

Title of Session: Next Vista for Learning - Videos and Challenging Math

Moderator: Rushton Hurley

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BjB: Rushton, would you like to start with introductions?

RushtonH: Definitely.

RushtonH: I'm Rushton Hurley,

RushtonH: and I teach Japanese at a high school, and run a nonprofit

RushtonH: called Next Vista for Learning

RushtonH: a save-the-world thang.

RushtonH bows

BjB applauds

BjB: I teach remedial communication in Pennsylvania

JeffC considers Tapped In his main "save the world thang."

FredK: I'm Fred Kimball, a tutor for literacy with the Pushmataha County Literacy Council in Oklahoma

RushtonH: We all need one, I figure.

SusanneE: I'm Susanne and TA a tenth grade class in Chandler, Arizona

RushtonH: Great!

FredK: Tapped in gets my vote

RushtonH: First, let's test your ability with links: <http://nextvista.org>

FredK: So far my connection is holding. it had trouble earlier.

SusanneE: I am in

RushtonH: Fred, you get the rock-solid award for hanging in there with troublesome

connections. Band, start playing.

RushtonH: Great! We're good to go then.

RushtonH: If you're ready to start, type something to that effect. This will get us practicing a response that works for me.

FredK: I did visit the sites you mentioned in your news letter. Good info

SusanneE: where do we type, here or in Vista?

RushtonH: You're in the right place.

RushtonH: BJ and Jeff are good, so I'll go ahead.

RushtonH: Today we'll look at approaches to helping students who are having trouble with commonly challenging topics. Our group worked on the difficulty middle school students have identifying what is and what isn't a prime number.

RushtonH: Let's start, though, by having you identify anything that you have found gives students trouble. It can be something you teach, or something you've noticed your own child/sibling/cousin/neighbor finds difficult. Any thoughts?

SusanneE: Anything on the history of the Middle East?

FredK is blank at the moment

SusanneE: Or are we dealing with math?

RushtonH: As in, students have trouble understanding the history and culture of the Middle East?

SusanneE: Yes

SusanneE: mostly, cultural issues

RushtonH: I think it would be WONDERFUL to get folks in the Middle East to help with that deficiency on our part by making short videos for NextVista.org.

RushtonH: Sounds self-serving, but I think it would really help for students and teachers to have good insights on such things.

RushtonH: I believe that with anything which gives a student problems, an important move is to find ways to get varying presentations to the student on what that topic is and how it works. Unfortunately, it seems fairly common for a student who asks for help to get the explanation he or she didn't understand in the first place.

RushtonH: It isn't a given, of course, that repeating the explanation is a bad move. The student may not have been paying attention, or may need to work with a teacher one-to-one to point out the particular term or concept that is the barrier.

RushtonH: That said, I suspect that in most cases it could be helpful to give students several different presentations of the difficult topic in manageable chunks.

RushtonH: In our case, we decided that we would make three videos. One has the topic explained traditionally, though with a few bells and whistles. Another uses a visual - the sieve of Eratosthenes - to allow students to see what happens in a 10x10 grid when multiples are removed. The third uses music and stop motion to explain via text and chips which move around.

RushtonH: The topic being prime numbers, by the way.

RushtonH: There are several advantages with using videos. First, when showing them in the classroom, even students who tend to be more social (than is normally helpful) will stop and watch, at least for a little while. When we stand in front of the class, after all, they tend to know what's coming. When we start a video, they know almost anything could appear on the screen.

RushtonH: Does this make sense? Is this something you've seen a child experience?

FredK: If you practice your mistakes, you will get better at making the same mistake

RushtonH: Which is exactly what happens when a student doesn't know what to do about what they don't quite get.

FredK: variety helps get the point across

RushtonH: Amen.

RushtonH: A second advantage is that it becomes easy to have students tell what part of the explanation is giving them trouble. A teacher can have a student sit down to a computer and instruct him or her to stop the video when it gets confusing. This is a lot better than having a child say, "I don't get it," and him or her not be able to point the teacher toward whatever the problem is. Is that consistent with your experiences?

JeffC: Rushton... if you're interested.... I've started a session at WizIQ... it just occurred to me since you're doing math, and they have math tools there. No plugin required (although I'm not sure it works with Macs). You could demo some problem solving with the whiteboard there.

RushtonH: I'd definitely be interested to learn more about it. Shoot me an e-mail on that front when you can, and I'll try getting some folks here (in Santa Clara, California)

interested.

FredK: Can you explain the WiziQ?

RushtonH: Go ahead - it may help with the larger discussion.

JeffC: cool Rushton. I don't want to detract from this presentation though.

JeffC:

<http://www.wiziq.com/tutorsession/session.aspx?JuX%2bgH%2b2GbZO71wLIyzojWM2MiqEvKOXNmJK1jyO2Ygu6tYYU8P7Dq2NpxY0Fwh6NqS3TIgwdW4%3d> is the session id

RushtonH: No prob.

RushtonH smiles

JeffC: well... it's like Yugma, Centra, Elluminate... etc.

JeffC: but it's free and has a whiteboard where you can use math symbols

RushtonH: Very cool.

JeffC: I have to write the ceo... I had taken tours, etc. before and promised to make suggestions... it's still in beta.

JeffC: for example, there are all these math symbols you can use in the whiteboard, but I don't see the numbers! plus... the symbols should be in folders.

JeffC: but you can do audio/video presentations, powerpoints, etc. as well.

JeffC: I'm thinking that writing on an interactive whiteboard while talking through stuff would be beneficial for most students.

RushtonH: Can you record what goes onto the whiteboard into a .wmv file?

RushtonH: or other video format?

JeffC: my son was just telling me how he's an audio learner... he's going to be studying for his geometry midterm with a friend on a game he's playing.

FredK: You have it on the Tapped-In Calendar [Ed. Note: WizIQ is scheduled on the Tapped In calendar on November 14, 2007.]

JeffC: everything at wiziq is recorded and the session autosaved.

JeffC: it's flash

RushtonH: Got it.

JeffC: so... assuming you already have flash... it's no plugin required.

RushtonH: Other questions on wiziq?

JeffC: I don't have my mike or webcam installed at the moment... but basically, you get the gist (I hope).

JeffC: and yeah... I'll email you and hopefully fully use it on Tuesday.

BjB . o O (join the discussion on the 14th and learn more :-))

RushtonH: Thanks for sharing that - knowing how such tools can be used to help kiddos is definitely part of the larger theme here.

JeffC: is David using it for Math and Tech?

BjB : no. MarkCC is presenting wiziq

RushtonH: Are we ready to get back to challenging concepts and video?

JeffC: ah! oh yeah... I remember... yes, please Rushton!

RushtonH: No problem.

RushtonH: A third advantage is that videos can be posted to a web site (we'll hit issues of release forms later if you wish). Having them available online means that students can watch them again and again, perhaps with their parents. There are also kids who don't think about their need to work with something they find difficult until quite late at night, which makes free online help quite nice. Do you know kids who fall into one of these categories?

FredK: I wish I had the Internet for tutoring a freshman

FredK: Physics

RushtonH: Is this an English language learner at a local community college?

RushtonH: Or a high school freshman taking physics?

FredK: You have some good videos

FredK: HS

RushtonH: We'll add some more science pieces soon.

RushtonH: Please consider talking to the student about making a video!

FredK: I'll get an ISP

RushtonH: "ISP"?

FredK: will do

FredK: Internet Service Provider

RushtonH: Cool.

RushtonH: Finally, it can be especially powerful to let students know that these videos are not necessarily simply passive helpers. If students know that they'll be able to make videos themselves, perhaps to help their peers or schoolmates in younger grades learn something, they may take a much more active interest in the video from the perspective of how it was made. My experience is that students LOVE making videos. Have any of you had or seen students do projects using video?

SusanneE: Yes, my daughter made one for her geography class.

RushtonH: What did she think of the project? Was it special to her in any way?

SusanneE: She had so much fun making it. The rest of the class joined in at the end.

RushtonH: If a teacher can keep students focused on content, videos are great for showing what they've learned.

RushtonH: What I'd like to do next is to have you watch the videos we made, one at a time. After each, please post at least one comment on what you saw that might be helpful, or perhaps could be better, or ideas that it brings up for you.

RushtonH: For each of these, please type "back" once you've watched it and returned to the chat screen. This is really important for me to keep things going. Also, if you can't see the video, let me know.

RushtonH: Ready to go?

BjB nods

RushtonH: Everyone else?

SusanneE: yes

JeffC: yup

FredK: Maybe

RushtonH smiles

RushtonH: We'll start with one called, "Primes Explained": <http://tinyurl.com/2ekpzq>

BjB looks

FredK waits

RushtonH: Fred, were you able to see it?

FredK: So far I

JeffC: still watching... learned something because I always thought 1 was a prime number.

FredK: gwt the MS

FredK: player

RushtonH: This link goes to a flash version, so it should just come through.

RushtonH: If you have the flash plug in installed, which most computers do.

JiaYuL joined the room.

RushtonH: Welcome JiaYu!

JiaYuL smiles

RushtonH: Susanne, were you able to see the video?

SusanneE: yes, fun!

FredK: Next Vista Presents Is where I get stuck

RushtonH: Hmmm. That may be a different issue. You'll have to take our word for it, I'm afraid.

RushtonH: What did you (everyone) think? Anything that you liked or thought could be better?

FredK: Was this in the newsletter?

RushtonH: Same videos.

FredK: got ya

RushtonH: I should specify; same videos that are on the vvproject.googlepages.com page.

RushtonH: Let's watch the second one, which runs about ninety seconds and introduces the sieve of Eratosthenes: <http://tinyurl.com/27wuw2>

RushtonH: Fred, if you get stuck again, let me know.

FredK: I played them at the library

RushtonH: Good deal.

FredK: Liked them. Patterns are neat

RushtonH: Susanne and JiaYu, please let me know when you get back.

SusanneE: I am back

RushtonH: How did that one strike you?

SusanneE: I liked it. Makes it easy for kids to find the prime numbers

RushtonH: Having it that visual is helpful, I think.

SusanR joined the room.

SusanneE: Yes, great idea. I wish video's were around when I was a kid!

FredK waves to Susan

RushtonH: Amen - short videos that get right to the heart of a topic.

RushtonH: Finally, the music and stop action piece. This one is a little longer (just over four minutes), but good for the discussion: <http://tinyurl.com/2xn772>

FredK: For a short attention span

SusanR waves back and attends the discussion

RushtonH: I almost read through your sentence before losing focus.

RushtonH slaps his thigh

BjB rolls her eyes

RushtonH: BJ, were you able to see the last one? / Are you watching it now?

BjB nods. I saw it

RushtonH: I quite like this one; it kept the kids engaged.

SusanneE: I am watching it now. Out of the three, for some reason I like this one better.

JiaYuL: interesting!! But I only saw the previous section..still downloading..

RushtonH: Were you able to see enough to get the idea?

RushtonH: Thoughts?

JeffC: cool videos... liked the diagonal patterns

JeffC: that was for the second one...

SusanneE: Great video, I liked this one the best.

SusanR: wonderful

FredK: I presume it works above 100 too

RushtonH: It was our hope that different videos would appeal to different kids (and different learning styles) in the room.

RushtonH: It does work beyond 100, yup.

RushtonH: What we decided to do was to take a shot at measuring how effective these videos would be with the students.

RushtonH: We went to each math class and gave the students a pre-test. You can view a copy of it here: <http://vvproject.googlepages.com/pre-test.jpg/pre-test-full.jpg>

JeffC: do you take them to what happens with prime numbers... like finding the largest and what that has to do with national security (encoding, etc.?)

RushtonH: Please type 'back' after you've given it a look.

JeffC: back

BjB : back

JiaYuL: back

FredK: back

SusanneE: back

RushtonH: It turned out that many students didn't bother with the "I don't know" option, perhaps because it's not normally an option on their tests and they weren't used to considering it. We also may have simply done a bad job of introducing the students to how to think about answering these.

RushtonH: We then showed the videos, and then did an immediate post-test, which was formatted just like the pre-test, though with different numbers. After a week, during which there was no explicit instruction on prime numbers, we did a follow-up test to see how much of it stuck.

RushtonH: The results showed some promise. 51% of the students scored at least 10% better on the follow-up, and 34% did at least 20% better. That's after a week.

RushtonH: The students also seemed to respond positively to the use of the videos. We asked them whether they thought the videos were very helpful, somewhat helpful, FILL-IN helpful, or not helpful at all. 45% said the videos were somewhat helpful, and another 38% thought they were very helpful. That only leaves 17% for the other two answers.

RushtonH: Any questions on the data we gathered?

JeffC: nope... great job, Rushton!

RushtonH: We think that this kind of thing could be replicated for many different topics in which testing for understanding is relatively straightforward. I can imagine this kind of thing with parts of speech, or word choice in a world language class, or to cover fundamental science concepts.

RushtonH: Having seen the videos and learned about the testing system we used, is there anything you would like to try out? If so, we can trade a few ideas today, and I'd be happy to follow up with you and even help create the video pieces you'd use, if you wish.

FredK: Your explanation of rainbows was really neat too

RushtonH: You can also contact me later via e-mail at: rh@nextvista.org

RushtonH: The rainbow video was done by a fellow at <http://qlipmedia.com> and they are keen to have people try using their free tool. Very cool way to make a simple video

using screen shots.

RushtonH: Some of you may not be familiar with my nonprofit, Next Vista for Learning. The site houses a library of videos by and for teachers and students everywhere, and our goal is to add several hundred videos over the coming 12-24 months. Please feel free to take a look at what we have there and to let me know what you would like to see that we don't have yet.

RushtonH: Also, for schools that are making videos, I'm working on a number of grant efforts. The basic idea is to say to a funder, "Here's what this school was able to create with just a little equipment. Help us help them get more in able to do more and help more students around the world." If that sounds interesting to you, by all means let me know and we can explore that possibility with your school.

RushtonH: Finally, please sign up for our newsletter. It comes out only once or twice a month, and is info, not discussion, so it won't suddenly explode in your inbox. You can do so at; <http://www.nextvista.org/newsletter/>

FredK: I really enjoy it

RushtonH: Thanks! I try to make it useful - and short enough.

RushtonH smiles

SusanneE: Thanks, I enjoyed it as well.

RushtonH: Thanks so much for joining today, and please do sign up for the newsletter if you don't already get it!

BjB : Thanks, Rushton!

RushtonH: De nada, amiga.

BjB heads for Teaching Teachers

JiaYuL: thanks:)

SusanneE: Have a great evening.

RushtonH: You, too!