%
Staff meetings	147	60.5%
Online Media	123	50.6%
<ul style="list-style-type: none"> • TLLP group on NING • School/district website • Project-dedicated website • Online blogs • Social networks (e.g. Facebook) • Online forums • Online multimedia tool (e.g. YouTube) • Other educational organization website 	<p>57</p> <p>45</p> <p>36</p> <p>35</p> <p>30</p> <p>16</p> <p>13</p> <p>11</p>	<p>23.5%</p> <p>18.5%</p> <p>14.8%</p> <p>14.4%</p> <p>12.3%</p> <p>6.6%</p> <p>5.3%</p> <p>4.5%</p>
Teacher learning community/group	108	44.4%
Conference presentations	105	43.2%
Modeling/Classroom visits	105	43.2%
Mentoring	90	37.0%
School newsletter	24	9.9%
Community events	17	7.0%
Local newspaper	16	6.6%
Journal publication (incl. forthcoming)	15	6.2%
Other	7	2.9%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

A further method for sharing learning and mobilizing knowledge is through the development of actual resources and artifacts that can be used by other teachers, schools, boards and wider community members. In the majority of the projects (73%), TLLP members developed materials that can be used in class, such as sample lessons, lesson plans, assessment tasks, and teaching strategies. TLLP members also compiled kits with recommended resources (43%), prepared workshops (41%), created videos of teachers demonstrating practices and students talking about the effects of those practices (36%), wrote research and literature review reports (23%), developed communication tools such as blogs and websites (21%), developed an entire program or a framework (e.g. departmental process for transitioning students) (21%), and wrote tutorials (8%). Other artifacts included writing a book, developing an online course on the topic, creating a magazine, creating art pieces, making accessible equipment, developing project promotional materials such as booklets, posters, and book marks.

Table 16: TLLP Project Products and Artifacts (Rank Order)

What products/artifacts have been produced as a result of your TLLP project?	#	%
Materials for use in class	178	73.3%
Recommended resources	104	42.8%
PD Workshop	99	40.7%
Multimedia	87	35.8%
Report	56	23.0%
Communication tool (e.g. blogs, websites)	52	21.4%
Framework/program/tool	51	21.0%
Tutorial	19	7.8%
Other	10	4.1%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

Effects on students

While the TLLP is primarily focused on teachers' learning and leadership, the intended improvements in professional knowledge, skills and practice are anticipated to also benefit students.

Student benefits

It is recognized that TLLP is one of many factors affecting students' learning and development and establishing a direct relationship is problematic. Moreover, most of the projects are relatively short-term with TLLP project funding being for one year. Nevertheless, almost all of the respondents reported that their TLLP projects affected their students in some positive way. For example, one teacher commented on the transformation in her students and the role of the TLLP project in it:

Because they lead their own guided reading groups, they've learned to be responsible, use accountable talk, and dig deeper into text. We feel they are more engaged and confident readers. While there are many variables for reading achievement, we feel our TLLP is one of the reasons they have improved comprehension (by our measures) and also success on EQAO.

Table 17: Student Benefits (Rank Order)

How have your students benefited as a result of your involvement in the TLLP project?	#	%
Improved engagement	177	72.8%
Enhanced learning experience	164	67.5%
Improved achievement	136	56.0%
Improved motivation	127	52.3%
Improved attitude and behaviour	104	42.8%
Improved technological skills	93	38.3%
Improved learning and innovation skills	78	32.1%
Character development	49	20.2%
Student leadership	45	18.5%
Other	18	7.4%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

TLLP members utilized a number of methods to measure effects on students. Importantly, 80% of the respondents reported using formal methods of data collection such as student assessment (62%), student surveys (44%), formal observations (40%), formal interviews (18%), course enrollment numbers, suspension data, and parent and teacher surveys. The survey respondents also relied on informal evidence collected through informal observations (78%) and informal conversations with other teachers, parents, and students (58%), student work, artifacts, videos and photographs to get a sense of changes happening for their students.

According to the survey respondents, the formally and informally collected evidence revealed significant changes for students. In the majority of projects, improved student engagement (73%), enhanced learning experience (68%), improved achievement (56%), and improved motivation (52%) were reported. Improved attitude and behavior (43%), improved technological skills (38%), improved learning and innovation skills (32%), character development (21%), and student leadership (19%) were reported as well. There were several comments regarding students as learners, such as students becoming more independent and confident learners, making more informed course selections, engaging in/recognizing learning happening outside of the school as well, engaging in problem solving and building knowledge. One of the respondents commented on the students' transformation as learners:

Students entered the year as “dependent learners” wanting answers, but not willing or capable of seeking answers independently. At the end of the year, students asked questions, sought answer independently, critically analyzed the answers they found with their peers and shared their learning with each other readily.

Improved school climate and teacher-student and student-student relationships were mentioned in the “other” comments as well.

Forms of additional support

About half of the respondents (49%) indicated receiving some additional support for their TLLP projects. Almost a third (32%) of the respondents received some additional release time to prepare a workshop, to attend a conference, or to form a professional learning community and continue the project. About a quarter of the respondents received additional funding to increase the scope of the project, to purchase technology and resources, or to share the innovation further, for example by presenting at a conference. In 17% of the projects, additional advising or mentoring was received from board experts, school administrators, the TLLP provincial team, an IT department, or colleagues. TLLP members were also able to use existing resources and opportunities (such as school facilities, events, educational materials) to learn, get together, or share knowledge. The most often cited “other” form of support was the purchase of the technology and related resources by the school board.

Table 18: Forms of Additional Support (Rank Order)

What kinds of support did you receive?	#	%
Release time	78	32.1%
Funding	62	25.5%
Advice/mentoring	42	17.3%
Use of existing resources/opportunities	40	16.5%
Other	6	2.5%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

The additional support described above came from a variety of sources, but mostly from the school board (28%), school administration (24%), colleagues (20%), and the Ministry of Education (16%). Other sources included the local community, parent council, the OTF, and professional and educational organizations.

Table 19: Sources of Additional Support (Rank Order)

What kinds of support did you receive?	#	%
School board	67	27.6%
School administration	59	24.3%
Colleagues	49	20.2%
Ministry of Education	38	15.6%
Community	10	4.1%
OTF	7	2.9%
Other	5	2.1%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

Enhancements and project sustainability

Learning about the long-term impact of the TLLP for educators was one of the most important purposes of this survey. The survey question regarding TLLP project sustainability encouraged the respondents to provide additional comments and details, and 104 respondents did so. This qualitative data provided us with better insight into this issue.

Only four respondents indicated that their project did not sustain in any form. Each of these projects had its own reason or explanation: a project from the very first Cohort was not sustained due to the turnover in the TLLP project participants and the administration; practices from a project from the second Cohort were sustained for three years but not further; a project from a more recent Cohort was not sustained due to a lack of support from the school board; and another project from a recent Cohort was not sustained due to the failure to complete the project in general.

Table 20: Project Sustainability

What aspects of your TLLP project sustained after the end of the TLLP funding?	#	%
Learning	182	74.9%
Implementing the learning/strategies/tools	198	81.5%
Sharing the learning/strategies/tools	160	65.8%
Collaborating with colleagues to develop and/or improve teaching practices	170	70.0%

* Multiple responses were allowed, thus resulting in more than the number of total respondents (243) or 100%.

In contrast, 98% of the project activities were sustained in some form, according to the survey respondents. Three quarters of the project leaders stimulated further learning in the same area, for example to explore the same topic at a deeper level. One of the respondents commented, "The TLLP gave us some foundation to use as we dug deeper into the learning about feedback." Also, former TLLP members can sustain their learning by looking into ways to implement the same ideas in a different subject area or with another group of learners, by continuing to search for new ideas in the same area, and by applying for another TLLP or other funding opportunity to further investigate improvements in their knowledge and practices.

The top sustained aspects of the project were the implementation of the learning, strategies, or tools. According to 82% of the respondents, the practices and tools that were developed during the TLLP funding period have been implemented at the individual, school, or board levels. For example, a TLLP project leader described the impact of the TLLP experience on his/her TLLP team members' teaching practice:

Our TLLP experience impacted the practice of each teacher participant. TLLP group members took on new roles in their schools, including formal and informal leadership roles. Some teachers began graduate work in education following their participation in the TLLP project. I believe that all teachers who participated in the project changed their teaching practice as a result of their participation.

Another example of sustained practice/tool implementation is the successful district-wide adoption of a Learning Management System (LMS) platform:

We introduced Moodle LMS to our district and it is used in every secondary school by thousands of students and hundreds of teachers to this day. We have a strong base of users. We have conducted many workshops both within our school and throughout our district on Moodle. Students entering classes have an expectation that they will be learning in a blended learning environment. Parents appreciate the ability to monitor their child's progress throughout the course of the semester.

Some of the TLLP practices were sustained by being incorporated into a classroom routine or a new school tradition. Others were modified to better suit new schools, student groups, or technology advancements. Still others survived the departure of the TLLP members and impacted new educators through the resources and artifacts that remained.

Collaboration that was developed during the TLLP project was reported to be sustained in 70% of the projects. The TLLP helped improve and sustain collaboration and communication for many TLLP members and in many schools by encouraging teachers to be "more open to sharing expertise and knowledge in a collaborative learning community," providing them with an opportunity to build new connections, and supporting the habit of engaging in collaborative learning and professional dialogue by showing the value of it and providing the appropriate conditions.

Sharing to sustain learning, practices and resources has been happening in multiple ways: workshops, mentoring, conference presentations, publications, networking, and developed resources and artifacts, among others. One of the respondents' comments on the ways he/she continues to share the knowledge was:

In my role as coach I have been able to model the instructional strategies I honed during the project. I have shared the videos for teachers to use on their own as well. I also shared the website with teachers from across the province in an online course (reading specialist).

CONCLUSIONS FROM SURVEY

The provincial survey of all former TLLP project leaders complements all of our other research methods (especially the Final Report analysis) not only by providing another perspective on the same issues explored by the other methods, but also by allowing us to get a better insight into some of the less-researched areas (particularly, teacher leadership, additional project support, and project sustainability).

The results of the survey responses from 243 former TLLP project leaders confirm that TLLP participants appreciate teacher-focused and led professional learning. All of the TLLP members saw improvements in their own teaching practice as well as in their students' learning and achievement. One of the respondents commented on his/her growth as an educator:

Although initially I did not feel as successful in my TLLP as I would have liked, the experience kick-started a revolutionary change in my teaching style, approach and effectiveness in and outside my program. ... There is no doubt in my mind that the TLLP and particularly the workshops and keynote speakers helped me grow as an educator.

Almost all of the respondents (97%) felt that the TLLP experience helped them grow as a leader as well. Furthermore, they did not just improve their leadership skills, they became recognized as experts and leaders in their areas within and outside of their boards, and some TLLP teachers were identified and/or inspired to undertake formal leadership roles. One survey participant states:

As a result of this project, I was inspired to apply for the role of Board Numeracy Facilitator, which led to a 3-year assignment working with elementary teachers across our board. ... This initiative is an excellent way to empower teachers to become lead learners in their schools and boards, and to take ownership of their professional learning.

The TLLP does not only affect its direct participants, it can also have profound effects on a wider group of educators. TLLP members actively share their learning and practice with their colleagues through workshops, presentations at staff meetings, teacher collaboration groups, mentoring, and distribution of teaching materials. To reach audiences outside of their immediate professional circles, TLLP participants use online media, present at provincial, national, and international conferences, and publish in professional journals and magazines.

According to the survey respondents, 98% of the project activities were sustained in some form. TLLP members continue to study their TLLP topic at a deeper level or try to apply it to a different area; they continue to implement the strategies and practices they developed in their classrooms or help their schools and boards to introduce those practices more widely; they continue to share their knowledge and practice by modeling, presenting, publishing, and sharing developed materials; they continue to collaborate and network to become better educators.

All of the findings mentioned above prove that the TLLP's effects on teaching and learning are long-lasting and far-reaching. As a teacher leader of three TLLP projects comments:

... each of our projects have yielded more than expected positive results and each has a lingering effect on both our learning and our sharing as well as our professional practice. We look forward to future TLLP projects. Thank you very much for these learning opportunities.

Similarly, other TLLP survey respondents commented enthusiastically about the value and power of TLLP for teachers' professional learning:

It has easily been the best part of my teaching career. This is the best PD I have been involved in and would support it in any way I can.

In short, I can't say enough how important this program was for my growth even though I wasn't a superstar TLLP. I feel strongly that this is a program of much benefit.

We look forward to future TLLP projects. Thank you very much for these learning opportunities.

In the following section, we further explore TLLP teachers' own voices on their learning through the TLLP.

During the 2014-15 research, ten people volunteered to write vignettes about their yearlong experience with their TLLP grant. We thought that we could get additional data on how teachers “learned leadership” as they were enacting their TLLP. The vignette asked each teacher to write a narrative answering a set of prompts. They were:

- What did you do?
- Who did you do it with?
- What happened as a result?
- What did you learn?
- What did you learn about leadership?

The topics they chose for their TLLP project

Of the ten people who wrote vignettes: five worked on some subject area using technology (assessment and digital portfolios using the iPad, teaching music using Apps in the 4th grade, Blended learning using technology); three worked on math (problem solving, workplace math, combining math and language in French Immersion classes); and two worked on social and organizational issues including: students’ transition to high school and peer observation and coaching.

Experiencing and developing teacher leadership

Vignette writers described how their leadership developed through their TLLP project experiences.

Peers as partners: stepping into a leadership position

In all of the ten vignettes teachers wrote about their peers, partners and teams who eventually became the creators, sometimes leaders, and always implementers of the work. It was here that the leadership and its challenges started. The first learning happened when the proposers began to build a team, figuring out how to share leadership, supporting people when things got tough and, in the final analysis, figuring out what those who wrote the proposal learned about their own leadership strengths and weaknesses. Two teachers worked with the whole school, while the other eight vignette writers worked with two to four people in their core TLLP team.

Leadership requires patience, insight, understanding, endurance and energy!

Growing leadership in the team

Many comments illustrated how the original proposers of the TLLP learned leadership skills and abilities as they began to work. Several vignette writers learned that “patience” in leadership is critical as other people have their own priorities. Along with this, several called attention to the fact that “we can’t do it alone” so we must learn to slow down, work for “buy in” and in the process of clarifying a vision, slowly communities get built. Sometimes it took a while to realize that you could benefit from and appreciate others strengths. Several vignette writers stated that there were different comfort levels with pedagogy, technology, and project management and all needed to be part of the negotiation as the team tried to implement new ideas. Some even stated that they learned to have “an understanding heart.”

I learned that the best way to get “buy in” is to show the value in their involvement and how it will benefit them.

Learning leadership while implementing new ideas

As teachers began to actually try new ideas with their students, other leadership strategies and understandings rose to the surface. Some came to learn that “leadership comes more easily when I share and am open to learning.” Some realized that they needed to be “vulnerable as much as their teammates”. When there were difficulties, teachers began to learn that not only do they need patience, but leadership requires “insight”, “endurance” and “energy”.

Leadership is sometimes giving your team the umbrella and standing in the rain with a smile.

Leadership is about being willing to take risks and rising to the challenge.

Collaboration, courage and support

Three big ideas concerning leadership have surfaced in all the vignettes so far: the necessity of collaboration, courage and support. In all cases, working together turned out to be an extremely positive outcome no matter what the development effort. When things sometimes became frustrating (couldn't get the technology to work; couldn't find the time to meet; some teachers stopped participating in the TLLP), those in leadership learned to develop the courage to continue and soon saw it as a strength in their leadership. Several teachers called attention to the fact that “ideas and experiences were valued by the Ministry” and that gave them courage and support in tough times.

Reaching out to learn from others

Those who had written the proposals realized that their partners (or their team, or those outside their school) could be tremendous sources of learning and expertise. In one project on a Locally Developed Math Pathway, teachers engaged math professors to find out what they needed to develop for technical skills in math. From these conversations, the team developed “trade math” in their schools to include new knowledge and skills as well as hands on learning.

All ten of those who wrote vignettes either went to the research first or to other sources of expertise before they began their projects. Leadership meant finding ways to build the capacity of teachers both to learn new knowledge and skills and to learn how to work together in the process and to continue to be open to learning new ways of working and new ideas to learn.

Leadership challenges along the way

Teachers who were leading their professional learning efforts had numerous challenges along the way. These too became a part of their leadership learning. The challenges were described in two ways – learning the leaders had as they worked with others and the insights they got about their own leadership stances that became evident along the way.

a) Working with Others

Teachers were very candid about their challenges in the TLLP. In working with other people there were numerous situations that were new and sometimes uncomfortable:

People don't want to follow (so you need to feel good about how you lead).

It is challenging to organize a large group of teachers! Sometimes it is difficult to make connections without dictating or overstepping from “facilitating” to “directing”.

Sometimes it is hard to remember that people need to feel that they are heard.

b) *Learning about myself*

TLLP offered many opportunities to reflect on one's own leadership aside from the challenges of working with others. Sometimes people had a-ha moments about themselves like:

Leadership comes more easily when I share and am open to learning.

I finally began to realize that I was overly cautious with money.

As the project moved, different leadership approaches evolved.

I learned that my communication style is different than most mathematical thinkers. I had to learn how to be clear and linear in my planning and communication with the team.

CONCLUSIONS FROM TLLP VIGNETTES CONCERNING LEARNING TEACHER LEADERSHIP

In the final analysis, learning leadership is personal, problematic, powerful, and potentially influential. Teachers who wrote proposals found that they could organize their peers, share ideas, move people along and, finally, provide professional development that was sensitive to teachers and to the context within which it was created. TLLP is one example that can teach us that reversing the system of professional development by starting with what the teacher chooses, who and how s/he works with others, and what s/he learns along the way can be very important to individual learning as well as the learning of the collective group of teachers in a team.

In the words of TLLP vignette writers:

This has been one of the most empowering experiences of my career!

TLLP has been one of the best learning experiences that the school community and I have participated in. Teachers need time to collaborate co-teach, debrief and learn together. TLLP allowed us to accomplish this goal.

3.2

RESEARCHING THE TLLP EXPERIENCES IN 2014-15

In this section, we provide data and findings from research conducted on TLLP participants' experiences during 2014-15, including: evaluations from the Leadership Skills for Classroom Teachers' training; Ministry mini-surveys of current TLLP cohort leaders; analyses of Mentoring Moments NING data; evaluations of the Sharing the Learning Summit; and findings from focus group interviews held with TLLP provincial leaders in each of OTF and the Ministry of Education's Teaching Policy and Standards Branch.

3.2.1

LEADERSHIP SKILLS FOR CLASSROOM TEACHERS TRAINING (MAY, 2014)

The *Leadership Skills for Classroom Teachers* training was held during May 7-9, 2014 for 233 participants in the eight TLLP cohorts. Evaluation forms indicate very high satisfaction with this training. A total of 97% of respondents were either very satisfied or satisfied with the training. 169 respondents were first time attendees; 98% of first time attendees reported being either very satisfied or satisfied with the training. Returning previous attendees were also very positive,

although at a slightly lower level; 91% reported being either very satisfied or satisfied with the training. These results continue to demonstrate the importance of the *Leadership Skills for Classroom Teachers* training.

The most valuable aspects of the training reported by respondents were: the Learning from Experience sessions and opportunities for assistance from former TLLP leaders (85 respondents); networking with colleagues (68 respondents); and time to work on their TLLP project (60 respondents). There were also positive comments about the range of carousels and training, as well as for specific carousels and speakers. Practical and logistical factors, including the training being well-organized, the quality of the binder and resources, and the seating arrangements were noted positively. 16 respondents wrote about the feeling of being motivated, inspired, energized and validated. Finally, the opportunity to hear from and talk with Ministry and OTF personnel was valuable for clarifying expectations and building relationships.

With regard to future suggestions, the three main recommendations were:

- Provide more time to work on TLLP project (58 respondents);
- More time for networking (26 respondents); and
- More carousel attendance opportunities (26 respondents).

Overall, however, when asked “What the Ministry and OTF should know”, the largest response (73 respondents) was to continue with the excellent training sessions, including the organization, facilitation and presenters experienced. For example:

Keep up the great work! This project is motivating, inspiring and exciting – exactly what teachers have asked for and need.

MINISTRY MINI-SURVEY OF 2014-15 TLLP PROJECTS AND PARTICIPANTS

3.2.2

The purpose of the Ministry’s mini-surveys of TLLP projects each year is to monitor changes in TLLP leaders’ confidence levels in learning, leadership and practices over the course of the TLLP project year. The TLLP research team designed survey items which were added to the first and last of the Ministry mini-surveys in 2013-2014 (see Figure 1). The survey sent in October 2013 established a baseline and the survey sent in April 2014 determined the changes. We administered the same survey items during the initial Training Session in May 2014 and will be surveying the same TLLP participants on the same items during the Sharing Session in November 2015. The analysis of these two surveys will be performed in 2015-2016.

Figure 1: Ministry Mini-Survey Questions

Please rate your current level of confidence in the following areas:

	No confidence				Moderate confidence				Complete confidence				
	0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%			
Implementing practices from your TLLP project											N/A		
Sharing knowledge and practices with others											N/A		
Leading professional learning											N/A		
Leading your TLLP team											N/A		
Managing your TLLP project											N/A		
Being a teacher leader											N/A		

Table 21: Responses for October 2013 (survey 1) compared with April 2014 (survey 2)

	Survey 1	Survey 2	Difference in
	Mean	Mean	Means
Leading TLLP team	80.9%	84.5%	3.6%
Being a teacher leader	82.4%	84.3%	1.9%
Implementing practices	79.4%	82.9%	3.5%
Leading professional learning	77.6%	80.4%	2.8%
Sharing knowledge	76.7%	80.4%	3.7%
Managing TLLP project	78.5%	79.8%	1.3%

Comparing TLLP project leaders’ self-reported responses for October 2013 and April 2014, positive growth is observed in all areas. The data reveals that even at the beginning of their TLLP journey teachers felt rather confident about all of the areas of interest, and therefore, there was limited room for growth. Hence, the changes in self-rating are small and not statistically significant, but they still indicate growth. Since October and April (the times when the surveys were administered) do not represent the true beginning and ending points of the TLLP journey, we expect that the results of the 2014-2015 mini surveys administered during the training session in May 2014 and the sharing session in November 2015 (which we believe are the true beginning and end points) would provide more accurate and encouraging results.

3.2.3

ANALYSIS OF MENTORING MOMENTS NING DATA FOR 2014-2015

The *Mentoring Moments* NING (<http://mentoringmoments.ning.com>) continued throughout the 2014-15 year. This section of the annual research report provides a descriptive analysis of Google Analytics data pertaining to the interactions and exchange of materials within the context of the TLLP during the period of April 2014 through March 2015. Areas of growth in NING activity as well as points for further investigation will be highlighted throughout this section, which begins with an overview of online activity on the *Mentoring Moments* NING in general, followed by a detailed description of how TLLP learning is being shared via discussion groups and blog posts is provided.

Overview of *Mentoring Moments* online activity in 2014-15

Overall, NING (Google Analytics) data demonstrate that October and November 2014 had the highest number of visits and visitors (see table 22). This finding echoes results from 2013-14 analyses where similar results were found (Campbell et al., 2014). The timing of these peaks in online activity coincides with the timing of the TLLP Sharing the Learning Summit in November and at the TLLP training session in May where the *Mentoring Moments* NING is highlighted. Similarly, the NING experienced the lowest amounts of activity during the summer months, although it is important to point out the amount of traffic on this site during July and August 2014 is about three times higher than it was during the summer of 2013. Mid-year data for the site (January/February) show similar results between this reporting year and the last, although it is noteworthy that there was some growth (albeit quite modest). These findings are very encouraging as these data demonstrate greater awareness of and engagement with the *Mentoring Moments* online platform.

Table 22: *Mentoring Moments* NING Activity by Month in 2014-15.

Month	Visits	Unique Visitors	Page Views	Pages/Visit	Average Visit Duration
March 2015	2 089	1 520	6 109	2.92	2 m 34 s
February 2015	1 875	1 409	5 932	3.16	3 m 40 s
January 2015	2 020	1 429	7 020	3.48	3 m 22 s
December 2014	1 789	1 266	6 627	3.70	3 m 18 s
November 2014	4 651	3 503	11 279	2.43	2 m 23 s
October 2014	5 702	4 488	14 177	2.49	2 m 41 s
September 2014	2 515	1 913	7 785	3.11	3 m 28 s
August 2014	843	544	3 781	4.49	5 m 10 s
July 2014	879	564	2 771	3.15	3 m 30 s
June 2014	1 826	1 095	7 895	4.33	4 m 32 s
May 2014	2 928	1 617	18 475	6.31	6 m 16 s
April 2014	1 824	1 245	7 136	3.91	4 m 02 s

Figure 2: Comparison of monthly *Mentoring Moments* NING data for 2013-14 and 2014-15.



Figure 2 presents a monthly overview of the number of site visits for both 2013-14 and 2014-15 for comparison, clearly showing growth in overall activity in 2014-15.

Although there has been growth overall, the data also show that there were some areas of decline this year (as evidenced in table 23). *Mentoring Moments* experienced an increase in both traffic volume and the number of unique visitors to the site, yet there was a decline in the number of page views per visit as well as in the time spent visiting the site. This presents an area for future research in an effort to understand the shift in these online behaviour patterns. Figure 3 illustrates the consistent growth in number of unique site visitors this past year, while Figure 4 provides a monthly visualization of the number of pages viewed per month showing less growth in this area.

Table 23: Comparison of Descriptive Data for Mentoring Moments in 2013-14 and 2014-15.

NING Data Type	Average	Median	Minimum	Maximum	Interquartile range
<i>Monthly Visits</i>					
2013-14	1679	1524	458	4334	581-1977
2014-15	2412	1948	843	5702	1798-2825
<i>Unique Visitors</i>					
2013-14	1094	892	267	3351	327-1253
2014-15	1716	1419	544	4488	1133-1839
<i>Page Views/Month</i>					
2013-14	7376	7453	1852	16 602	2671-10 717
2014-15	8249	7078	2771	18 475	5976-10 433
<i>Page Views/Visit</i>					
2013-14	4.67	4.43	2.77	8.69	3.83-4.93
2014-15	3.62	3.32	2.43	6.31	2.97-4.23
<i>Length of Visit (minutes/seconds)</i>					
2013-14	4m 41s	4m 18s	2m 47s	9m 19s	3m 32s – 4m 47s
2014-15	3m 43s	3m 29s	2m 23s	6m 16s	2m 35s – 4m 25s

**Note. Because of the wide range in activity on a month-to-month basis, this table includes the median and interquartile range to give a better sense of online activity overall given that the average number of visits is more positively skewed by the high volume of visits in October and November.*

Figure 3: Comparison of unique site visitors per month in 2013-14 and 2014-15.

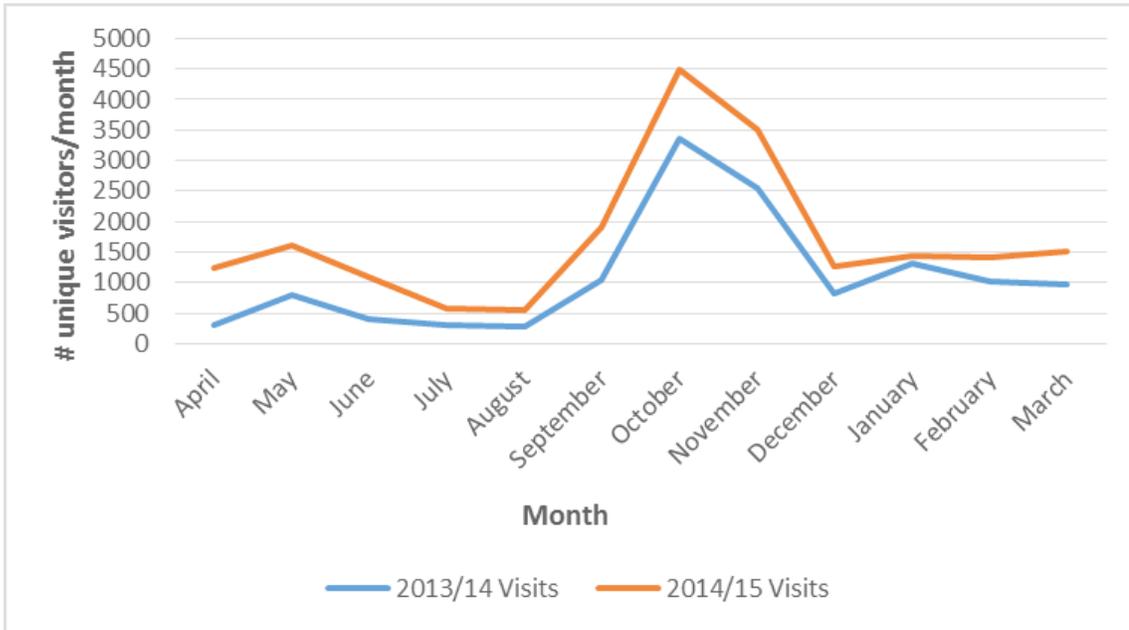


Figure 4: Comparison of monthly page views in 2013-14 and 2014-15.



Sharing TLLP learning online

TLLP members have the opportunity to engage with colleagues through interest groups, discussion forums, and blog posts. At the end of this reporting period, the *Mentoring Moments* NING had 1 035 members. Although educators must be members in order to upload materials and participate in discussions, the site is not password protected and all materials and discussion threads can be viewed by anyone with access to the internet. The NING also maintains a running Twitter feed where all tagged posts – #TLLP14 and #TLLP2014 – are showcased, further demonstrating a rise in the public profile of TLLP on popular social media. The following paragraphs describe activity within the TLLP groups, discussion forums, and blogs.

TLLP groups

As of March 2015, there were 91 individual groups operating through *Mentoring Moments*, representing a nearly 100% increase in the number of individual groups in the previous year (46 groups were reported in 2013-14). TLLP group webpages were visited a total of 3 759 times in 2014-15, with an average of 470 visits per month, ranging from 156 views in February 2015 to 1,688 views in May 2014. These groups represented many different interests ranging from using technology in the classroom, and literacy and numeracy to inquiry-based learning and developing mindfulness. The most active TLLP group at the time of reporting was “iPads in the Classroom” with 78 members.

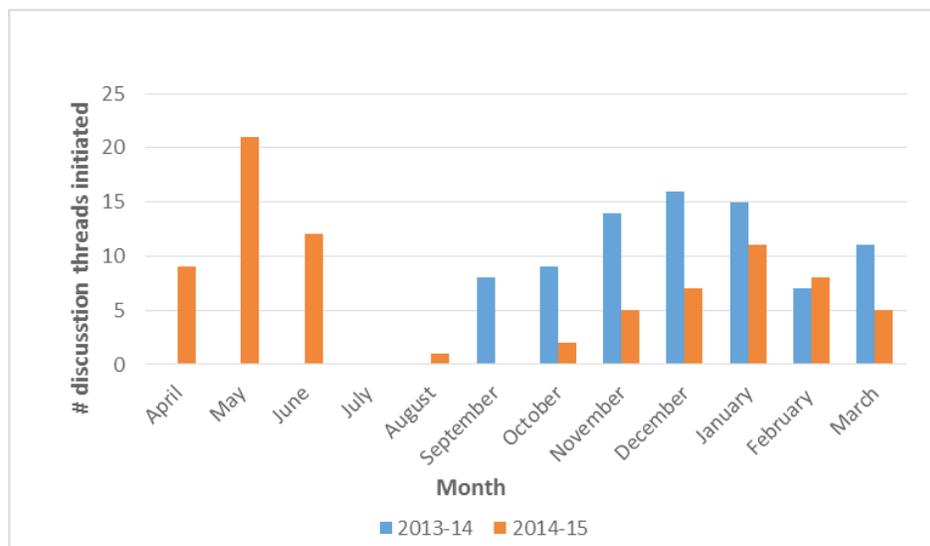
As described in the group descriptions on the *Mentoring Moments* group webpage, the iPads in the Classroom group provides a space where educators “can share best practices for iPads in the classroom, [make] app suggestions, and [provide] management tips, troubleshooting etc.”

The largest TLLP group in terms of membership in 2014-15 was the general TLLP/PALPE group with 278 members, followed by iPads in the Classroom (78 members) and inquiry-based teaching and learning (63 members). However, the vast majority of these groups have fewer than ten members, with many groups having less than five members. Thus, although there are almost one hundred groups represented on the NING, the number of members and levels of activity are quite variable.

Discussion forums

There were 81 separate discussion threads initiated in 2014-15 reporting period. Although the highest number of initiated discussion threads occurred within this reporting year (May 2014), overall, the number of threads declined this year as the average number of discussion threads initiated monthly dropped from eleven in 2013-14 to seven in 2014-15. Figure 5 provides the data disaggregated by month for each year. Nevertheless, discussion forum webpages received a total of 2 875 views this year overall, with an average of 261 page views per month.

Figure 5: Monthly comparison of initiated discussion threads in 2013-14 and 2014-15.

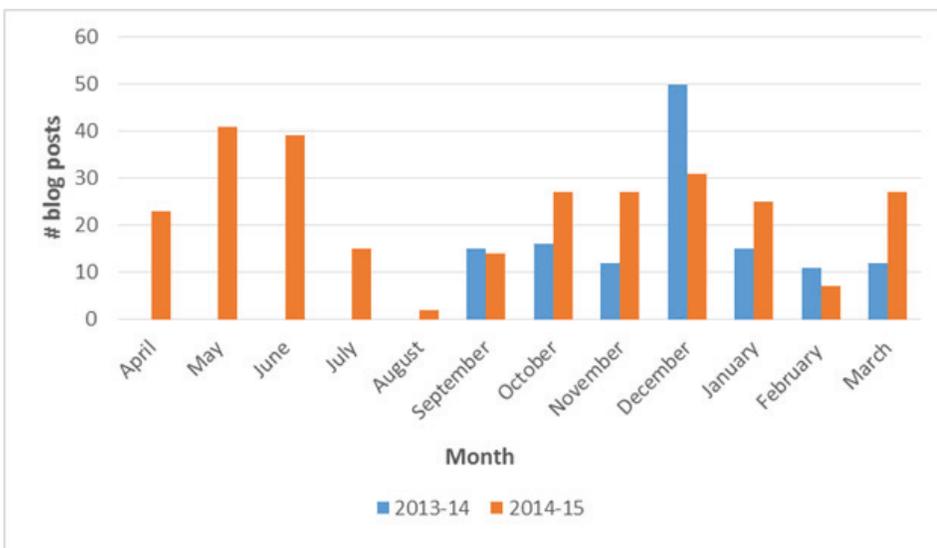


In 2014-15, there was a notable shift to having many of these online discussions within the individually-created groups. The discussion threads appear to be places where educators provide links to resources or provide reflections on their TLLP project.

Blog posts

The number of blog posts also increased from 131 in 2013-14 to 278 in 2014-15 (based on March 2015 data), although it should be reiterated that there were fewer months of data available for the 2013-14 research report (seven months versus twelve in 2014-15). Even when this discrepancy is accounted for in the analyses, there is a higher level of blog activity this year with an average of 23 blog posts per month as compared to 18 posts per month in 2013-14. Figure 6 presents a monthly comparison of blog posts for each of the reporting years. In total, the blog post webpages received 2 405 page views this year, with an average of 217 page views per month.

Figure 6: Monthly comparison of the number of blog posts for 2013-14 and 2014-15.



The patterns of behaviour on the blog posts were similar to that in the discussion forums in that posts were largely made by individual educators in an effort to document their TLLP journey, but the posts generated less interaction with colleagues. Thus, also the pages may have been read, for the most part they did not appear to stimulate critical online dialogue about TLLP learning and experiences as very few of the blog posts received any comments. A deeper examination of the blog post content and activity would yield better insights on how the blogs are (or are not) contributing to the sharing of TLLP learning.

Conclusions from analysis of *Mentoring Moments* NING data

Overall, the *Mentoring Moments* NING experienced growth in numbers in terms of number of site visits, unique visitors and page views per month. However, the number of page views per visit and the length of time spent on the site decreased in 2014-15. TLLP groups continue to play a significant role in the sharing of TLLP learning as the number of groups almost doubled this year when compared with the previous year. However, group membership and levels of activity varied greatly across the site. It appears that there was a decline in discussion forum activity this year as the number of discussion threads initiated this year nearly matched last year where fewer months were reported. Furthermore, the average number of discussion threads started each month also decreased in 2014-15. In contrast, the number of blog posts more than doubled this year in comparison with the previous year's data.

3.2.4

SHARING THE LEARNING SUMMIT (NOV. 2014)

The *Sharing the Learning Summit* was held during November 7-8, 2014. Evaluation forms were completed by 159 participants. Overall, an extremely impressive 98% of participants were either very satisfied or satisfied with the Summit. This compares favorably with a 97% satisfaction rating in 2013 and 95% in 2012. The Summit – already an excellent event – continues to improve.

When asked about the three most valuable aspects of the summit, the following top factors were identified by respondents:

- Networking/connecting with colleagues from across the province (94 respondents);
- Learning from others about their TLLP projects (68 respondents);
- Presenting our project and getting feedback (68 respondents);
- Dynamic, inspirational keynote speakers (39 respondents);
- The Marketplace sessions and their organization (34 respondents);
- New ideas for our school/classroom from others' projects (21 respondents);
- Feeling motivated, inspired (19 respondents).

In addition, respondents commented positively about specific sessions and speakers, about the overall organization of the Summit, and the materials and resources provided, and a positive learning experience and validation for their work.

With regard to suggestions for a more valuable Summit experience, in the context of very high satisfaction with the existing experience, the main suggestions involved more time for the marketplace visits to TLLP projects (40 respondents) and not holding the event on a weekend (32 respondents).

When asked what "best thing about the TLLP is", the following responses were received:

- Sharing ideas/collaboration/work with like-minded colleagues (36 respondents);
- Teacher-directed rather than Board driven (24 respondents);
- Time to reflect and work on projects (17 respondents);
- Access to funding for IT, resource (15 respondents);
- Access to funding in general (10 respondents);
- Benefits and experiences for students (14 respondents);
- Flexibility/ability to control our own project (12 respondents);
- My own professional learning (12 respondents);
- Developing our leadership skills (11 respondents);
- Support from the Ministry (7 respondents);
- Being valued and treated professionally (6 respondents);
- Engaging and motivating for our school (6 respondents)

- Sharing beyond the Board (5 respondents);
- An inspiring and exciting program (4 respondents);
- Risk taking/thinking outside the box (4 respondents);
- Release time (3 respondents);
- Sharing/presenting at PD days or conferences (3 respondents);
- Networking with teachers outside the TLLP (3 respondents);
- Community/parental involvement (3 respondents);
- Cross-panel connections (3 respondents);
- Team teaching (2 respondents);
- The opportunity to pursue a passion (2 respondents);
- Learning from the TLLP keynote speakers (1 respondent);
- The best type of PD (1 respondent);
- Collaboration between the Ministry, federations, and teachers (1 respondent);
- The NING website (1 respondent);
- Allowed to focus on one concept (1 respondent); and
- Diversity of projects (1 respondent).

When asked what “the Ministry needs to know...?”, two of the top responses were: “This is great PD (authentic, teacher-driven and chosen, classroom-focused) (16 respondents); and “Important to continue with the TLLP” (14 respondents). Less positively, two other top responses concerned interference by Boards in projects and budgets (14 respondents) and/or interference or lack of support from principals (9 respondents).

FOCUS GROUPS WITH PROVINCIAL TLLP PARTNERS

3.2.5

A focus group using semi-structured interview questions was held with each of Ministry TLLP team members (6 participants) and OTF TLLP members (2 participants).

Both OTF and the Ministry remain highly committed to the TLLP. Consistent with the ongoing support, development and refinement of the TLLP over the years; there continues to be a commitment to continuous improvement:

...the TLLP, I think, in all our eyes is already a pretty successful and powerful program... there are small improvements that we try to implement every year... There are small incremental changes and I think, as a team, we're responsive to those and try to build. But it's the small things we do from year to year versus large scale change. (Ministry interviewee).

Enhancements to the TLLP in 2014-15 included attention to further developing the provincial selection process, including additional French-language representation, and also decisions to limit the maximum expenditure within a TLLP on technology to 50% of the overall project budget.

As in previous years, there have been enhancements and refinements to the provincial TLLP training in light of evaluation feedback. A new approach for the May 2015 *Leadership Skills for Classroom Teachers* training session was the involvement of previous TLLP teacher leaders as co-presenters alongside OTF and Ministry presenters. The proactive engagement of current and former TLLP teacher leaders is part of a larger move to further increase recognition of TLLP projects and participants and to expand the spread of their expertise:

I think we are a little more intentional now about getting to other projects. Not just the Summit and collecting postcards, but then through ongoing communication and online, and actually other work with Boards. (Ministry interviewee).

During the TLLP projects, the Ministry has also introduced Adobe connect sessions for Francophone participants (in addition to continuing English-language Adobe connect sessions).

Another aspect of increased intentionality and communication, in 2014-15, was the introduction of communication to Principals about the TLLP projects their teachers were engaging in:

We heard that there was some miscommunication, different information getting to Principals and we reflected on our practices and we realized well we're sending information for Directors to come down and for teachers to come up, but we are not doing anything to target Principals. So there was no surprise at this communication gap. (Ministry interviewee)

Now Principals receive a letter from the Ministry in September to orient them to the TLLP and let them know about a TLLP in their school. A further enhancement to spread and sustain TLLP practices is through the expansion of the PKE; in 2014-15, 18 PKE projects were approved and funded, contrasted with 3 PKE projects in the previous year.

As well as continuous improvements, in 2014-15, two significant new initiatives connecting to the TLLP began. First, TVOntario (TVO) has launched Teach Ontario <https://www.teachontario.ca/welcome> an online platform "For Ontario teachers, By Ontario teachers". Teach Ontario has drawn substantially on expertise, advice and support from the TLLP community. From the outset, TVO connected with the Ministry and OTF to seek advice on developing the proposed approach and, importantly, drew on focus groups and beta testing with TLLP teacher leaders to develop the design, content and usability of Teach Ontario. As one interviewee commented:

The first thing, like TLLP, it's from a partnership, so the very first sort of thinking about what Teach Ontario could be involved our Branch and OTF... It came out of a partnership and I think where it intersects with TLLP are in two ways. First is we actually recruited some really strong TLLP teachers to be the first focus groups and field testers of the community... So the actual development of the community was in a large part attributed to the feedback from this group of beta testers. And the second purpose is ... the NING has been really powerful for the TLLP teachers sharing with themselves. It's an active place and lots of people go there... What we see the potential with Teach Ontario is really that third goal of TLLP, knowledge spread across Ontario. So, we've been very intentional in identifying to Teach Ontario, to TVO, some projects that we think are worthy of highlighting. So starting in January, each month they have been focusing ... they're calling it a Teach Ontario talk, but really it is the profile of an outstanding either previous TLLP or current PKE project. We're using the media skills, if you will, of TVO. ... So if we think of TLLP sharing with each other already was happening, now what's starting to happen more and more is TLLP sharing provincially with colleagues. ... So the teachers themselves from TLLP in a true TLLP way are becoming ambassadors for the community... And I think the strength of the Teach Ontario community is the same strength as the NING. That it's learning out loud, it's publicly accessible... (Ministry interviewee).

Consistent with TLLP's philosophy, approach, and goals, the developers of Teach Ontario have been clear "from outset, they would put it in the hands of the teachers to design by, for teachers." (OTF interviewee).

A second major new initiative is the Norway-Canadian (NORCAN) partnership involving Alberta, Ontario and Norway. The focus of the three-year initiative is for projects concerning mathematics in the transition years. Drawing on experiences from Ontario's TLLP and from a Finland-Alberta (FINAL) partnership, NORCAN offers opportunities for school teams to connect and collaborate across jurisdictions. Two previous TLLP projects have been selected to participate in NORCAN, with the potential of a third project being included in future. Differing from the TLLP, NORCAN involves school principals in the project team – as well as teachers – and, by year three of the project, will directly involve students. Similar to the TLLP, however, the projects are intended to be:

...developed by the teachers and they're iterative and collaborative, so teams will be encouraged to share with other jurisdictions as they embark on this journey. (Ministry interviewee).

Through professional collaboration and online sharing, NORCAN is intended to further the shared goals for knowledge exchange and offer opportunities for further learning about spread and sustainability of professional sharing:

I see it as opportunities for us to learn about knowledge spread as much as it is ... the schools will certainly have a rich opportunity to learn from each other and from the Alberta and Norway partners. Another way of sharing and celebrating TLLP, but in a way that might lead us to deeper thinking about how TLLP evolves. (Ministry interviewee).

Or as an OTF interviewee commented: "it's like the TLLP on steroids a little bit, or TLLP taking the next step and seeing what happens!"

Alongside a highly effective combination of commitment to continuous incremental improvements and attentiveness to new relevant opportunities, it is important that the original and ongoing principles and goals of TLLP remain central to current and future activities. In 2014-15, some key members of both OTF and Ministry teams retired. It is a testament to the collective commitment and shared ownership for TLLP that the initiative not only continues but further strengthens. As TLLP approaches its 10th cohort, it will be important to continue to value, nurture and evolve the vital partnership and principles of professional collaboration that are the crucial backbone to this innovative and important initiative. As one interviewee commented, it is important to remain "vigilant" to protecting and developing the TLLP principles and practices:

...if you don't protect partnership, you lose the benefits of partnership and this project has given us many, many benefits through the partnership. Some of it is that it's kept it honest. Some of it is that it's kept both sides committed to it. We're all committed to it and all still very excited about it." (OTF interviewee).

In moving forward, there are some potential tensions in the selection of future TLLP projects. First, is if an aim of TLLP is to engage an expanding group of teachers, how many times should an individual (or team) be allowed to re-apply and be approved for TLLP funding? Concerns were expressed by both OTF and Ministry interviewees about the same recipients receiving TLLP funding for a third project or more. The OTF and Ministry are, therefore, encouraged to give strong consideration to clarifying the rules about whether an individual or team can be the lead on more than one (or two) TLLP projects over time. A second tension is in ensuring an appropriate balance between encouraging TLLP applications to align with overall provincial goals and priorities, while also providing the flexibility for authentic teacher-led projects connected to teachers' own priorities and needs. While a general connection with the Ministry's priority goals was considered important for

supporting students and for linking to school priorities, some concerns were expressed about limiting the possibility of more “out of the box” innovative and creative projects that may be exactly what teachers’ need to further their professional learning and their students’ learning:

...the image I always use is if you took a chrysalis and you put it in a matchbox ... what happens if you put a chrysalis into a matchbox, and the size of the chrysalis is exactly the size of the matchbox? What happens when the butterfly is ready to emerge? There’s no space for it to open its wings. And that’s a really good image for us to keep in our heads... These are not teachers who start out necessarily as pre-recognized or pre-packaged leaders. They grow into leaders, and so if we confine too closely what they are allowed to work on ... and even for the fabric of what makes up the TLLP, if all of the projects are about math or all about numeracy or all about ... it’s so less interesting than when you get somebody who is looking at a specific aspect of what makes a difference in kindergarten or what about transitions... (OTF interviewee).

Indeed, to further the chrysalis and butterfly metaphor, TLLP enables teachers to grow their wings and fly.

Provincial interviewees continue to recognize the powerful benefits of TLLP for the goals of teachers’ professional learning, teacher leadership, and knowledge exchange. When describing the impact of TLLP, as one interviewee commented:

Oh, it’s immeasurable, I think, on teachers’ professional learning and confidence. (OTF interviewee).

Another interviewee commented:

You feel so energized by spending time with them (TLLP teacher leaders), because they are thinking so deeply... It’s the energy level, but also the depth of the thinking. (OTF interviewee).

The combination of teachers’ learning by looking at their own practice and also learning from research and from other teachers’ practices was considered powerful professional learning.

Linked to the goals of teacher-led professional learning, interviewees commented also on the development of teacher leadership and de-privatization of practice:

...the people you might have identified at the front end as having been eventually becoming part of this elite group [of TLLP teacher leaders], they’re not the ones that you might have anticipated. So if you don’t open it out to those teachers who are not automatically leaders in their area, you actually undermine the program... If you pre-select teacher leaders, you miss the opportunity to grow leadership, and the whole point of this ... the most exciting parts is when a teacher says, “I couldn’t present to a group before, only to my students. I never would have seen myself doing this, and now I’m flying across to here and there to give” I think that that is so beautiful in this project. (OTF interviewee).

*...it’s powerful... I think of one of the TLLP teachers who is now very involved in Teach Ontario who stated to me that a year ago she was afraid to speak up at a staff meeting, and now she is leading workshops at provincial technology conferences. So I think of those transformational pieces, and a really interesting one from northwestern Ontario where a former TLLP teacher is now **the** math consultant for **the** School Board. So that de-privatization of practice, whether it led to formal teacher leadership or formal leadership or whether it led to being a mentor, or being an associate teacher. Or just that idea as a habit of mind... (Ministry interviewee).*

Furthermore, as well as de-privatization of their practices, TLLP teacher leaders are increasingly sharing their knowledge, skills and resources with a larger professional community. For example, through online networking:

And what is excellent... is the fact that they are exchanging more information. They are not afraid to blog about their experience, to share their workshops. As part of the increased confidence, I believe, is that a lot more of the teachers are sharing on-line and with the virtual world than ever was possible. (OTF interviewee).

The goal of knowledge exchange has been integral from the outset of the TLLP in 2007. However, provincial interviewees indicated that this goal had really taken off during the 2014-15 year:

I would say that from my perspective there has been kind of an explosion really of the recognition of the TLLP. The external recognition, as well as internal recognition, of the TLLP... I think that it has been very clear that when groups are looking for innovation, groups within Ontario, but even outside, people are really recognizing what's been going on in the TLLP and you've really seen this explosion of the recognition of the program that has come largely through increased knowledge exchange activities. (OTF interviewee).

...we've seen a very pleasing increase in acknowledgement about the project, and that has come as a result of a growth in... the knowledge exchange more than anything else, because people are more and more aware of what's going on, and that has come out of this constant blogging and talking about and celebration of what they're doing, and in terms of what skills they're growing, the confidence that... really does grow their leadership skills and experiences, because the other teachers in the school and the Principals then look to them. And the whole system is looking to them. They are being chosen by the Ministry to present. They are being chosen by us to present. They are being chosen by other School Districts through the PKE. So all of that is progressing well. (OTF interviewee).

TLLP teacher leaders are continuing to be – and indeed increasingly – recognized as leaders for improving, sharing, spreading and sustaining improvements and innovations in professional practice. Furthermore, as well as direct benefits for teachers participating in TLLP projects, the growing success of the TLLP overall is resulting in a concern to widen the “TLLP approach” across other teacher development policies and practices:

...those guiding principles of the TLLP. So I think about authentic learning, or the agenda is owned by the teacher where there's choice and voice, where there's knowledge construction... so those same principles that are underneath the TLLP, we've tried to apply to the annual learning plan, to our work with new teachers, to even our work supporting associate teachers and teacher candidates. So I think that there's the impact of [TLLP on] the participants themselves - on each other and on their own - but I think more powerfully, maybe there's an impact on us. (Ministry interviewee).

In summary, provincial interviewees in the Ministry and OTF teams responsible for the TLLP continue to be highly positive about the TLLP and committed to its continuous improvement through attention to the ongoing principles of TLLP, adaptations and changes to introduce new enhancements, and being attentive to challenges and tensions as they arise.

4

RESEARCH IN PROGRESS

Two areas of research initiated during 2014-15 continue to be in progress.

4.1

PROVINCIAL KNOWLEDGE EXCHANGE LOGS

We requested all previous and current PKE project leaders to fill out a log of all PKE-related sharing activities. We plan to analyze the collected logs along with the ones we will receive (from 2013-2014 and 2014-2015) in 2015-2016 research year.

4.2

CASE STUDIES

In 2013-14, we initiated a case study of a PKE led by Kristen Muscatt-Fennell on Balanced Math in Simcoe County District School Board. We continue to research the expansion and evolution of this work as we further develop that case study.

In 2014-15, with advice from Ministry colleagues, we identified a new PKE case study: *Using iPads and ePortfolios for Pedagogical Documentation and Parent Communication*. This project focuses on integrating technology into Kindergarten classrooms for the purpose of documenting and supporting student learning. It focuses on building students' abilities to use the photography, video, and audio features of iPads to create electronic portfolios (ePortfolios) to document their learning. Throughout the school day, students use technology to take photos, make videos, and/or audio recordings about activities that they have engaged in as part of their learning centres. These photos and videos are shared in real-time within the classroom using smart TV and Apple TV technologies. Because teachers and students are able to easily share their work with the class, these 'documentations' of student learning are shared with classmates daily as prompts to encourage reflection on previous learning and in setting future directions and learning goals. Using ePortfolios allows students to: 1) reflect on their own work and learning; 2) take an active role in documenting their success; 3) examine their growth and learning over time; and, 4) make decisions about the future based on evidence and criteria (Teach Ontario, 2015).

The project was initiated by teachers at a school within the Renfrew County Catholic District School Board (RCCDSB) that had a high proportion of military families within its community. It was common for many of these households to be single-parent homes as a result of parental deployment overseas as part of their military service. The use of technology and creation of ePortfolios provided a unique and effective way to establish and maintain parent engagement in the face of these difficult circumstances. Using Desire2Learn, an online learning platform available through the Ontario Ministry of Education, teachers in the originating school (Saint Francis of Assisi Catholic School) were able to use the images and videos captured daily within their classrooms to create password-protected electronic portfolios for each student, which could be accessed from anywhere in the world where the internet was available. This 'blended learning environment' (classroom and online) has opened up pathways for parents, teachers, and students to engage with each other to support student success.

Based on the success of their TLLP project, the project team applied for and was awarded a Provincial Knowledge Exchange (PKE) grant to support sharing their learning with many of their Kindergarten colleagues from other schools within RCCDSB. The goal was not only to share their own successes with their peers, but also to build the capacity of other schools within the district to infuse technology into Kindergarten classrooms in the building and use of online learning environments to present and use students' electronic portfolios, while also emphasizing the benefits of pedagogical documentation. The project coordinators, Julia Graydon and Alison Radley-Walters, are organizing four professional development sessions to support their colleagues' learning. Funding in support of this PKE activity allows for the coordinators to facilitate their colleagues' exploration and learning about pedagogical documentation through full-day PD sessions that also allow for valuable

networking and collaboration time for the 65 RCCDSB faculty and administrators involved in this initiative. In addition to the face-to-face activities, there is also an online learning space where teachers can engage with and learn from each other. The project coordinators will also produce an iMovie that documents the shared learning experience among themselves and their students.

SITUATING TLLP WITHIN INTERNATIONAL RESEARCH ON EFFECTIVE PROFESSIONAL LEARNING

5

As our research on TLLP continues, we are seeking to both inform the continuing development of TLLP within and for Ontario, and also to learn from and profile the successes of TLLP and this form of professional learning more widely.

An early action of the Working Table on Teacher Development was to conduct a literature review of effective approaches to teachers' professional learning. Five principles for professional learning were identified:

1. **Coherent**

Teacher professional learning is ultimately about best practices for student learning and development and occurs in the context of the Ministry/board/school and parent/community/classroom continuum. Coherence is also built on the "three R's" of respect, responsibility and results, recognizing teacher professionalism and the complexity of teacher learning. ...

2. **Attentive to adult learning styles**

Teachers come to each professional learning experience with a wide variety of skills, knowledge, education, teaching, and training background. As a result, when planning professional learning, adult learning principles should be addressed by:

- Considering the role of choice. Research supports the importance of choice and self-direction in personalizing the learning.
- Providing programming that is viewed as meaningful, relevant and substantive.
- Providing differentiation in the content and delivery models.
- Considering "best fit" within a culture of collaborative learning. The "one size fits all" approach may prove problematic in many circumstances. Effective learning must recognize and include the participants' understanding and perspective in order to bring about a culture of reflection and transformation.
- Providing appropriate recognition for the successful completion of professional learning.

3. **Goal-oriented**

Professional learning is enhanced when it is goal oriented and is clearly:

- Connected to improved student learning and achievement.
- Connected to daily practice (job embedded), both directly and indirectly.

- Situated within and respectful of varied contexts (i.e. relevant to Ministry, board, school/community, classroom).

4. **Sustainable**

Professional learning that will have impact in the classroom must:

- Be planned and progress over time (i.e. it is a process).
- Be supported by appropriate resources focused on its success.
- Involve the learners and allow time for practice (job embedded).
- Include time for self-assessment through reflection (construct/de-construct/re-construct thinking about practice) within its processes.
- Include, wherever possible, congruency in professional learning for other staff who support student learning....

5. **Evidence-informed**

Professional learning should be considered and be built upon current research as well as both formal and informal data....

(Working Table on Teacher Development, 2007, pp.4-5).

These principles have become embodied in the TLLP.

Eight years later, as part of our research on TLLP as not only a provincial leader but also as a potential world leader in approaches to teachers' professional learning, we decided to review the current literature on effective professional learning to discern its connection or otherwise with our evidence emerging about the TLLP experiences.

5.1

LITERATURE REVIEW RESEARCH QUESTIONS AND METHODS

The following research questions were used to guide this inquiry:

- What are the 'big ideas'/recurring themes about teachers' professional learning and leadership development?
- What ideas and themes in the literature support and/or contradict the TLLP approach to teachers' professional learning?

Two sources, a best evidence synthesis (Timperly et al., 2007) investigating teacher professional learning and development, as well as a recent book titled, *Handbook of Professional Development in Education: Successful Models and Practices, PreK-12* (Martin, S. Kragler, D.J. Quatroche & K.L. Bauserman, 2014) served as dual starting points for the literature review. Efforts were made to expand the search to capture all contemporary perspectives and viewpoints in the selected references and ensure that the findings accurately reflect current best practices and key themes in teacher professional learning and leadership development literature. As such, the following seven databases were searched for potential studies that could inform this project:

- ProQuest;
- ProQuest Dissertations and Theses;
- JSTOR;
- EBSCOHost;
- Education Research Complete;
- Thesis Canada Portal;
- Google Scholar;
- Microsoft Academic Search; and the
- University of Toronto Library, including the print and online holdings at OISE.

The selected references cover a period from 2001 – 2015. The final selection of literature reviewed is comprised of 24 book chapters, 15 peer-reviewed academic journal articles and four professional reports¹. All of the selected references were written in English. Thirty-four of the references were produced in the United States of America, with small numbers of sources originating from Australia, the Netherlands, New Zealand, the United Kingdom and Chile.

LITERATURE REVIEW FINDINGS

Findings, which are organized by research question, are discussed in the remainder of this section.

RESEARCH QUESTION #1: WHAT ARE THE ‘BIG IDEAS’/RECURRING THEMES ABOUT TEACHERS’ PROFESSIONAL LEARNING AND LEADERSHIP DEVELOPMENT?

A careful review of the literature revealed 12 best practices or big ideas about teachers’ professional learning and leadership development. These best practices are divided into two domains. The first domain is appropriately titled, *Content of Teachers’ Professional Learning and Leadership Development*. Not surprisingly, this domain and the three thematic areas it contains highlight content-related elements of effective professional learning and leadership development programs. The second domain of best practices related to teachers’ professional learning and leadership development deals with how programs are structured. This domain contains nine best practices and is titled, *Structure of Teacher Professional Development*. Each of these domains and the 12 best practices they contain are displayed in Table 24, and will be discussed in the remainder of this subsection.

5.2

5.2.1

Table 24: Best Practices - Teachers' Professional Learning and Leadership Development

Summary of Best Practices –	
Teachers' Professional Learning and Leadership Development	
Content of Teachers' Professional Learning and Leadership Development	
Content Focus and Quality	
Teacher Voice	
Job-embedded Learning	
Structure of Teachers' Learning and Leadership Professional Development	
Collaboration and Community of Practice	
Sustained Duration	
Coherence to Professional Needs and Students' Needs	
Active Learning	
Professional Support, Coaching and Mentoring	
Program Evaluation	
Sustainability	
Reflection	
Positive Learning Environment	

CONTENT OF TEACHERS' PROFESSIONAL LEARNING AND LEADERSHIP DEVELOPMENT

It may seem obvious, but in terms of teachers' professional learning and leadership development, content is important. As demonstrated above in Table 25, content of teachers' professional learning and leadership development has been divided into three key themes and best practices: content focus, teacher voice and job-embedded learning. Each of these best practices associated with the content of teachers' professional learning and leadership development are discussed below.

Table 25: Best Practices - Content of Teachers' Professional Learning and Leadership Development

Content of Teachers' Professional Learning and Leadership Development
Content Focus and Quality
Teacher Voice
Job-embedded Learning

Content focus and quality

Garet et al. (2001) offered some of the earliest large-scale studies identifying a focus on content knowledge (rather than the activities used to deliver the content) as an element of effective teachers' professional learning programs. Since that initial study, some have indicated that a consensus exists in the literature regarding "content focus" being a key theme associated with effective teacher professional learning programs (CUREE, 2012; Desimone, 2009; Desimone & Stuckey, 2014; Evans, 2014; Merriman, 2014). Further, a content focus has been described as "among the most important features of effective professional development" (Griffith et al., p. 194). Dagen & Bean (2014) put it more simply by stating, "the recent research has validated the importance of features such as focused content" (p. 46). The Timperley et al. (2007) and CUREE (2012) syntheses note that the content of effective teacher professional development should have content which is focused on student outcomes. High quality content blends and connects theory and practice for teachers' professional learning to support valued student outcomes (Darling-Hammond et al., 2009). Indeed, a content focus was described as a core feature of effective teacher professional learning programs in 20 of the references included in the literature review.

Teacher voice

The importance of including teacher voice when creating content for programs aimed at developing teachers' professional learning was also identified in the research reviewed. For example, Ingvarson (2014) mentions that, "professional development should involve teachers in the identification of what they need to learn and in the development of learning experiences in which they will be involved" (p. 389). Perhaps Youngs & Lane (2014) offer one of the best assessments of the importance of including teacher voice in professional learning and leadership development programs. They state that, "having teachers choose their own research topics and design instructional strategies...can promote a strong sense of ownership among teachers over their professional growth" (Youngs & Lane, 2014, p. 300). Teachers will own the professional learning if they have a voice and if the content and activities helps to address their needs. The importance of professional learning which is personalized to teachers' needs and practical with relevance to their context is important. Teacher involvement in creating knowledge is so important that Lieberman & Miller (2014) noted that teacher involvement in creating knowledge must be a fundamental element of any professional learning opportunity.

As a best practice in teacher professional learning and leadership development, teacher voice can be incorporated into programming by providing teachers with the autonomy to lead projects, as well as implementing tools and processes to collect data in an effort to both build local policy from practice, and assess the effectiveness of ongoing professional learning on student outcomes. Timperly et al. (2007) note that teachers need a powerful reason to engage in professional learning. In order to engage participants in available opportunities, programs need to view teachers, "as self-regulating professionals who, if given sufficient time and resources, are able to construct their own learning experiences and develop a more effective reality for their students through their collective expertise" (Timperly et al., 2007 p. xxv).

Job-embedded learning

There is also a great deal of evidence to support the notion that job-embedded learning, which often occurs in the form of action-research or school-based professional learning is associated with effective teacher professional learning. Griffith et al. (2014) note that, "current research suggests that teacher professional development should be job-embedded, ongoing and directly related to the challenges teachers face in daily classroom instruction: (p. 190). Stated more bluntly, Rafael et al. (2014) found that, "when not situated in the immediate needs of the faculty, or when time is not allotted to build shared understandings of these goals, professional development is less likely to be effective" (p. 157). Similarly, in their study, Dagen & Bean, (2014) found that teachers, "indicated that professional development that is disconnected from classroom practice has little impact" (p. 45). The evidence suggests teachers' professional learning opportunities have a greater probability of being effective when rooted in daily practice. For instance, programs which emphasize action research can unlock authentic changes in instructional practice by allowing teachers to direct their own professional learning and identify the focus of their own learning.

STRUCTURE OF TEACHER PROFESSIONAL DEVELOPMENT

The preceding discussion has emphasized the importance of focusing on appropriate content when developing teachers' professional learning. However, the ways in which professional learning is structured is just as important. Nine best practices related to the structural elements of effective teacher professional learning and leadership development were identified in the literature. These nine best practices are displayed below in Table 26.

Table 26: Best Practices - Structure of Teachers' Professional Learning and Leadership Development

Structure of Teachers' Professional Learning and Leadership Development
Collaboration and Community of Practice
Sustained Duration
Coherence to Professional Needs and Students' Needs
Active Learning
Professional Supports, Coaching and Mentoring
Program Evaluation
Sustainability
Reflection
Positive Learning Environment

Each of these nine best practices is discussed in the following subsections.

Collaboration and community of practice

There is a consensus in the literature regarding the need for teachers' professional learning to offer participants opportunities for collaboration and the potential to develop a community of practice. (Sharing knowledge and collaborating with other teachers is a vital part of effective professional learning and teacher leadership. Brozo (2014) indicates that, "professional development can be more effective if it occurs in a collaborative culture that emphasizes the importance of teacher as learner and schools as places of learning for both students and teachers" (p. 59). Similarly, Gordon et al., (2014) mention, "teacher leaders tell us they learn much from dialogue and problem solving with other teachers" (p. 51). Further, if teacher-leaders who engage in effective professional learning and leadership development opportunities are seen as credible by their colleagues, others on staff will want to participate in similar activities. The importance of professional learning providing opportunities for structured dialogue, group work and discussion surrounding problems of practice cannot be understated.

As Griffiths (2014, p. 200) comments: "The power of a community of practice to sustain momentum has to be underscored in any discussion of high-quality professional development". Effective teacher professional learning and leadership development create and embed opportunities for collaboration. There is also evidence that collaboration and communities of practice can be a mediating factor in changing teacher practice and improving student learning, while supporting participants in trying new things, processing emergent understandings and reflecting on implications for the classroom.

There is also evidence indicating that online communities of practice are not only effective, but provide a good space for authentic teacher professional learning and leadership development to take place. Online professional learning opportunities can be convenient for teachers to access. Further, Lieberman & Miller (2014) mention that, online networks "view teachers as thinkers and doers" (p. 13) and point to, "a growing body of evidence from both research and practice that authentic professional learning can be promoted through online networks and learning communities" (p. 18). Whether participants and interacting face-to-face or using online resources, it is clear that there is a consensus in the literature that collaboration and developing a community of practice, either through networks or other means, are best practices in supporting teachers' professional learning and leadership development.

Sustained duration

Professional learning opportunities with a sustained duration are associated with changes in practice and improved outcomes. For instance, “the more intensive, long-term professional development teachers have, the greater the achievement gains posted by their students during the following year” (Darling-Hammond et al., 2009, p. 9-10). It appears that a *minimum* of 49 hours of sustained professional learning is needed to really effect improvements in practice and outcomes with higher number of hours of quality professional learning being desirable. Indeed, one-off lectures will not change practice rather sustained and ongoing professional learning and leadership development is more likely to have a positive impact in the classroom. Both time span, in terms of the timelines associated with a professional learning opportunity, and the contact hours spent engaging in the professional development are two aspects of duration associated with effective programs. Penuel et al. (2007) indicate that, “professional development that is of longer duration and time span is more likely to contain the kinds of learning opportunities necessary for teachers to integrate new types of knowledge into practice” (p. 929), including opportunities for professional reflection and for adaptations in learning.

Coherence to professional needs and students’ needs

Penuel et al. (2007) explain that, “coherence refers to teachers’ interpretations of how well aligned the professional development activities are with their own goals for learning and their goals for their students” (p. 931). This means that effective professional learning has coherence with, and is situated within a teachers’ context and daily practice and linked also to their students’ needs. As Brozo (2014, p. 271) comments: “Teachers need new strategies and practices in professional development contexts that can be integrated into their existing instructional repertoires and routines”.

Active learning

Since the turn of the century, a growing body of research has identified active learning as a core feature and best practice associated with effective teacher professional development. . Active professional learning is designed to maximize teacher learning. Timperly et al., (2007) indicate that “teachers require similar conditions to students when in-depth learning is being promoted; that is, they need multiple opportunities to learn through a range of activities” and that, “these activities need to be focused on content aims, such as translating theory into practice or demonstrate how assessment can be used to focus and refine teaching” (p. xxxviii). Indeed, effective professional learning involves multiple, active opportunities for experimenting, observing, sharing, monitoring and adapting through new knowledge, skills and practices.

Professional supports, coaching and mentorship

Research indicates that providing professional supports to teachers who are engaged in professional learning can be important. Teachers need scaffolding just as much as students when learning new skills, so coaching, mentoring and peer supports are good examples of supports that can be put in place to enhance professional learning opportunities for teachers. As Frost (2012) states, “teachers can lead innovation, build professional knowledge, develop their leadership capacity and influence colleagues and practice in their schools, provided they have the appropriate support structures and strategies” (p. 223). Based on this evidence, effective professional learning and leadership development opportunities for teachers include a component designed to support teachers throughout this process.

Program evaluation

Effective professional learning and leadership development needs to generate data and evidence to demonstrate effectiveness, for example through an evaluation plan to determine if desired goals, objectives and outcomes have been achieved.

5.2.2

Sustainability

Sustainability is not necessarily a best practice in and of itself, but seemingly the result of incorporating a number of these above research-informed best practices into professional learning. Sustainability is directly related to “the notion of capacity building, so that participants are able independently to carry out the improved practices gained through professional development and even to lead others in carrying out these practices” (Rafael et al., 2014, p. 164). Timperly et al., (2007) indicate that a program can only be deemed to be sustainable if improve outcomes once implementation is complete or professional development supports have been removed.

Opportunities for reflection

Teachers’ professional learning and development which builds in opportunities for participants to engage in reflection are also associated with effective professional development in the research reviewed. For instance, Webster-Wright (2009) states that, “research findings have indicated that professionals learn through practice experience, that reflection has a valuable role in learning that requires change, and that such learning is contextually mediated” (p. 720).

Positive learning environment

A positive learning climate is essential for collaboration and can lead to authentic changes in instructional practice. Hence, it seems that effective teacher professional learning and leadership development requires attention also to the development of a supportive positive learning environment.

RESEARCH QUESTION #2: WHAT IDEAS AND THEMES IN THE LITERATURE SUPPORT AND/OR CONTRADICT THE TLLP APPROACH TO TEACHERS’ PROFESSIONAL LEARNING?

Not surprisingly, but nonetheless encouragingly, there is high congruence between the five principles of effective professional learning identified by the Working Table on Teacher Development (2007) – coherent, attentive to adult learning styles, goal-oriented, sustainable, and evidence-informed – and the 12 features of effective professional learning we discuss from our review of recent relevant literature – content focus and quality; teacher voice; job-embedded learning; collaboration and community of practice; sustained duration; coherence to professional needs and students’ needs; active learning; professional support, coaching and mentoring; program evaluation; sustainability; professional reflection; and positive learning environment. This is highly encouraging.

What is perhaps even more encouraging is that our research evidence indicates that TLLP does in fact embody all of these principles in its actual practice. This is to be highly commended. While there is growing evidence and consensus about ‘what’ effective professional learning requires, previous syntheses and reviews have suggested that these principles have not actually been fully applied in practice. Our review of the research literature, plus an inter-jurisdictional scan of teachers’ professional learning in other contexts, combined with our research evidence lead us to conclude that TLLP embodies highly effective and evidence-informed principles and practices for teachers’ professional learning and is a global leader in this work.

The research conducted in 2014-15 continues to confirm and add further evidence of the powerful nature, benefits and impacts of TLLP for teachers' professional learning, knowledge, skills and practices, which in turn can also benefit experiences and outcomes for students. Returning to our overarching research questions, some conclusions and highlights from the 2014-15 research are summarized below.

WHAT IS THE IMPACT OF TLLP PROJECTS FOR TEACHERS' PROFESSIONAL LEARNING, KNOWLEDGE, SKILLS, PRACTICES AND LEADERSHIP?

6.1

Participants in the TLLP are highly enthusiastic about the benefits of these projects. In 2014-15, 97% of participants in the *Leadership Skills for Classroom Teachers* training rated being very satisfied or satisfied with the experience. At the end of their TLLP project, 98% of participants reported being very satisfied or satisfied with the *Sharing the Learning Experience*. These are excellent results.

As part of our longitudinal research, in 2014-15, we surveyed current and previous TLLP project leaders over all cohorts. All (100%) survey respondents indicated TLLP-related professional learning benefits. Specifically:

- ✓ 78% of respondents reported new knowledge and/or improved understanding
- ✓ 75% of respondents reported improved instructional practice
- ✓ 73% of respondents reported improved communication/collaboration between teachers
- ✓ 58% of respondents reported improved energy/inspiration
- ✓ 54% of respondents reported improved self-efficacy
- ✓ 50% of respondents reported improved technological skills
- ✓ 48% of respondents reported improved assessment skills
- ✓ 33% of respondents reported improved classroom management skills
- ✓ 23% of respondents reported improved research skills.

With regard to teacher leadership, 97% of survey respondents indicated that the TLLP had supported development of their leadership skills. Specific skills that improved were:

- ✓ Improved facilitation/presentation skills for 74% of respondents
- ✓ Improved project management skills for 70% of respondents
- ✓ Improved communication/listening skills for 54% of respondents
- ✓ Improved interpersonal skills/relationship building for 53% of respondents
- ✓ Improved trouble shooting/problem solving skills for 47% of respondents

Ten TLLP teacher leaders wrote vignettes during our 2014-15 research. These vignette writers spoke of the experiences of: stepping into leadership and working with peers as partners; growing leadership in their TLLP team; learning leadership while implementing new ideas; developing collaboration, courage and support as a leader; and identifying and overcoming personal and interpersonal leadership challenges.

Provincial TLLP partners in OTF and the Ministry spoke of the positive benefits of teacher-led professional learning through the TLLP with impact for participating teachers' confidence, knowledge, skills, and practices and their growing leadership to share, support and spread professional learning and practices with other teachers. A combination of de-privatizing practices and professional collaboration (in person and online) is very powerful for teachers' professional learning and leadership development.

While TLLP focuses primarily on teachers' learning, the improvements in knowledge, skills and practices are intended to also benefit students. According to the majority of our survey respondents, their TLLP professional learning and practices had benefited students' engagement (73% of respondents), improved students' learning experiences (66% of respondents), increased achievement (56% of respondents), and/or improved students' motivation (53% of respondents).

In combination, TLLP is providing considerable improvements and impact for teachers' professional learning and leadership development with benefits for teachers' practices and for students' experiences and outcomes.

6.2

HOW IS LEARNING SHARED BEYOND THE TLLP TEAM?

An important goal of TLLP is knowledge exchange to share professional learning and practices more widely. The main audience for sharing TLLP knowledge is teachers (according to 96% of survey respondents). Additional audiences include school and district administrators, students, parents, and community members. Over three-quarters (77%) of TLLP survey respondents reported sharing knowledge within their own school, and over two-thirds (64%) reported sharing knowledge within their own board. Almost half (49%) of survey respondents shared their TLLP knowledge with other nearby schools, for example in families of schools, and 21% of TLLP projects shared their knowledge across other school boards. Impressively, a quarter (25%) of TLLP projects shared their knowledge provincially and 10% shared their knowledge nationally and/or internationally.

Consistent with our 2013-14 findings, the main methods of knowledge exchange involved in-person sharing/professional learning and/or online sharing of knowledge, practices and resources. Specifically, the following methods of sharing were reported by TLLP survey respondents:

- ✓ Use of workshops/professional development sessions (77% responses);
- ✓ Staff meetings (61% responses);
- ✓ Online media (51% responses);
- ✓ Teacher professional learning communities/groups (44% of responses);
- ✓ Conference presentations (43% of responses);
- ✓ Modeling/classroom visits (43% of responses);
- ✓ Mentoring (37% of responses).

In addition, communications and publications were used, including school newsletters, professional articles, and academic journals, to further spread information and awareness about the TLLPs. In terms of what TLLP members are sharing for professional learning and knowledge exchange, the vast majority (73%) of projects are (co)producing and sharing materials for use in classrooms. The combination of professional collaboration (in person and online) to develop and share practical resources appears to be powerful.

With just over half of TLLP survey respondents utilizing online media, the most common online approach was via the Mentoring Moments NING (24% of online activities). Very encouragingly, our analysis of NING data for 2014-15 indicates increased use of this online site. Comparing average monthly data for 2014-15 to 2013-14, we discover the following increases:

- ✓ Monthly visits increased from average of 1679 in 2013-14 to 2412 in 2014-15
- ✓ Monthly unique visitors increased from average of 1094 in 2013-14 to 1716 in 2014-15
- ✓ Monthly page visits increased from average of 7376 in 2013-14 to 8249 in 2014-15

The number of blog posts more than doubled comparing 2013-14 (131 blogs) to 2014-15 (278 blogs). By March 2015, there were 91 TLLP groups on the NING and 81 discussion threads occurred during 2014-15. These increased in online activity on the NING are impressive.

According to provincial interviewees, the knowledge exchange goal of TLLP has developed considerably during 2014-15. There has been “an explosion” of interest in TLLP projects and the identification of TLLP teacher leaders as sources of knowledge and expertise by partners across Ontario and beyond.

Two new initiatives – Teach Ontario an online platform developed by TVOntario in partnership with TLLP teachers “For Ontario teachers, By Ontario teachers” and the Norway-Canada partnership involving former TLLP participants – have the potential to further the provincial, national and international sharing of teachers’ knowledge, skills, and practices.

WHAT LONGER-TERM IMPACT CAN BE IDENTIFIED FROM PARTICIPATING IN TLLP PROJECTS?

6.3

TLLP teacher leaders attend their initial training in May, are expected to implement their TLLP project during the following school year, and report on their final project at the *Sharing the Learning Summit* in November. Hence, TLLP participants are engaged in their projects for approximately 18-months in total. In this context, there have been some concerns about whether TLLP projects can have a longer-term impact. Indeed, the PKE was introduced as one response to provide funding to board to further extend the spread and sustainability of TLLP learning.

Very encouragingly, 98% of our TLLP survey respondents reported that their TLLP activities had been sustained in some way. Reported aspects of sustainability included:

- ✓ Further implementation of TLLP learning/strategies/tools (82% responses);
- ✓ Further development of professional learning (80% responses);

- ✓ Continued or further collaboration with colleagues to develop and/or improve teaching practice (70% responses);
- ✓ Further sharing of professional learning/strategies/tools (66% responses).

In our review of research literature concerning effective professional learning, sustainability is a key and potentially challenging issue. The above findings concerning sustainability or spread and/or implementation of TLLP-related activities after the initial funding is highly important.

6.4

CONCLUDING COMMENTS

Overall, we conclude that there are substantial benefits and positive impacts from participating in the TLLP for teachers' professional learning, knowledge, skills, practices and leadership development. These benefits can extend to other professionals and to students, parents and community members through improvements in educational practices and also sharing of new knowledge. The provincial TLLP partners – in the Ministry and OTF – are to be highly commended for their continuing commitment to the TLLP, now in its 9th Cohort of TLLP projects. Moving forward, continuing to value, honor and embed the original and integral principles of the TLLP through partnership working to support professional learning for, with and by teachers will be key; combined also with the ongoing commitment to continuous improvement for the details of the TLLP in practice and to include new relevant professional learning approaches and opportunities as appropriate.

To end in the words of one of our TLLP survey respondents:

... each of our projects have yielded more than expected positive results and each has a lingering effect on both our learning and our sharing as well as our professional practice. We look forward to future TLLP projects. Thank you very much for these learning opportunities.

And in the voices of two of our TLLP vignette writers:

TLLP has been one of the best learning experiences that the school community and I have participated in. Teachers need time to collaborate, co-teach, debrief, and learn together. TLLP allowed us to accomplish this goal.

This has been one of the most empowering experiences of my career!

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