Mathematics Leadership Community of Practice
CoP ANNUAL IMPLEMENTATION AND ANNUAL REPORT COMPONENTS
November 1, 2016 – August 31, 2017

PRINCPLES

How did the CoPs address the 3 principles of the MKN?

Addressing Teacher Identified Needs

- Annual surveys of, and annual interviews with, teachers and school (CoP)
    - Survey questions about identified needs
    - Annual feedback from teachers involved
- Assess the extent to which CoP activities addressed teacher identified needs reported in the annual survey (CoP)
    - Survey questions about the alignment of the teacher-identified needs to CoP activities
- Assess the extent to which teachers, both those in the CoP and beyond the CoP, were involved in CoP activities (CoP)
- Membership of the CoP to be specified
- Instances of annual collaboration and planning meetings will be reported

Implementation Plan

Anticipated Outcomes (See Appendix A)	**Activities (e.g., events, resource development, meetings etc.)**	**Anticipated Outputs (if applicable)**	**Number and type of participants (if applicable)**	**Anticipated Timeline**	**Monitoring and Evaluation** (Required: Surveys and interviews for teachers, parents, etc.)
Identify educators' needs Outcomes #2 & #3	GECDSB MSLTs meet to extend content, pedagogy and leadership learning	Surveys	48 (In elementary: administrators, Division Leads (P/J/I), and Special Education Teachers; in secondary: DH, and teacher representatives of Academic, Applied and Locally	April/May 2017	Surveys; notes from the meetings

			Developed Courses)		
	CoP Members provide feedback	Feedback re. survey questions		May 2017	Revised surveys
	Members (OPC, OMCA, GECDSB, MLN) conduct surveys with educators		Member organizations have access to thousands of educators	May-June 2017	Survey/ interview data
Examine mathematics leadership Outcomes #2 & #3	GECDSB MSLTs meet with guests from member organizations	Compare organizational structures (system and school) necessary to support mathematics leadership across the GECDSB and province	48 (GECDSB) + 10 (guests from member organizations)	June/July 2017	Description of models (incl. benefits and limitations)
Co-learn Outcomes #2 & #3	Martinovic attends regional meetings of the CoP members	Capacity sharing and building		April-August 2017	Notes from the meetings; data collected by member organizations

Report

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Changing Attitudes in Mathematics

- Show evidence that the work of the CoP has a mathematical focus that is conceptually rich for students and teachers – each CoP identifies such activities
- The design of student experiences creates opportunities for students to share their learning (especially in the form of mathematical surprises and conceptual insights) with family, friends, and the wider community

    - Annual survey will also include data about the extent to which activities of the CoP engaged family and the wider community (CoP)
- Any instances of student-level impact will be reported (CoP)
    - Survey questions about attitudes toward mathematics (drawn potentially from EQAO questions)
- Evidence of artifacts (actionable resources, case stories, etc.) that were shared on the MKN website that reflect the above criteria
    - Data collected on number of artifacts created and shared

Implementation Plan

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Outcomes #1 & #4 & #5	Resource development meetings	GECDSB Math Task Force findings (plain language summaries) What is math leadership? (research synthesis) Concreteness fading (case study) 2 exemplary lessons (based on SWOAME and CI work)	~5 CoP members	June-August 2017	Analytics from the CoP's website
	Educators use the resources	Student level impact		April-June 2017	Students from affected grades are interviewed

Report

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Fostering Inclusion

- Annual surveys of, and annual interviews with, teachers and school (CoP), compiled annually (MKN). Survey diverse groups engaged in the activities (CoP)
- Report on how the design of student experiences foster differentiated learning
- Differentiation levels of artifacts and quantity of artifacts reported. Sow evidence that the design of student experiences fosters differentiated learning: for example, student experiences have a low floor (allowing engagement with minimal prerequisite knowledge) and a high ceiling (offering connections to more complex relationships and more varied representations).

Implementation Plan

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Outcomes #2 & #3	EdCamp event	Mathematics knowledge mobilization	~350	August 2017	TVO analytics Event exit cards

Report

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ACTIVITIES/OUTCOMES

What activities have the CoPs engaged in to achieve network outcomes through their work?

CoPs will produce/report on the following annually:

Resource Production

1. Actionable evidence-informed, differentiated resources
   - Lesson plans/supporting resources
   - One case study/CoP
   - One research mini/CoP
2. Research Syntheses
   - One plain language summary/CoP

Implementation Plan

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Outcomes #3 & #6	Apply for external funding	Support for networking and scaling up	All member organizations	May-August, 2017	Number of potential leveraging grants
	Workshops	4	TVO and other member organizations	May-August 2017	# of CoP-led workshops (4 annually) # of participants

	A documentary			August 2017	Web analytics
	A research-mini			August 2017	Web analytics and feedback from members

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Capacity Building

3. Networking and scaling up (meetings, conferences, additional funding, etc.)
    - Number of first-time teacher participants
    - Number of teacher participants who have participated in other provincial initiatives beyond CoPs
    - Number of extended projects
    - Number of potential leveraging grants
4. CoP-led workshops (4 annually)
    - Number of teacher participants
    - Number of math-teacher lead participants
    - Number of administrator participants
    - Number of participants outside of the CoP
    - Overall number registered to attend

Implementation Plan

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Knowledge Dissemination

5. Arts-informed knowledge dissemination
    - One story-based research mini
    - Up to one research song
    - Post-concert/activity surveys
6. TeachOntario
    - CoPs utilize TeachOntario as a digital space for KM and collaboration – report on number of instances of collaboration
    - CoPs make use of existing resources available on TeachOntaio – report on number of artifacts posted
7. Publications
    - One article/CoP for each of the target audiences (practitioners, scholarly community)
8. Conferences
    - One conference/CoP per year

Implementation Plan

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Outcomes #1 - #6	Involve TeachOntario	Utilize web space Research mini Documentary		May-August 2017	
	EdCamp conference	One conference	~350	August 2017	Exit survey
	Share resources	Publications One plain language summary One research synthesis One case study 2 exemplary lessons		May-August 2017	Web analytics & feedback from the audience
	Accessing expertise	Exploring and planning more deeply around an open-network to learning	TBD	May-August 2017	Feasibility of a network to learning

Report

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ADDITIONAL INFORMATION

1. List and attach copies of any other relevant final documents or other products including marketing and promotional materials; media coverage; developed resources; testimonials; participant feedback, surveys, analysis, and other performance measurement tools/mechanisms, and so forth, that demonstrate the success and achievements of the CoP.
2. List any adjustments to the annual knowledge mobilization plans.
3. Highlight some promising practices that have shown evidence of improving mathematics outcomes for students.
4. Provide any OTHER information that may be relevant to this report and/or demonstrate the success of the CoP.
5. Provide details of any challenges/barriers faced while implementing CoP activities or working towards achieving network outcomes. Include steps taken to address them. Highlight issues of continuing concerns and potential solutions to them.
6. Lessons Learned: Based on your experience in implementing CoP activities and working towards achieving network outcomes, provide details on what can or should be done differently and why.

Report

[Insert text]

Appendix A
Anticipated Outcomes

1. Increased awareness, understanding, use and sharing of evidence-informed practices for mathematics by engaging teachers in co-designing mathematical learning experiences for students that offer surprise and conceptual insight, and opportunities to share their learning with family, peers, and the wider community, changing mindsets around professional learning and attitudes towards mathematics;
2. Enhanced capacity of school districts, organizations and universities in Ontario to collaborate, to access existing, as well as generate new, evidence-based knowledge that can positively impact the teaching and learning of mathematics, and efficiently meet the goals and directions of Ontario curriculum and policy;
3. Increased collaboration, partnerships, and networking between and among the Ministry, organizations, communities, networks and associated communities of practice across the education sector;
4. Improved student engagement, and equity of outcomes and well-being for marginalized students by enhancing learning and participation opportunities;
5. Advanced mathematics learning for First Nations, Métis and Inuit students, built on ways that have been identified through traditional technologies and design, as well as expanding the lens of educators to deepen their understanding of the benefits of integrating Indigenous "ways of knowing" into their practice; and
6. Sustained growth, in breadth and depth, of networks that provide evidence-based knowledge sharing to inform mathematics program, policy, and practice, based on existing and other sources of funding.