Review of a YouTube clip

http://www.youtube.com/watch?v=z6lL83wl31E&feature=youtu.be

Among many origami videos on YouTube, you will find this proof of Pythagoras' theorem. I was sent the link by an ex-student and thought that the video merited a review for the many teaching and learning opportunities it afforded.

Reviewed by SNEHA TITUS

The video starts slowly and clearly. Instructions are easy to follow because the demonstration backed by the excellent audio track is very student friendly, though the paper folding happens rather fast.

As the activity proceeded I noticed a visible increase in the pace of the narration. I managed to keep up for a while, but towards the end my energies flagged, I gave up and had to press 'pause' till I figured out what was happening.

And therein lay my learning opportunity! Stimulated by the excellent trigger afforded by the video, I stayed on task, deconstructed the instructions and arrived at the proof.

Which brought me to the second learning opportunity: the excellent questions offered by the video. A lot of 'whys' encourage students not to accept shapes unquestioningly, give reasons for congruence of triangles, understand the significance of starting with a square sheet of paper, and so on. Using the properties of the geometric shapes that have been recognized, the student can understand relationships between the areas of these shapes. The video stimulates the thinking but does not over-explain.

A word on the abstraction: Undoubtedly, a viewer friendly aspect of the video is the use of descriptive terms for the sides of the right angled triangle. 'Little leg' and 'Big leg' intimidate young viewers much less than the standard 'a', 'b' and 'c' which mean so much to math teachers and so little to students. Of course, these symbols do make their way in at the end but only when all the tough work is done and the student can cope with the finer points of the proof.

A great classroom exercise to introduce or reinforce the theorem; the lesson can be conducted with planned pauses for questioning, clarifying, summarizing and predicting and will provide several learning opportunities for students.