

**See Results of Rated Scale in Excel file
Results for written responses are below.
SciPack Project Pilot
October 28, 2006 Informal Evaluation
Rated Scale**

Please respond to each statement as to indicate your level of agreement. The following scale represents your level of agreement. Circle your selection.

- 1. Strongly disagree**
- 2. Disagree**
- 3. Neither agree nor disagree**
- 4. Agree**
- 5. Strongly agree**

1. *Gravity and Orbits* presented many concepts that I did not previously know.
1 2 3 4 5 **AVG: 4.133**

2. The knowledge gained from *Gravity and Orbits* will help me teach my students.
1 2 3 4 5 **AVG: 4.267**

3. The two days of summer trainings were important in my completion of the SciPack.
1 2 3 4 5 **AVG: 4.733**

4. I found the content too challenging and more than what I need to teach my students.
1 2 3 4 5 **AVG: 2.867**

5. There are other professional developments that would have made better use of my time.
1 2 3 4 5 **AVG: 2.0**

6. Technology problems such as a slow connection speed made the SciPack more difficult.
1 2 3 4 5 **AVG: 3.067**

7. My school administrator was supportive of my participation in the SciPack.
1 2 3 4 5 **AVG: 4.5**

8. I would have liked more face-to-face help with the SciPack.
1 2 3 4 5 **AVG: 3.2**

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9. When I had problems or difficulties, they were addressed quickly.
1 2 3 4 5 **AVG: 4.067**

10. As a result of my participation in the SciPack Pilot, my students know more science.
1 2 3 4 5 **AVG: 4.133**

11. Completing *Gravity and Orbits* took too much of my time.
1 2 3 4 5 **AVG: 2.533**

12. The Science SCASS website is a tool that will help me teach science in the future.
1 2 3 4 5 **AVG: 3.467**

13. The training and support offered by the WVDE was of good quality.
1 2 3 4 5 **AVG: 4.533**

14. A textbook with the SciPack information would have been helpful to me.
1 2 3 4 5 **AVG: 4.333**

Answer the following questions with written responses.

1. What obstacles did you or other participants encounter?

- Connection speeds
- The text option was helpful.
- Have the administration provide time in teaching schedule for the SciPack
- Individual time management as a teacher
- Password difficulties
- "Some of the content in the SciPack did not agree with that found on the assessment, e.g. Ken Griffey Jr. items"

2. What are some specific pieces of content that you learned?

- The drop of the earth relative to the horizontal distance.
- Microgravity misconceptions
- Gravity as a force
- The actions of gravity in the absence of air
- Conceptual understanding of the Newton (N)
- Gravity in terms of astronomy
- "I'm still needing some content on gravity's role in the laws of motion"
- Information was better than most textbooks.
- "I think the SciPack stated *circular orbits* instead of elliptical. This needs checked on."

3. List three improvements to this type of professional development.

- Faster downloads of videos
- Improved access to checking personal SciPack progress
- More videos and simulations
- Add a textbook or workbook
- Student based materials to augment SciPack content
- Pacing guides suggesting the amount of time required to complete
- Better technology tools in the schools
- Follow-up meetings/Local contact experts
- More hands-on training

4. If paying for a SciPack as a graduate level class, what value in dollars would be appropriate and how many hours of credit should be awarded for one SciPack?

- One credit hour/SciPack/\$100
- Include some other work to be required such as problems to work or a workbook to complete and then make it a 3 hour course.
- 3 hours/SciPack/free to teacher, paid by county
- 2 hours
- This is packed with relevant content—3 hours minimum
- 1 hour credit, great content!!

Large Focus Group Discussion Questions

Summary: For each question below the teachers voiced their opinion concerning the question. Group conclusions were recorded from groups of three. The answers were shared and discussed in a group forum. Below are overall views of the entire group.

1. What were your impressions about the value of the science content contained in the SciPack *Gravity and Orbits*?

- The SciPack content involved deep understandings.
- The content provided more content than necessary to teach the middle school WV standards.
- The interactive simulations made the assessments much easier. The content progressed in a logical manner.
- Time consuming but valuable

2. How did the SciPack make you feel when you encountered science that you had not previously learned?

- The SciPack didn't make me feel stupid.
- It gave me a desire to dig deeper to get the content.
- As a multi-subject teacher I felt a little overwhelmed.
- The collaboration was an important tool when encountering unfamiliar content.
- Elementary teachers found the content intimidating
- Middle school teachers found the content accessible

3. If the state was to expand the pilot to a state-wide initiative, what obstacles do you perceive would hinder teachers and what could be done to make improvements?

- Time is the greatest obstacle if completing the SciPack during a school year.
- Time should be provided for professional development in which the SciPack is an acceptable use.
- Technology barriers such as slow modems or inadequate access to school computers
- More SciPacks covering other contents of science would be valuable.
- WVDE should follow up with meetings and continue the project over a long period of time to see change.
- Some teachers lack professional commitment to tackle challenging content
- Localized trainings would help opposed to state, centralized trainings.

4. Discuss the benefits and or disadvantages of the embedded questioning contained in the SciPack.

Benefits

- Serves as a personal check of master
- Provides Reteach opportunities
- Made for quicker coverage of familiar topics
- Provided feedback quickly
- It provides an opportunity of reflection

- Good questioning strategies
- Easier items than final assessment

Disadvantages

- Tricky wording
- Encouraged skipping of content
- Some questions not specific as to the location of responding

5. Compare and contrast the SciPack professional development with that of others in which you have participated.

- More intense
- Specific content for science
- Online format
- Clear expectations
- Measured success
- Specific content that can be used in a classroom
- More beneficial than 90% of the PD available

6. Describe ways in which SciPack has changed how or what you teach in your classroom?

- More content means better instruction
- I am more prone to utilize video clips and simulations.
- The use of pre/post tests in my own classroom
- Refreshed physical science content
- Stimulated new ideas to teach the same content
- Learning the detailed content made us feel that we needed to teach this subject with more depth