

What do you see?

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At the University of Vermont, we are using images to step back in time and teach students about human/landscape interaction – our work is tied to the *Landscape Change Program*, which we consider to be a virtual time machine; its 10,000+ images are freely accessible on the web at uvm.edu/perkins/landscape.

We have just received NSF support (Educational Materials Development) to pilot web and classroom-based educational materials founded on the yet-to-be-formally-tested hypothesis that photographic images of landscapes are a more effective catalyst for student engagement and learning than traditional diagrammatic approaches. In other words, does the interest we see anecdotally in the classroom when we use such photographs actually translate into sustained student attention, better learning outcomes, and a more favorable impression of the learning environment as a whole? So far so good, but, how do we know what students really see in the images we show them?

Our work over the next few months, and one of our interests in attending this workshop, is to figure out how we will know better what students actually see when looking at an image. Unless we understand how the body of learners we seek to serve actually sees and interprets images, we won't be able to design meaningful educational activities or even properly design evaluation exercises to see if the activities we create are working. Our immediate goal is thus to understand better the spectrum of ways in which students see and interpret images documenting the interaction of people and the natural landscape.



Image courtesy of Vermont Historical Society

HELP US LEARN



As part of the *NSF-Educational Materials Development* effort to design effective curricular materials, we are trying to learn what different groups of people see in images. **Please, take 5 minutes and fill out the survey.** We'll compile and distribute the results to the group.

During winter term, 2005, the image below was given to 14 UVM students before they started an on-line class about Vermont landscapes. We have summarized and analyzed their replies.

AFTER YOU HAVE FILLED OUT A SURVEY, LIFT FLAP TO SEE STUDENT RESPONSES

QUESTION	Give us one word that best describes the image.	What did you see first in the image?	List everything you see in the image.	Try and describe a process (action) that some object you see suggests could, is, or was happening.	Can you identify what season it is?	What do you imagine is going on just to the right of the image	When do you think this image was taken?	What clues did you use to help you determine when the image was taken?
MOST COMMON RESPONSES	Growth (3) Old (2) Rural (1) Bleak (1) Quiet (1) No/improper response (2) Specific town, wrong (1)	Dirt Road (7) Large Buildings (7) Wagon (2) Hill (2)	Stores or buildings (9) Road or path and homes (8) Trees (or lack of) and hills or mountains (7) Fences and Wagon wheel (6) Horse-drawn transport (4) Grass/fields and stacked wood (4) Stone monument (2) Lack of vegetation (2)	Dirt roads and wagon wheel suggest people used horse-drawn transport (6). Growing town is under construction (2) Streets are not busy = rural (2) Large building suggests people work there and live nearby (1)	Late fall (7) Lack of leaves (7) Spring or winter (4) No snow (4) Lack of veg(2) Ice or snow (2) No mud or ruts (2) Short grass or drought (1)	Saw mill/wood products (4) More homes/buildings (2) Field and farms (2) Work shop (1) Wood chopping (1) Country fair (1)	Early 1900s (5) About 1900 (1) Late 1800s (5) 1800s (1) mid 1800s (1)	Horse powered transport (6) Architectural style (5) Dirt road (4) Wagon wheel (3) Building materials (2) Lack of autos (2) Image resolution/ style (1) Recent town growth (1) Civil War monument (1)
ANALYSIS	Human actions and human-centered descriptions dominate student perception.	Human constructs (road, buildings and wagon) are seen first, not landscape.	Human constructs most noted by students but list includes vegetation and topography.	Processes identified are human actions; most cited is transport related and not related to current student experience.	Detailed responses with logical reasoning and rationale for season choice.	Many answers deduced from observations in image (wood working).	Reasonable range of age estimates.	Styles of transport and architecture offer important visual clues for students.