

# eTextbooks: *What can they bring to geoscience education?*

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# What is an eTextbook?

- Digital format
- Ranges from simple online pdf to highly interactive product deliverable on any platform
- Usually purchased for a limited time via license, although that can vary according to the provider
- E-book sample:  
<http://www.youtube.com/watch?v=LV-RvzXGH2Y>

# Characteristics of Some Interactive eTextbooks

- Short pages and chapters
- Moveable chapters
- High interactivity; e.g., pinch and unpinch pages; touch to access functions
- Video and animation options
- Highlighting and note-taking functions
- Instant glossary
- Links to real time datasets and maps
- Embedded assessments
- Automatic scoring and recording

# What are the Advantages?

- Easily customizable
- Easily updatable
- Accessible on many platforms
- Can be less expensive than print
- Instant scoring and grade recording
- Attractive to the “Digital Age” student
- Access to real time data for analysis
- More portable than print texts
- Allows for more creative pedagogies



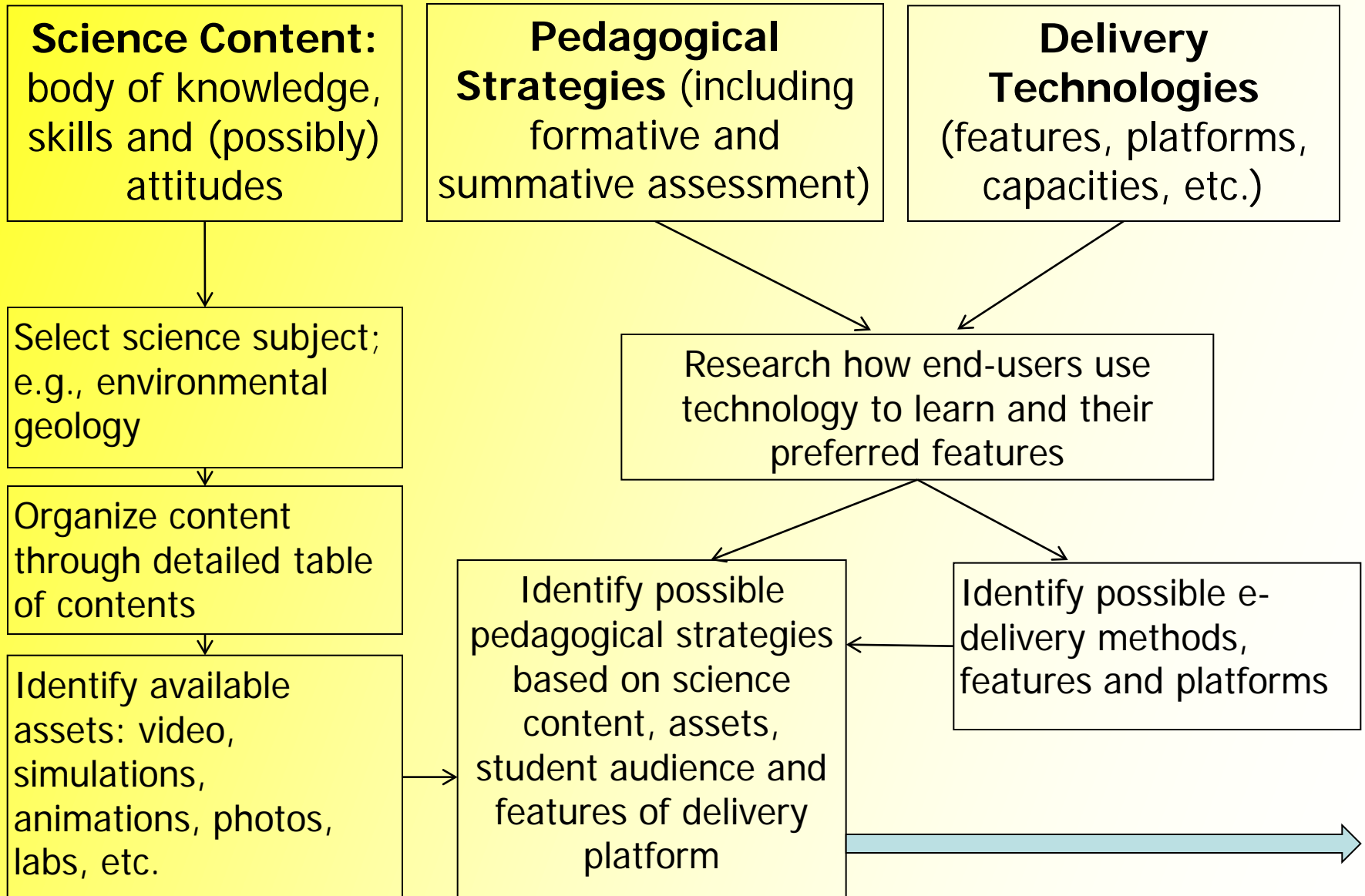
# How About the Down Side?

- Not always easy for students to locate
- Can cost the same as print
- Not preferred by all learners
- Constantly changing technology – easy to fall behind the curve during development
- Hard (or impossible) to re-sell and pass on
- Difficult to retain as resource text beyond school
- Can take up large amounts of memory
- Varying features from book to book

# Developmental Considerations

- Avoiding the technology tail wagging the pedagogy (and/or content) dog
- Taking advantage of the technology to introduce new types of content and pedagogy
- Researching how Digital Age students learn differently from their predecessors (if at all)
- Making books accessible to students beyond their school careers
- Making sure the book works on *all* platforms.

# Development Process (1)



# Development Process (2)

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graph TD; A[Bring all aspects together to create a beta version of a single module; e.g., coastlines] --> B[Arrange for scientific, pedagogical and technological review and platform testing.]; B --> C[Revise based upon reviews.]; C --> D[Pilot test beta version with target audience of students and faculty (end-users).]; D --> E[Revise to field test version. Re-test.]; E --> F[Revise to final version and publish.];
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Revise to final version and publish.



The background of the slide is a photograph of two large icebergs floating in the ocean. The icebergs are white and blue, with a jagged, rocky appearance. The water is a deep blue. The sky is a pale, hazy blue.

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Photographs courtesy of Image Bank.  
Photographer: Michael Collier