## TCDSB 7-12 NUMERACY PROFESSIONAL LEARNING PLAN STOP, START, CONTINUE FOR 2015-2016

| Goals | Initiative/ Subject | Details | Grades | Schools | \# Teachers | \# Days | Time Lines | STOP, START AND CONTINUE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Develop understanding of mathematics program planning and instruction in relation to Ontario mathematics curriculum, EQAO assessment practices and board improvement goals, like LG, SC, DF | EQAO <br> Assessment <br> Analysis | Focus on organization, planning, teaching and assessment strategies in preparation for grade nine EQAO Assessment of Mathematics. <br> Gr 7/8 teachers analyse Gr. 3 \&6 EQAO data of their students to further inform and improve classroom strategies <br> LG, SC, DF learning sessions | 7-8 7-10 | 34 schools <br> N/A <br> N/A | 1-2 teachers per school <br> PAL-sessions <br> PAL-sessions | 4 days $x$ <br> 25 teachers $=100$ <br> teachers <br> 4 days $\times 20=80$ <br> teachers <br> 6 days $\times 25$ <br> teachers $=150$ <br> teachers | Oct 2015, Feb 2016 <br> Oct 2015, Jan 2016 <br> Oct 2015, Feb 2016 May 2016 | Continue EQAO sessions with four sessions (two October and two February, two East and two West ) that teachers participate. <br> Start- one session per grade; low achieving schools; ( 2 sessions ( 7 and 8 ) in the West and 2 sessions (7 and 8) in the East) <br> Continue LG, SC, DF, sessions, (two Fall, two Winter, two Spring), (three East and three West) |
| Develop math content and pedagogical knowledge in relation to analysis and monitoring of student learning and achievement using collaborative inquiry study sessions with whole math department (division) and co-teaching. | Collaborative inquiry | Collaborative inquiry/ study sessions with math department. <br> This sessions are facilitated by numeracy resource team | $\begin{aligned} & \hline 7-10 \\ & 7-10 \end{aligned}$ |  | $\begin{aligned} & 15 \text { to } 20 \\ & \text { teachers } \times 4 \\ & \text { groups }=80 \\ & \text { teachers } \end{aligned}$ | 3 days per SSLN group <br> 3 day per group | Oct 2015 to <br> May 2016 <br> Oct 2015 to <br> May 2016 | Continue - high schools with their feeder schools ( SSLN-grades 7, 8, 9 and 10) . <br> Continue - local or group of schools math professional learning sessions, 2-3 schools in a group inquiry based learning, coteaching. |
| Develop math content and pedagogical knowledge within the context of school and regional leadership contexts | Math Leadership | Learning session on math leadership strategies (e.g., math department heads sessions, math reps, and coaches). | $\begin{aligned} & \hline 7-8 \\ & 9-12 \end{aligned}$ | 14 schools <br> 34 schools | 14 teachers <br> 34 heads+ 34 <br> numeracy <br> leads | 3 days <br> $\times 14$ teachers $=$ <br> 42 days <br> 3 sessions from <br> 2pm-4pm <br> $3 \times 34 \times 2=204$ <br> teachers | Dec 2015 to <br> June 2016 <br> Sept 2015 <br> Feb 2016 <br> May 2016 | Start- <br> Continue |


| Develop math content and pedagogical knowledge in relation to analysis and monitoring of student learning and achievement using focused learning sessions. | Focused Learning Sessions | Sessions, PAL sign-up, focused on hot topics; e.g., learning skills in mathematics, learning and teaching through problem solving, enrichment in mathematics, implementing technology in mathematics classrooms, learning trajectories, inquiry based learning lessons/units design, spiraling through curriculum-unit design) | Gr 7-12 | 192 schools | 20 teachers <br> per session= $9 x$ <br> 20x2= <br> 360 teachers | 9 topics $\times 2$ sessions=18 days x20 teachers= 360 teachers | Nov 2015 to March 2016 | -continue- learning skills in mathematics, learning and teaching through problem solving, enrichment in mathematics, implementing technology in mathematics classrooms, learning trajectories, inquiry based learning lessons <br> -Start- units design, spiraling through curriculum-unit design |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investigate, study math content, implement related instructional strategies and analyze and monitor its impact on student learning and achievement; Summarize results of study and analysis in a curriculum resource document. | Math Working Group | Monthly sessions <br> I-Pad in Mathematics | Gr. 7/8 <br> Gr. 9 | 10 elementary schools <br> all high schools | 20 teachers per session <br> 20 teachers per session | $\begin{aligned} & 20 \times 4 \text { days }=80 \\ & \text { days }(\times 2 \text { east } \\ & \text { and west })=160 \\ & \\ & 20 \times 3 \text { days }=60 \\ & \text { days } \times 2 \text { east and } \\ & \text { west })=120 \end{aligned}$ | Sept 2015 to June 2016 <br> Nov 2015 to <br> April 2016 | start - focus on division; grade 7 and 8 ; schools and teachers who are interested regardless of achievement, but group schools who are in common; 4 sessions with the last session as a local study (AMP) <br> Continue to explore iPad apps and to plan math lessons using iPads |
| Develop strategies for using Knowledgehook web-based program for student selfdirected learning and classroom instruction | Knowledge hook Implementation | ```Student and teacher use of web-based self- directed learning, practice and assessment program designed with gaming principles``` | Gr 9 | 9 schools | 3 teachers $\times 9$ <br> schools $=27$ <br> teachers | $\begin{aligned} & 2 \text { days } \times 27=54 \\ & \text { days } \end{aligned}$ | $\begin{aligned} & \hline \text { Oct } \\ & 2015 \text { to June } \\ & 2016 \end{aligned}$ | continue- classroom visits, focus on teachers new to KN |
| Develop math content and pedagogical knowledge | OAME Local <br> Conference <br> Toronto <br> Math AQ and <br> ABQ Courses | Educator selfselected mathematics learning sessions (after school) $50 \%$ subsidization of AQ Senior and ABQ Intermediate Math | 7 to 12 <br> 7 to 12 | N/A | 2 teachers $\times 50$ <br> schools $=100$ <br> teachers <br> 28 teachers | None <br> None | Oct 2015 <br> Year long | Oct 2015, May 2016 <br> Sept 2014 to July 2015 |

