## **Appendix J- Details for Question A12**

## Estimates of Burden of DMI PD

The DMI PD program (Making Meaning for Operations in the Domains of Whole Numbers and Fractions) consists of eight 3-hour units that are presented over <u>five PD sessions</u>—typically two 3-hour sessions (units 3 and 6 which include more difficult material to absorb) and three 6-hour sessions (unit pairs 1 and 2, 4 and 5, and 7 and 8), with accompanying preparation assignments for each unit (approximately 8 hours needed for teachers to prepare for each of the five PD sessions, such as reading PD materials). The five sessions will be scheduled to take place over a 6-month period of the school year (typically beginning in September and ending in February).

The five PD sessions will be presented over a combination of Release Days and Saturdays. The specific schedule and structure of the sessions will be worked out in consultation with the DMI PD facilitators and school and district personnel. The two parties will have to decide what will work best for the facilitators and the teachers, given the school and district calendars. It may be that they decide to present the five PD sessions over five Release Days or over five Saturdays or some combination of the two.

If any of the five PD sessions take place during the work day and teachers are released from their teaching responsibilities, the study team will share the cost of the substitutes with the school or district. In most districts and schools, teachers are required to attend in-services during the work day and their substitutes are paid for by the school or district. If any of the five PD sessions are scheduled to replace typical district- or school-mandated PD, districts or schools will likely pay for the substitute. For additional PD days, if schools or districts cannot afford the cost of the substitutes, the study will offer to share that cost. (Note that the cost of paying substitutes in those cases where districts or schools refuse to pay for them has been included in the cost of the study and is not presented as an additional cost or incentive for this study.)

Teachers will be paid their typical hourly rate (varies by state and district and often by seniority) for any time they spend attending PD sessions or completing assignments outside of their work day (i.e., on Saturdays). If teachers attend sessions on Saturdays, they will receive their hourly rate for the time they spend attending the session, completing the preparation assignment, and traveling to the PD site. (Note that the cost of paying teachers for the time they attend the session, complete the preparation assignment, and travel to the PD site has been included in the cost of the study and is not presented as an additional cost or incentive for this study.)

Table J.1 summarizes some (but not all) potential variations of the two 3-hour sessions (units 3 and 6) and three 6-hour sessions (unit pairs 1+2, 4+5, 7+8) and estimates of burden for each. For question A12, the burden on teachers in the experimental group (n=123) was estimated based on the maximum time teachers may be expected to spend participating in the five PD sessions, completing 8 hours of assignments, and traveling to the site of the sessions, outside of their normal work day (i.e., if all five PD sessions took place on five Saturdays over 6 months of the school year). However, the study team anticipates the DMI PD facilitators and school and district personnel from each district will work out a variation of PD scheduling and structure, ranging from five Release Days to five Saturdays or some combination of the two.

Table J.1

Possible Schedule <sup>a</sup>	Burden Estimates <sup>b</sup>
<ul> <li>5 sessions on Saturdays</li> <li>0 sessions on Release Days <sup>c</sup></li> </ul>	24 hours of PD + 8 hours of assignments + 5 hours to travel to the site = <b>37 hours/per teacher</b>
	37 * 123 experimental teachers = 4551 hours, <b>1517 hours annualized</b>
<ul> <li>4 sessions on Saturdays</li> </ul>	21 hours of PD + 7 hours of assignments + 4 hours to
<ul> <li>1 session on a Release Day</li> </ul>	travel to the site = <b>32 hours/per teacher</b>
	32 * 123 experimental teachers = 3963 hours, <b>1312 hours annualized</b>
3 sessions on Saturdays	18 hours of PD + 6 hours of assignments + 3 hours to
<ul> <li>2 sessions on Release Days</li> </ul>	travel to the site = <b>27 hours/per teacher</b>
	27 * 123 experimental teachers = 3321 hours, <b>1107 hours annualized</b>
<ul> <li>2 sessions on Saturdays</li> </ul>	12 hours of PD + 4 hours of assignments + 2 hours to
<ul> <li>3 sessions on Release Days</li> </ul>	travel to the site = <b>18 hours/per teacher</b>
	18 * 123 experimental teachers = 2214 hours, <b>738 hours annualized</b>
• 1 session on a Saturday	6 hours of PD + 2 hours of assignments + 1 hours to
<ul> <li>4 sessions on Release Days</li> </ul>	travel to the site = <b>9 hours/per teacher</b>
	9 * 123 experimental teachers = 1107 hours, <b>369 hours annualized</b>
<ul> <li>0 sessions on Saturdays</li> </ul>	0 hours of PD + 0 hours of assignments + 0 hours to
• 5 sessions on Release Days	travel to the site = <b>0 hours/per teacher</b>
	0 * 123 experimental teachers = 0 hours, <b>0 hours annualized</b>

<sup>a</sup> For these estimates, individual 3-hour units were scheduled for Release Days before Saturdays; however, the DMI PD facilitators and school and district personnel from each district may prefer to schedule the double unit (6-hour) sessions for Release Days instead. That is another variation of scheduling that is <u>not</u> presented in this table.

<sup>b</sup> The estimate of burden on teachers was calculated by counting the number of hours they would use to attend PD sessions, complete related assignments, and travel to the PD site, **outside** the school day. For each Saturday session, one hour has been added to the burden estimates to account for driving to the PD location on a day teachers would not normally drive to work.

<sup>c</sup> Release Days include time for teachers to complete the related assignments for those PD sessions that take place during the school day.