

The Impact of an Integrated Curriculum on Student Success in Science

How will student achievement in science be affected when the science is integrated with language arts and math?

Introduction

Students often forget how to write a complete sentence or how to calculate an equation while doing science activities. Other times, students are only interested in science and find no meaning in any of the other skills they must learn.

Rather than teaching each subject separately, I wondered if using science content to practice math and language arts skills would increase student achievement, interest and ability to transfer their learning from one activity to another.



Students were working together in groups to decode weather data and prepare a weather forecast to their peers.

Literature

"The child's life is an integral, a total one. He passes quickly and readily from one topic to another, as from one spot to another, but is not conscious of transition or break."

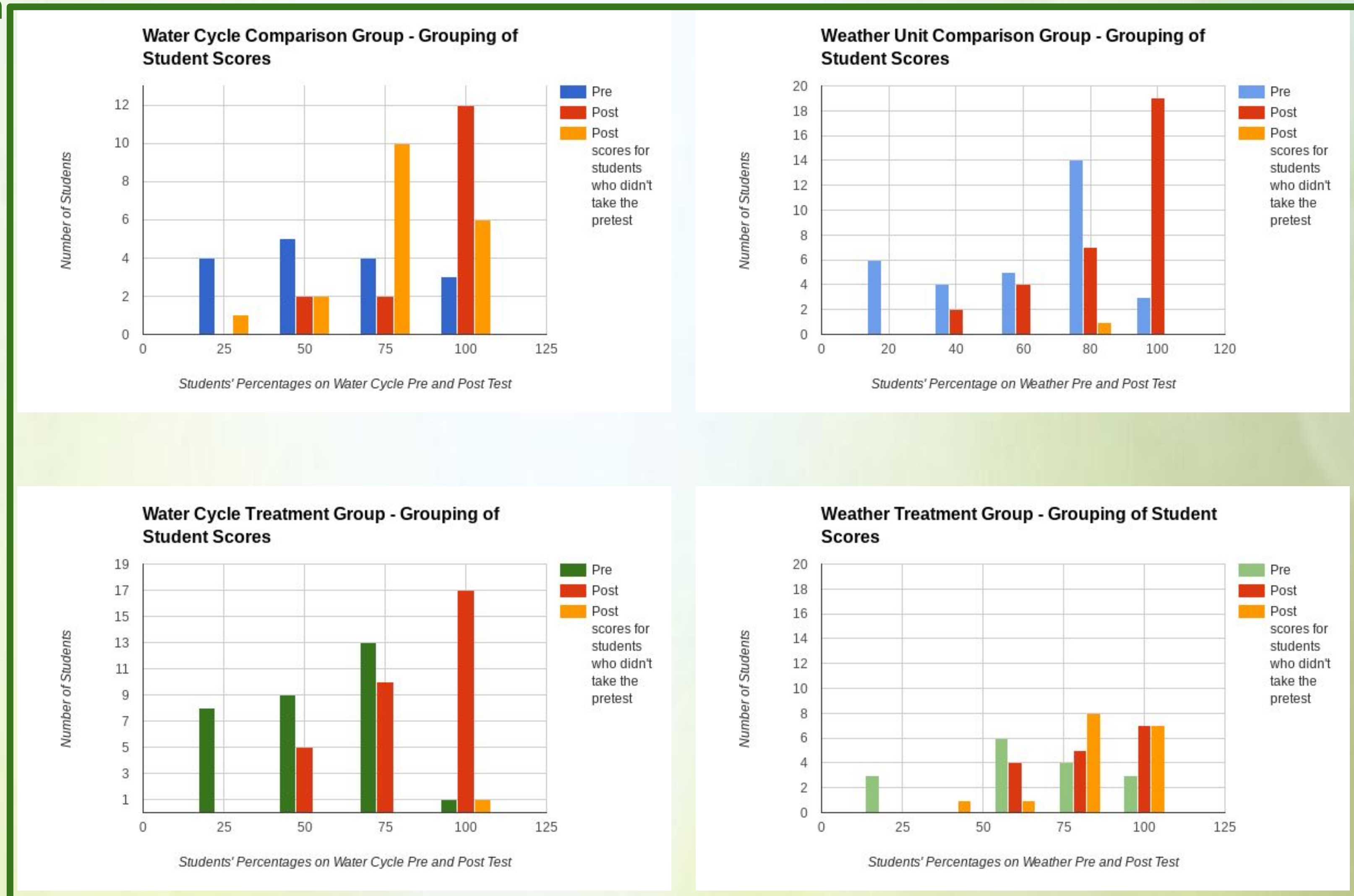
John Dewey's book, *The Child and the Curriculum* (1902)

Methodology

For the treatment, students were encouraged to use math, language arts and science content together to complete projects.

Students were given integrated projects where all three content areas were intertwined. During their classes students received instruction on specific skills or content they needed and were then given time to practice those skills while completing their projects. The comparison group practiced their skills in isolation of one another on individual assignments.

Data



Student's Reflection

"It was good to have everything together because we didn't really have to transition our minds a huge amount."
-6th grade boy



Students are interpreting data, writing their conclusions and evidence and preparing to present to their classmates an answer to a real world problem.

Conclusion

Students were positively impacted by an integrated curriculum. The pre and posttest data did not show significant difference between the treatment group and the comparison group, but the students' responses to the integration was that it was a beneficial and a fun experience for them. Students commented that it was easier to learn and easier to remember when everything was connected. They also enjoyed learning when they could see how it worked together.

An integrated curriculum is overall beneficial to students to help them learn to operate in the real world. They learn that ideas and concepts and topics are connected to each other.