

**Teacher Preparation/Readiness Matrix**

Key: O=Observations; I=Interview; S=Survey Response; T=Teacher; St=Student; Blk=Block

| King  | Miller  | Nolan  | Owens  | Reynolds   | Saunders   |
|---|---|--|--|--|--|
| I-wasn't prepared   | I-very little preparation<br>I-couple inservices but not how to tch alg in blk<br>I-overview for everyone | I-T must account for every minute<br>I-no specific trng prior to beginning |  | I-not very prepared<br>I-some small workshops<br>I-nothing to help write lessons for blk<br>I-wish had prepared lessons in summer before blk | I-zero prep; scared to death<br>I-didn't know how to fill time |
| I-takes lot of time to prepare<br>I-had to plan dbl lessons<br>I-don't have life after school anymore | I-still feel unprepared   | I-lots of work to prepare  |  |  | I-planned down to minute<br>I-first yr rough                   |
|   |   | I-mentor exp may have helped   | I-prior sum sch experience<br>I-prior mid sch experience |  |  |
|   | I-doesn't fit T style   |  | I-feel comfortable                                       | I-somewhat fits T style  |  |
| I/S-don't have hands-on material & sftwr  | S-lacks material  | S-lack eqp & mat   | S-have eqp and material needed                           | S-have eqp and material needed   | S-have eqp and material needed                                 |
| S-computers avail if need<br>S-use grphng cal   | S-computers avail if need<br>S-use grphng cal   | S-computer avail if need<br>S-use grphng cal                               | S-computers avail if need<br>S-use grphng cal            | S-computers avail if need<br>S-use grphng cal  | S-computers avail if need<br>S-use grphng cal                  |

| King   | Miller   | Nolan  | Owens  | Reynolds   | Saunders   |
|--|--|--|--|--|--|
|  | I-tch like always; not trnd diffrently<br>I-need trng in strategy, activities, pacing, what works, how much homework |  |  |  | I-basically doing same as always<br>I-not sure how much HW enough w/o overwhlmng |
| S-not enough time to cvr curr  | S-not enough time to cvr curr<br>I-hard to cover material  | S-not enough time to cover curriculum                                    | S-not enough time to cover curriculum                                    |  |  |
| S-lessons more varied now<br>S-Blk challenges<br>T to try new strategies | S-lessons more varied now<br>S-Blk challenges<br>T to try new strategies   | S-lessons more varied now<br>S-Blk challenges<br>T to try new challenges | S-Lessons more varied now<br>S-Blk challenges<br>T to try new strategies | S-lessons more varied now<br>S-Blk challenges<br>T to try new strategies | S-lessons more varied now<br>S-Blk challenges<br>T to try new strategies         |
| I-time too long  |  |  | I-can't pln one activity for whole blk time                              |  |  |
|  |  |  | I-T must use pln time well; if not, 2 days away                          |  |  |

**Teacher Satisfaction Matrix**

Key: O=Observations; I=Interview; S=Survey Response; T=Teacher; St=Student; Blk=Block

| King   | Miller  | Nolan   | Owens  | Reynolds  | Saunders   |
|--|---|---|--|---|--|
| I-T likes but St problem<br>S-T enjoys tchnng alg in block<br>S-T doesn't prefer block<br>S-T feels unscsfl<br>S-T not part decision | S-T doesn't prefer block<br>S-T feels unscsfl<br>S-T not part of decision<br>S-T enjoys tchnng alg in block | S-T doesn't enjoy tchnng alg in block<br>S-T not part of decision | S-T doesn't prefer block<br>S-T doesn't enjoy tchnng alg in block<br>S-T feels unscsfl<br>S-T not part of decision | S-T doesn't prefer block<br>S-T not part of decision<br>S-T enjoys tchnng alg in block<br>S-T feels scsfl | S-T doesn't prefer block<br>S-T doesn't enjoy tchnng alg in block<br>S-T feels unscsfl<br>S-T not part of decision |
| I-St attendance prob; neg impact   |   |   | I-St attendance is prob; neg impact  |   |  |
|  | S-blk not good for achievement  |   | S-Blk not good for achievement   | S-Blk not good for achievement  | S-Blk not good for achievement<br>I-Nt good for math; easier on T than St  |
|  |   | I-don't like alt day<br>I-St need time mgmt                       |  | I-don't like alt day; hard to f/u   | I-alt day is prob  |
|  |   | I-St don't do HW  |  | I-like to do as much as poss in class;HW is prob  | I-St don't do HW   |
| I-kids need brks<br>I-time too long for 9 <sup>th</sup> graders  | I-would like shorter blk<br>I-too long(not a groupie)<br>I-St attn spn poor                                 | I-too long; St tired  | I-would go back to 50 min<br>I-too long for attn span  |   | I-too long for St attn span & sitting  |
| S-T like blk more as time passes   | S-T like blk more as time passes  | S-T like blk more as time passes<br>S-has made better             | S-likes less over time   | S-T like blk more as time passes  |  |

| King   | Miller  | Nolan                                  | Owens  | Reynolds   | Saunders   |
|--|---|--|--|--|--|
| I-needs materials & software<br>I-need fieldtrip, jobs | I-hard to cover same amount of material<br>I-pos if St motivated; neg if St struggling<br>I-going all day is exhausting w/o break | I-T planning takes more time; research | I-T must manage time   |  | I-hard to decide how much HW to give<br>I-not all St like math<br>I-T tired on long day<br>I-T must plan every min of lesson |
| I-more time to reinforce                               | I-blk gives more time to ?<br>I-Opp for discovery (esp geom)  | I-opp to answer "why do I need this"   | I-opp to apply concept (paper to practice)<br>I-long plan period is a plus | I-like for discovery<br>I-Like for group work<br>I-More indiv attn to St<br>I-get to know St better<br>I-Labs possible<br>I-Bring in more technology | I-T more relaxed; St not as rushed<br>I-nice long plan time  |
| Lessons A quality                                      | Lessons C quality   | Lessons A quality                      | Lessons C quality  | Lessons B quality  | Lessons B quality  |

**Instructional Design and Strategies Matrix**

Key: O=Observation; I=Interview Statement; S=Survey Response; T=Teacher; St=Student; Proj=Project; HW=homework

| King  | Miller                                    | Nolan  | Owens                              | Reynolds                                | Saunders   |
|---|---|--|------------------------------------|---|--|
| I-fast start  | I/O-fast start                            | I/O-fast start                               | I/O-fast start                     | I/O-fast start                          | I/O-fast start   |
| I-HW check  | I/O-HW check                              | I-HW check                                   | I-HW discussion                    |   | I-HW check   |
| I/O-expln new material  | I/O-expln new lesson                      | I/O-T explanation                            |                                    |   | I/O-tch new lesson   |
| S/O-lecture(10x)  | S/O-lecture (1/2 time)                    | S/O-lecture some                             | S/O-seldom lecture                 | S/O-seldom lecture                      | S/O-lecture(22x)   |
| I/O-model prob for St   | I/O-model & demo problem                  | O-T model prob                               | I/O-demo & pract                   | I/O-model prob some                     | I/O-T models for St  |
| I/O-drill & prac  | I/O-prac problem                          | I/O-St prac prob                             | I/O-demo w/prac                    | I/O-St wrk & slv                        | I/O-St prac  |
| I/O-grp actvities   |   | I/O-St prob in group                         | I/O-St probs in group              |   |  |
| I/O/S-indiv work  | I/O/S-indiv work                          | I/O-indiv work                               | I/O/S-indiv work                   | I/O/S-indiv work                        | O/S-indiv work   |
| I/O-T assists   | I/O-T gives 1-1 help                      |  |                                    |   | I/O-T monitor St work  |
| I-reading text  |   | S-use txt (1/2) time                         | I/O-use text                       | I/O-text material                       | I/O-reading text   |
| I-quiz every 3 sections   |   |  | I/O-freq assessm (formal, infor)   |   | I/O-quiz/test often<br>I-use ntbk quiz                             |
|   | I/O/S-use partners                        |  | O-partners                         | I/O/S-St work w/partners (20X)          | O/S-St work w/partners (1/2)                                       |
| I/O-proj 1 per 9 weeks  | I/S/O-proj 1 per 9 weeks                  | S/O-proj (3-4)                               | S-few proj                         | S-some proj                             | O-proj 1x  |
| I/O/S-HW assgnmt  | I/O/S-HW assgnmt                          | I/O/S-HW assgnmt                             | I/O/S-HW assgnmt                   | I/O/S-HW assgnmt                        | S/O-HW assgnmt   |
| I-computer (spreadsheet)<br>S-some computer lab(6)<br>S/O-use cal(20) | S-computer activity (2x)<br>S/O-use calcs | S-come computer (6-10x)<br>S-use calcs (1/2) | S/O-cals<br>I/O-not much computers | S-computers some (3-5)<br>S/O-use calcs | I-don't use comp much<br>I-lack sftwr for alg<br>S/O-use calcs lot |
| S/O-all time Q&A  | I/O-Q all st                              | I/O/S-lots Q&A                               | S/O-lots Q&A                       | I/O/S-lots Q&A                          | I/O/S-lots Q&A   |
| S-alg applications(14)  | S-applications (1/2 time)                 | I/S/O-some applications                      | I/O/S-application prob             | I/O-prob/situatn<br>S/O-applctn(22x)    | S-applications some  |
|   | S/O-multip representations                | S/O-mult rep                                 | S/O-mult rep                       | S/O-mult rep                            | S-mult rep   |

| King                                      | Miller                                 | Nolan                                  | Owens                                  | Reynolds                               | Saunders  |
|---|--|--|--|--|---|
| S/O-alg as rules (14)                     | S/O-alg as rules (1/2)                 | S/O-alg as rules (all)                 | S/O-alg as rules (1/2)                 | S-alg as rules sometimes               | S/O-alg as rules (often)                                      |
| S-real data smtm                          | S/O-sm real data                       | S-use real data                        | I/O-real life connection               | S/O-use real data                      | S-seldom real data  |
| S/O-St part all                           | S/O-St part all                        | S/O-much st part                       | S/O-lots St part                       | S/O-St part                            | S/O-lots St part  |
| S/O-no jrnl, speakers, fld trp, portfolio | S/O-no jrnl, spkrs, fld trp, portfolio                        |
| S/O-few models<br>S/O-few group grades    | S/O-seldom use labs                    |  | S/O-few models or manip<br>S-smtm lab  | I/O-use St discovery                   | I/O-tch as trnd<br>I/O-not lot variety, T says "not creative" |
| S/O-St take note                          | O-St take note                         | S/O-St take note                       | S/O-St take note                       | S/O-St sldm note                       | S/O-St take note  |

**Student Responses - Engagement**

Key: O=Observed; I=Interview; S=Survey; DR=Document Review; St=Student; T=Teacher; Blk=Block;  
 O#1=Observation#1; O#2=Observation #2; O#3 = Observation #3

| King  | Miller  | Nolan  | Owens  | Reynolds   | Saunders  |
|---|---|--|--|--|---|
| I/O-St tend off task<br>I-time too long   | I-too much content in 1 less; tend quit   | I-St used to 1 act per less; tend quit   | I-less active=less atn<br>I-1 <sup>st</sup> 60 min best  | I-time 2 long for student  | I-2 long for student attntion   |
| S-St not more interested  | S-St not more interested  | I-St get tired   | S-St not more interested   | S-St can pay attention   | S-St can pay attn; St unwill to pay attn  |
| O#1 >1 off task all period (up to 4-5 at time)  | O#1-3 off task over entire blk  | O#1-all on task  | O#1-all on task  | O#1-1-6 off task most of time  | O#1-1 off task once   |
| O#2-OK 1/2hr; then 3-5 off tsk  | O#2-occasionally 2-3 off task   | O#2-1-2 off task occasionally  | O#2-3 off task at end of less  | O#2-3-6 off task occasionally  | O#2-3 off task end of class   |
| O#3-OK 1/2hr; then 2-3 off tsk  | O#3-occasionally 2 off task   | O#3-1 off task once  | O#3-1 off task occasionally  | O#3-3-4 off task occasionally  | O#3-1-2 off task occasionally   |
| I/O-T gives brks<br>S-give more 1:1<br>S-T gives fdbck<br>S-uses lot Q&A<br>S-T makes St notes<br>S-T gets active participation | S-give more feedback<br>S-T uses lot Q&A<br>S-T gets active participation           | S-give more feedback<br>S-T use lot Q&A<br>S-T gives active participation<br>S-T makes St take notes | S-gives more feedback<br>S-T use lot Q&A<br>S-T gets active participation<br>S-T makes St take notes | S-T gives more feedback<br>S-T uses lot Q&A<br>S-T gets active participation | S-T gives more feedback<br>S-T uses lot Q&A<br>S-T gets active participation<br>S-T makes St take notes |
|   | I-grp OK but with young St more people=less work                                    | I-St not groomed for groups  | I-would prefer daily meetings  |  | I-T didn't like long college classes (TTh)  |
|   | I-Lrng faster, better on some topics<br>I-more uninterr attn to topic (grph) is a + | S-T can give more help after St has been absent  |  | S-T gives more 1:1 after absent  | S-T gives more 1:1 help after absent  |

**Student Responses - Achievement**

Key: O=Observed; I=Interview; S=Survey; DR=Document Review; St=Student; Blk=Block; O#1-Observation #1; O#2-Observation #2; O#3-Observation #3

| King                                 | Miller  | Nolan   | Owens  | Reynolds   | Saunders  |
|--------------------------------------|---|---|--|--|---|
| S-St attend wrse<br>S-St absent=lost | S-St sttend wrs<br>S-St absent=lost                                   | S-St absent=lost  | S-St absent=lost                                   | S-St attend wrs  | S-St attend btr<br>S-St absent=lost   |
| S-Fs not lower<br>S-grades not btr   | S-# Fs not lwr<br>S-grades not btr                                    | S-Fs not lower<br>S-grades not btr  | S-Fs not lower<br>S-grades not btr                 | S-Fs not lower<br>S-grades not btr                           |   |
| DR-32% ABC;<br>36%D;32%F             | DR-59%ABC; 17%<br>D; 24%F   | DR-33%ABC; 19%D;<br>48%F  | DR-21%ABC; 48%D;<br>31%F                           | DR-67%ABC; 8%D;<br>25%F                                      | DR-51%ABC; 17%D;<br>32%F  |
|                                      | I-St don't do HW<br>Hurts achievemnt<br>I-absent hurts<br>achievement | I-need imprvd<br>attitude toward<br>lrng<br>I-St put off HW<br>I-nd parent supp | I-would like to<br>meet daily; less<br>time        | I-T would like<br>more real<br>applications                  | I-Alt day schl<br>is neg on achv<br>I-Reotr to shrtr<br>daily schedule<br>S-Blk=less St<br>lrng |
| S-Blk=more St<br>lrng                |   | S-Blk=more St<br>lrng   | I-enough time<br>for curr; not<br>enough to enrich | S-Blk=more St<br>lrng; more<br>meaning; less<br>memorization |   |

**Advice to Teachers Beginning to Teach Algebra in Alternate Day Block**

(All responses taken from teacher interview)

Key: T=Teacher; St=Student; HW=Homework

| King   | Miller  | Nolan  | Owens  | Reynolds  | Saunders   |
|--|---|--|--|---|--|
| Plan!  | Get guidance  | Ask lots ?   | Value plan time & use well                                 | Pln dur summer  | Try to figure how to tch 2 lessons w/o overwhelming                                |
| Be prepared                                    | Just being immersed is awful  | St-do they do HW, participate, have parent supp  | Pln some proj for St                                       | Use colleague expertise   | HW important-takes thought & planning  |
| Know materials                                 | Get trng in strategies, activities, pacing course, how long to spend on topics, how much to do in a day | Any school activities conflict with classtime  | Find applications  | Don't try 2:1   | Get info from teachers in practice   |
| Know books                                     | Watch out for St attn span  | Does T like alg? Like St? Like 1:1 contact; T enthusiasm? Can't be phony for 100 minutes | Hard to keep St attn so use at least 3 activities          | Get materials, books, curr, colleagues together to sit down & share ideas | Long days w/no planning are tiring   |
| It's a long time                               | Days w/o planning are long & exhaustng  | Chance to do interesting things but takes research & plan                                | See what others have experienced, don't reinvent the wheel | Unencumbered time to think and plan before St arrive                      | Do the best you can for students when they are with you                            |
| Maybe a diff schedule for 9 <sup>th</sup> grad |   | Stick w/it, don't abandon too quickly  |  | No outside expert needed  | Expert suggestions aren't so good unless you can see it happen (I am not creative) |
| Watch St doing HW                              |   |  |  | Plan some labs  |  |
| Watch St attend                                |   |  |  |   |  |

