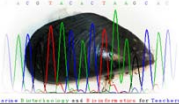


Why Telecommunications Tools and Emerging Technologies?

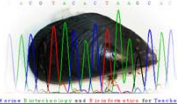
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Why Emerging Technologies?

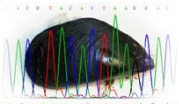
- One NSF ITEST goal is to provide opportunities for both school-age children and teachers to build the skills and knowledge needed to advance their study and to function and contribute in a technologically rich society.
- New NSF “GENI” (Global) Initiative



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and

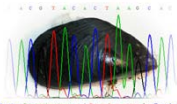
- Technology-rich activities are motivating
- They enhance school to work concepts
- Technology activities connect students to “real world” practice
- When teachers model technology supported learning environments, students adopt the innovation



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Research says ...

- Students who learn in technology-rich environments outperform their peers who don't learn in these venues.
- Students learn in less time
- Technology increases student enjoyment of learning.

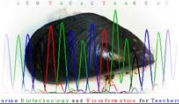


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Milken Study - 2003

also

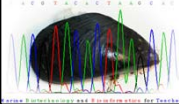
- Integrating emerging technology supports distributed education practice
- Technology integration bridges the “Digital Divide”
- Technology integration in school helps engage children in STEM careers.



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more ...

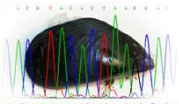
- Students self concept improves when technology is integrated in classrooms
- Increased achievement K through 16 on teacher-made and standardized tests
- Students acquire more problem-solving skills and expertise



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What are emerging technologies?

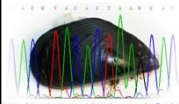
- VOIP – ex. Skype & iHearU
- Podcasting
- Blogs & MySpace & YouTube
- e-Quizzes & e-Surveys
- e-Rubrics



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and

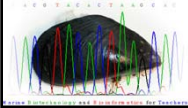
- Distributed education – face-to-face and web-based learning - on-line tutorials
- Virtual field trips & Netmeeting
- Miniaturization and hand-held devices
- Learning management systems – Moodle & ATutor



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Other trends

- Participatory databases – Wikipedia, How Stuff Works, Wiki
- Open Source Software
- Learning objects
- Virtual learning communities



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