Red River Watershed Stewardship RESTORE Workshop

This is the pre-post survey from the Red River Watershed Stewardship Workshop (RESTORE) that was held at Minnesota State University – Moorhead’s Buffalo River Science Center, June 15 -19 2015. Ten teachers filled out the 2 surveys. Twenty two knowledge questions were used on the 2 surveys to show knowledge gained over the week long class.

Pre-Workshop Comments:

1. What you value most with Professional Development workshops...

   I need to increase my student's connection to nature.
   Spending my time learning something that I can bring back into the classroom . . . something usable and worthwhile.
   Experiencing and practicing ways to bring the knowledge gained at the workshop into the classroom.
   That the topics and approaches are in alignment with making the world a better place;
   Information and techniques that I can actually use
   Information that can be applied to classroom teaching.
   Info that I can use in the classroom
   To use the time effectively and come away with ideas and activities that can be put to use in my classroom.
   That ability to listen to everyone's ideas and not put them down. If someone gets put down, they have little motivation to continue with quality input.

   What I value most are practical ideas and strategies I can implement in my classroom. Ideally these are aligned with the standards I am required to cover and fit well into my existing curriculum. This is most helpful to me as a teacher because I attend professional development to grow as a teacher and bring new ideas back to my classroom. If i can't implement the ideas to make my classroom a better learning environment or provide better learning experiences the professional development was not beneficial.

2. Years of teaching:

<table>
<thead>
<tr>
<th>Years of Teaching</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>2 - 4 Years</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>5 - 10 Years</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>More then 10 Years</td>
<td>6</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100%</td>
</tr>
</tbody>
</table>

3. Teacher in:

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>K - 3rd Grade Teacher</td>
<td>3</td>
<td>30%</td>
</tr>
<tr>
<td>4 - 6th Grade Teacher</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>5 - 8th Grade Teacher</td>
<td>1</td>
<td>10%</td>
</tr>
<tr>
<td>9 - 12th Grade Teacher</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100%</td>
</tr>
</tbody>
</table>
4. **Pre-Post Survey on RRWS 2015:**

These tables are the Mean comparisons on subject’s perceived Knowledge questions from pre-post surveys on a 5 point scale. Knowledge Questions responses: (1. I know nothing, 2. I know a little, 3. I know a fair amount, 4. I know a great deal, 5. I consider myself an expert). It should be noted that this is the teachers “perceived” knowledge. Actual knowledge was not tested for.
2.78  3  2.44  2.67  2  3.22  3.11  2.89  3.33  2.56  2.67  2.89  2.56
1.9  2.6  1.5  1.5  1.4  2.2  2  2.2  2.4  1.9  1.8  1.7  1.5
0.88  0.4  0.94  1.17  0.6  1.02  1.11  0.69  0.93  0.66  0.87  1.19  1.06

Note, these tables show a strong change with all 22 items in the pre-post survey evaluation. Fifty percent of the questions, items 1, 2, 3, 4, 6, 8, 13, 15, 16, 21, and 22, were one point or more different from pre to the post survey. This suggests that significant learning took place even with 70% of the teachers coming with 5 or more years of teaching. It supports the notion that experience teachers do want to expand their knowledge and grow in new areas.

5. Additional workshop comments:

Be specific about what we will learn in the course and stick to the schedule. After the course I felt some topics were not covered at all or were barely touch on. Be clear about what grade level teachers you are targeting. A lot of the course focused on the lower elementary grades which are very different from what one would focus on in middle school and high school, so these activities were not very helpful to me as a middle school teacher.
6. Post Workshop Satisfaction Comments:

It appears that 3 teachers felt the workshop did not meet their expectation and 4 felt that the level of information present was not appropriate for the grade level they teach.

7. The most valuable aspect of this professional development experience was...

- Building the collaboration in Fargo-Moorhead.
- Deciding to plant a species garden at our school for student learning.
- Working with other teachers and networking through them.
- Networking with other like-minded educators in my community
- The most valuable aspect was the connection to local resources I can use to enhance learning activities for students in my classes next year. I moved to the area relatively recently and am still trying to build an awareness of what is available locally and how it can benefit my students.
- Descriptions of the restoration process.
- Being able to talk with other teachers and work together on this.
- Learning why Fargo/Moorhead has some of the land/growing/flooding issues that it has and some of its history. The connection made with the River Keepers.
8. How would **improve** this professional development experience for yourself and others?

- Begin recruiting 5 months earlier
- Could be a more direct instruction.
- Some of the activities could definitely be cut down in time, or just give a overview instead of carrying them out. Reordering some of the activities would also make some sense, bring the main goal to the beginning.
- Scheduling further ahead of time - did not know about it until the last week of school - overlapped with previously made plans I could not get out of;
- Improve the organization of the class. Make sure the presenter is prepared for class each day and can give clear instructions. Make sure the requirements for the course are clearly communicated to participants.
- More instruction directed to upper level students.
- I would not have the teachers do the activities that are meant for first graders. It is not age appropriate. They loved the lecturers, and learning about this, but did not need to do it this way.
- Have materials ready - Have an agenda/schedule for the week and each day - Give time for bathroom breaks and don't forget time for lunch - Give time to process or brainstorm how the activities fit into our standards and classrooms.

9. Which **activity(s)** will you plan to use next year?

- Building rain gardens.
- Planning a garden
- Looking at Macro inverts
- Developing a rain garden at the school site.
- I plan to have my students do a habitat assessment of the Red River near our school and take them to the Bluestem Prairie to do field observations and journaling.
- Habitat restoration.
- Planning a restoration
- Not sure. Will need to see how they fit into our standards and current curriculum from the district.

10. Summary:

This survey shows changes on the 22 item knowledge questions based on the week long workshop. Every item went up on the knowledge survey with 50% of classes going up one point or more (5 point scale) on the topic after the workshop. Six of the teachers came from the K-8 and 2 were from 9-12 with 2 more as “Other” (10 filled out the 2 surveys). Seventy percent of the teacher had five of more years of teaching. The Pre-survey showed that the teachers value workshops that can be applied to their classroom teaching. Networking with other teachers and connecting with River Keepers was considered a highlight of the class. These results shows that 70% of the teachers intend to apply watershed improvement projects in their classes this next year. It also offers a number of suggestions on how to improve the program for next year, key would be to get the promotion out earlier.

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