Five Goals of the Assessment Plan. The following assessment plan is to assure that:

1) the program is viable,
2) the program is consistent and authentic,
3) students entering into the program are adequately prepared,
4) students make adequate progress toward completion of the program,
5) the program is responsive to student needs.

1) The program is viable.

The three major threats to program viability are: a) lack of student enrollment in summer math courses offered, b) low faculty involvement, and c) insufficient administrative support. Measures related to program viability will be grouped into these three categories.

a) Student enrollment in summer math courses.

i) Data to be collected and reported on an annual basis for each summer course offered: #PC students (new/continuing), #IC students, school districts represented.

<table>
<thead>
<tr>
<th>Year</th>
<th>Courses</th>
<th>PC(new)</th>
<th>PC(cont.)</th>
<th>Others*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>(766,751)</td>
<td>(3,3)</td>
<td>(0,0)</td>
<td>(3,2)</td>
<td>(6,5)</td>
</tr>
<tr>
<td>1999</td>
<td>(736,756)</td>
<td>(3,3)</td>
<td>(3,3)</td>
<td>(5,0)</td>
<td>(11,6)</td>
</tr>
<tr>
<td>2000</td>
<td>(711,726)</td>
<td>(3,3)</td>
<td>(5,5)</td>
<td>(7,4)</td>
<td>(15,12)</td>
</tr>
<tr>
<td>2001</td>
<td>(751,766)</td>
<td>(1,1)</td>
<td>(6,6)</td>
<td>(4,4)</td>
<td>(11,11)</td>
</tr>
<tr>
<td>2002</td>
<td>(756,736)</td>
<td>(2,2)</td>
<td>(3,3)</td>
<td>(6,6)</td>
<td>(11,11)</td>
</tr>
<tr>
<td>2003</td>
<td>(726,711)</td>
<td>(3,3)</td>
<td>(2,2)</td>
<td>(2,6)</td>
<td>(7,11)</td>
</tr>
<tr>
<td>2004</td>
<td>(751,766)</td>
<td>(4,4)</td>
<td>(5,5)</td>
<td>(6,0)</td>
<td>(15,9)</td>
</tr>
<tr>
<td>2005</td>
<td>(736,756)</td>
<td>(2,2)</td>
<td>(7,8)</td>
<td>(2,0)</td>
<td>(11,10)</td>
</tr>
<tr>
<td>2006</td>
<td>(726,711)</td>
<td>(5,5)</td>
<td>(8,6)</td>
<td>(2,2)</td>
<td>(15,13)</td>
</tr>
</tbody>
</table>

*Others category includes initial certification students and others taking the course for various reasons.
School Districts Represented

Webster, WI  
South Washington County, MN  
Cadott, WI  
Hudson, WI  
Ladysmith, WI  
Edina, MN  
St. Paul, MN  
Shell Lake, WI  
Amery, WI  
South St. Paul, MN  
Mound-Westonka, MN  
New Richmond, WI  
Baraboo, WI  
Alaska  
Tashkent, Uzbekistan  
UW – Baraboo  
Weyaywega-Fremont, WI  
Hastings, MN  
Century College, MN  
Inver Groves, MN

Program retention & graduation data to be reported on an annual basis:  
# of new students officially admitted to the PC program,  
# of students who have graduated in the past year,  
total # of students admitted into the PC program since the summer of 1998,  
total # of graduates since 1998.

Year  Admitted  Graduated  Three-year sum

1998  3  0  3
1999  3  0  6
2000  3  0  9
2001  1  0  7
2002  2  1  6
2003  4  1  7
2004  5  0  11
2005  2  1  11
2006  6  1  13

Totals  29  4

Emily Peterson, Amy Ellison, Jeff Hahn, Melvin Blomquist, Joseph Early, Kevin Reese, Zach Turpin
iii) Qualitative assessment of publication materials and the program’s on-line face
to be reviewed on a yearly basis.

2004 survey results from 11 students in the MSE-Math program are summarized below
(scale: 1 – strongly disagree, 4 – strongly agree):

Course registration easy to follow: mean = 3.09
Communication about courses useful for planning my schedule: mean = 3.27
Info received early enough to make planning decisions: mean = 3.27

Improved marketing of courses since 2003. Contributing factors include: improved
customer service, greater print/web marketing, and timely class schedules.

On-line information is available at www.uwrf.edu/math/gradprog.html. This page is
slightly out-of-date as the Plan C option has been replaced with the Plan B option.

iv) Questionnaire to be developed addressing student’s initial recruitment to the
program and subsequent completion/noncompletion of the program.

Questionnaires were developed and administered by Outreach in the summers of 2003
and 2004. Pertinent information concerning initial recruitment and program completion
follow.
Scale: 4 = strongly agree, 1 = strongly disagree. Number of respondents: 11(04),
13(03).

“Courses offered frequently enough for timely completion of program”
Mean = 3.18 [2003 = 2.9].

“Courses offered on convenient days”
Mean = 3.64 [2003 = 3.7]

“Courses offered at convenient times of the day”
Mean = 3.55 [2003 = 3.7]

“Course location is convenient”
Mean = 3.36

“Program is a good value for the money”
Mean = 3.0 [2003 = 2.8]
“Main reason to enroll in the program (in order of priority)”

1. To enhance my teaching skills
1. To improve my general education level
3. To obtain a graduate degree
4. To increase my earning potential

**Action:** Low student enrollments will initiate a review of program publicity efforts with proposed changes guided by responses to student questionnaire.

b) **Faculty involvement**

i) Listing of instructors assigned to each summer math course.

- **Dr. Keith Chavey** Discrete Math for Educators (Math 736)
- **Dr. Pamela Katzman** Geometry for Educators (Math 711)
- **Dr. Laurel Langford** Modern Algebra for Educators (Math 751)
- **Dr. Don Leake** Calculus for Educators (Math 766)
- **Dr. Stephan List** Probability for Educators (Math 756)
- **Dr. Edward Mealy** Statistics for Educators (Math 726)
- **Dr Robert Coffman** Statistics for Educators (Math 726)

ii) List of graduate student Plan B advisors (year graduated)

- Nelson - Katzman
- Rothbauer – List
- Stamper- Chavey
- Woelber – Mealy (2002)
- Martin - Leake
- Schiller - Coffman
- Skattebo – Leake (2005)

*The program director serves as the advisor for all students previous to the Plan B paper.*

**Action:** Minimal faculty involvement will give rise to new faculty recruitment. Advising of Plan B papers to be shared equitably.
c) **Administrative support.**

i) **Yearly report of compensation guidelines for teaching faculty.**

_**Facult y teaching in the program are paid under the compensation guidelines developed by administration in the spring of 2003. This means that double-digit class enrollments result in a gross pay of $5,200 per four-credit class. Underenrollment results in prorated compensation. In the past four summers this has happen 25% of the time.**_

ii) **Yearly report of compensation guidelines for Plan B advising.**

_No compensation is currently given to Plan B advisors._

iii) **Faculty salary per course taught.**

<table>
<thead>
<tr>
<th></th>
<th>Session I</th>
<th>Session II</th>
<th>Total Comp*</th>
<th>Program Coor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2003</td>
<td>$3,640</td>
<td>$5,200</td>
<td>$10,667</td>
<td>$1500 ($1810)</td>
</tr>
<tr>
<td>Summer 2004</td>
<td>$5,200</td>
<td>$4,680</td>
<td>$11,922</td>
<td>$1500 ($1810)</td>
</tr>
<tr>
<td>Summer 2005</td>
<td>$5,200</td>
<td>$5,200</td>
<td>$12,550</td>
<td>$1500 ($1810)</td>
</tr>
<tr>
<td>Summer 2006</td>
<td>$5,200</td>
<td>$5,200</td>
<td>$12,550</td>
<td>$1500 ($1810)</td>
</tr>
</tbody>
</table>

*Includes 20.67% fringe benefit*

iv) **Tuition collected per course taught.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>($1063/student/class)**</th>
<th>($1153/student/class)**</th>
<th>($1267/student/class)**</th>
<th>($1336/student/class)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2003</td>
<td>$7,441</td>
<td>$11,693</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer 2004</td>
<td>$17,295</td>
<td>$10,377</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer 2005</td>
<td>$13,937</td>
<td>$12,670</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer 2006</td>
<td>$20,040</td>
<td>$17,368</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Based on Wisconsin resident taking an 8-credit load.**

$5,200 curricular redesign grant given to Leake and Katzman in the summer of 2005 to transfer courses to D2L.

**Action:** If faculty compensation is minimal, discussion with administration to remedy the situation is initiated. Worst case scenario: program is discontinued within three summers.
2) **The program is consistent and authentic.**

As the MSE – Math PC program completes its ninth summer (third cycle of courses) concerns of program consistency have replaced those of program viability. Program consistency means that the program goals are well-understood by students and faculty and the curriculum’s support of those goals is well-documented. The program is deemed authentic if the courses that are delivered implement the curriculum faithfully. In other words, the courses accomplish what they say should. Evidence of authenticity comes from a detailed and accurate description of course content and examples of student work generated within the course.

a) **Course assessments.**

i) Summary of assessment tools for course grade: a) assignments, tests, final exam or final project description.

ii) copy of grading spreadsheet.

iii) Annotated 16-day class summary (topics, activities, comments).

iv) Samples of student work.

**Action:** Program coordinator will review course assessments with each instructor. Instructor will make recommendations for the next teaching of the course.

b) **Plan B paper assessment.**

Assessment of the quality for the Plan B paper is the domain of the oral committee. The math graduate program, however, is interested in tracking the progress toward completion of the Plan B paper as this has been a problem in the past.

i) Objective data to be collected concerning this process are; student, Plan B paper topic, advisor, time of completion, oral committee members.

ii) Subjective data that would be useful in assessing the quality of the Plan B experience are advisor and student comments concerning: support provided to the student, student initiative, length of time to complete the paper, difficulties, library support, etc.

**Action:** Program coordinator will continue to develop and revise guidelines for the Plan B paper based on feedback from students and advisors.
The assessment program in this area is still in the development phase. Data that we do have concerning consistency and authenticity come from the Outreach surveys of 2003 and 2004. A summary findings in this survey follows.

“Courses are challenging”  
Mean = 3.64 [2003 = 3.0]

“Courses are high quality”  
Mean = 3.36 [2003 = 3.1]

“Curriculum focuses on practical application”  
Mean = 2.41 [2003 = 3.1]

“UWRF faculty are effective teachers”  
Mean = 3.09 [2003 = 3.0]

3) Students entering into the program are adequately prepared.

Prerequisites for entry into the program are: a) must be a certified middle/secondary teacher, b) have two or more years of teaching experience, c) have an overall undergraduate grade point average of at least 2.75 (on a four-point scale) or an average of at least 2.90 based on the last 60 semester credits (90 quarter credits) of the undergraduate program (graduate school requirement), d) have earned a baccalaureate degree from an accredited institution (graduate school requirement).

No admissions irregularities have been observed so far.

Action: Program coordinator will monitor admissions into the program for irregularities.

4) Students make adequate progress toward completion of the program.

a) Grade assessment. A grade of A or B in each summer course is deemed adequate for sufficient progress (checked at the end of every summer for every students by program coordinator).

Sufficient progress in each course taken has been made by all students.

Action: Students not maintaining an overall “B” average will be placed on probation for the next enrollment period (graduate school requirement).
b) **Research methods course assessment.** Questionnaire to be developed comparing students experiences with the online delivery and in-class delivery of this course. Outcomes to be reported will include: grade, time to complete the on-line course, …

*The assessment program in this area has not been implemented.*

**Action:** Advising on which class mode to take will be informed by the data collected.

c) **Degree progress assessment.** A qualitative assessment by the program coordinator will be made on the yearly progress toward degree completion of every student in the program (satisfactory/not satisfactory).

*The one area of concern is completion of the Plan B paper. Three students have had to appeal for program extensions. Two more students will face the seven-year deadline at the end of the spring semester of 2007.*

**Action:** The program coordinator will notify students who are considered to not be making satisfactory progress.

5) **The program is responsive to student needs.**

*Annual assessment given at the end of the summer session will provide for student feedback concerning program improvements.*

*Student comments to questions in the Outreach survey provide an opportunity for feedback.*

“ *What additional curricular areas would you like to see offered as part of this program to better meet your needs as a practicing teacher?*”

*More directed towards middle level education.*
*Technology applications in the classroom.*
*More options in subject areas.*
*Trigonometry.*
*Instead of ed psych – have a more practical class, e.g. using technology.*
*Mathematics for low ability students.*
*Current trends and issues in mathematics education.*
*More options for non-math courses.*
*More summer/online options.*
*A math history course at the graduate level.*
“What additional teaching skills would you like to see offered as part of this program to better meet your needs as a practicing teacher?”

Standards-based links and incorporation into “reform” math programs.  
Continued emphasis on technology and software. More software explorations.  
Advanced Placement seminars.  
I am interested in any curriculum and teaching skills that focus on teaching in the high school classroom.  
Themed projects.  
How to teach concepts effectively and with hands-on, labs and practical applications.  
Pretty good as is.

**Action:** Feedback will be considered by the graduate faculty for possible program revisions.