Step 1 - Needs Self-Assessment and Goal Selection

Critical Question: What will your students be able to do as a result of your professional growth that they are not now able to do?

Choosing area of focus - Consider the following as you determine the area of focus for your professional growth:
- Self-assessment of my performance using the criteria from one of the Professional Certification Standards (see list)
- Student work samples
- Input from my principal
- Discussions with my mentor
- My school’s School Improvement Planning focus

Area of focus – From the self-assessment above, identify area relevant to your assignment that will focus your professional growth activities and increase your capacity to impact student learning:

For the 2009-2010 school year I would like to work on using various assessment strategies in Integrated 2 Math to figure out what is most beneficial for student learning. I want to mainly focus on if there is a type of formative assessment that would produce better summative assessment scores.

I would like to take the average scores from one chapter assessing with a mid-chapter quiz and chapter test, and compare scores to the average of scores from another chapter assessing with weekly concept quizzes and a chapter test.

Step 2 - New Learning

Critical Question: What new skills and knowledge (research on best practices) will you need to build your capacity in this area? Be specific.

-I will need to discuss and get ideas from other teachers/math coaches about their formative assessment strategies and how I could implement them in my classroom.
-I can observe other teachers to watch their assessment strategies, both formative and summative.
-I will talk to students about what methods of assessment they found most helpful.
Step 3 - Professional Action Plan

Critical Question: What specific growth activities will you engage in to obtain the identified new learning?

<table>
<thead>
<tr>
<th>Activities</th>
<th>Target Date</th>
<th>Resources Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet with other Integrated 2 math teachers to discuss student progress as well as assessment strategies</td>
<td>Done every other week throughout the year</td>
<td>Other teachers</td>
</tr>
<tr>
<td>Mid-Chapter Quizzes and Chapter Tests</td>
<td>First semester</td>
<td>Integrated 2 Math textbook Assessments Student Scores</td>
</tr>
<tr>
<td>Weekly Homework/Concept Quizzes and Chapter Tests</td>
<td>Second Semester</td>
<td>Integrated 2 Math textbook Assessments Student Scores</td>
</tr>
</tbody>
</table>

Step 4 - Evidence Proposed

Critical Question: What evidence might you gather to demonstrate the impact of your professional growth on student learning as stated in Step 1?

First semester I am going to give self-created Mid-Chapter Quizzes and Chapter Tests. These assessments will be closed book, closed notes; the problems will be similar to homework and example problems discussed throughout the chapter. Second semester, for each chapter I am going to give weekly homework/concept quizzes. Students will be asked to use their homework assignments to copy specified problems as well as demonstrate their knowledge by completing a few new problems covering the same topics. As the weeks progress the concept questions might cover the previous weeks' topics as well. Then I will give a Chapter Test. Throughout the year I will keep track of all these scores.

I will then compare the scores of only the students I had in my class both semesters to see if one of the assessment methods had a positive impact on student learning.

Towards the end of the year I would also like to talk to a few students and ask them which method of assessment they felt was better, which was more helpful, and which did they like better.

Step 5 – Evidence Presented

How does the evidence gathered in Step 4 support positive impact on student learning?

The evidence gathered showed that student’s average scores were higher with weekly homework/concept quizzes and a chapter test. The attached spreadsheet shows the data from Chapter 4 first semester, and Chapter 6 second semester. Not only were scores higher, but students average quiz percentage was closer to the average test percentage with weekly assessments. There were of course some individual students whose grades did not improve but looking at the averages, weekly assessments definitely had a positive impact on student learning.
### Step 6 - Reflection/Implications

<table>
<thead>
<tr>
<th>Critical question: As you reflect on your progress in this area of focus, what are some next steps that might guide future learning?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, I was extremely happy with the outcome. I feel that the weekly quizzes were beneficial to most students and it was still manageable for me to create, correct, and score. I would like to continue using weekly quizzes, as I feel students retained what they learned better with the repetition of similar concept questions. I want to continue trying new assessment strategies as well and will continue to discuss ideas with other teachers.</td>
</tr>
</tbody>
</table>