



TPACK

(Technological Pedagogical Content Knowledge)

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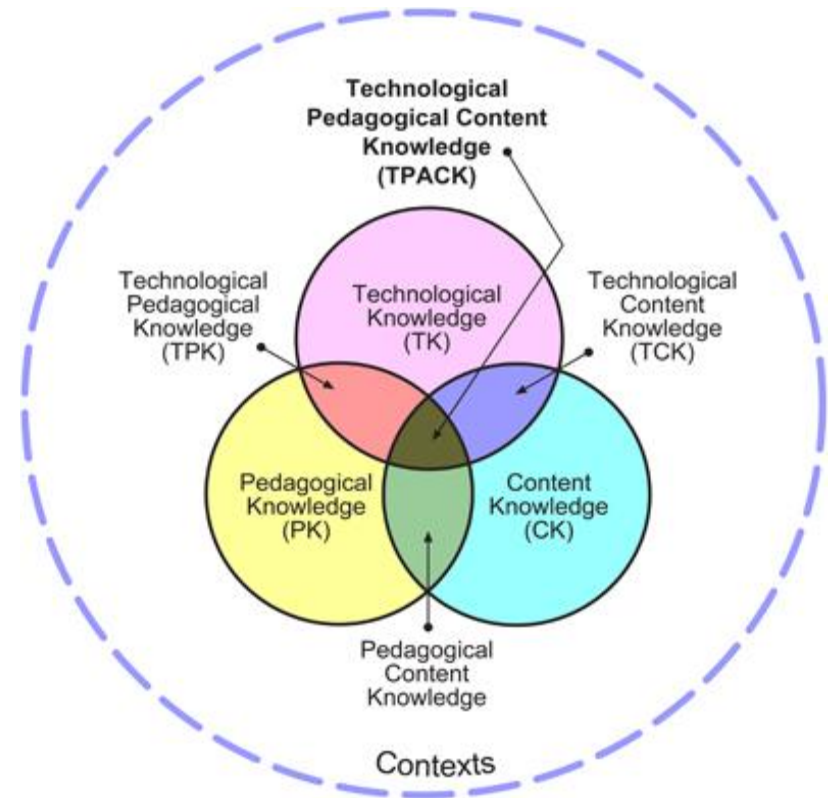
Why TPACK?

(Technological Pedagogical Content Knowledge)

- Learning “how to use” technology is much different than knowing “what to do with it for instructional purposes.”
- Coined by Mishra & Koehler (2006).
- A framework to understand teachers’ knowledge required for effective technology integration.

TPACK (Technological Pedagogical Content Knowledge)

- The TPACK framework stresses that teaching and learning with technology requires an understanding of interactions between and among three forms of knowledge (TK, PK, CK), rather than seeing these as three distinct knowledge bases.



<http://www.tpack.org>.



CONTENT Knowledge

(CK)

Knowledge about the actual subject matter that is to be learned or taught.

TECHNOLOGICAL Knowledge

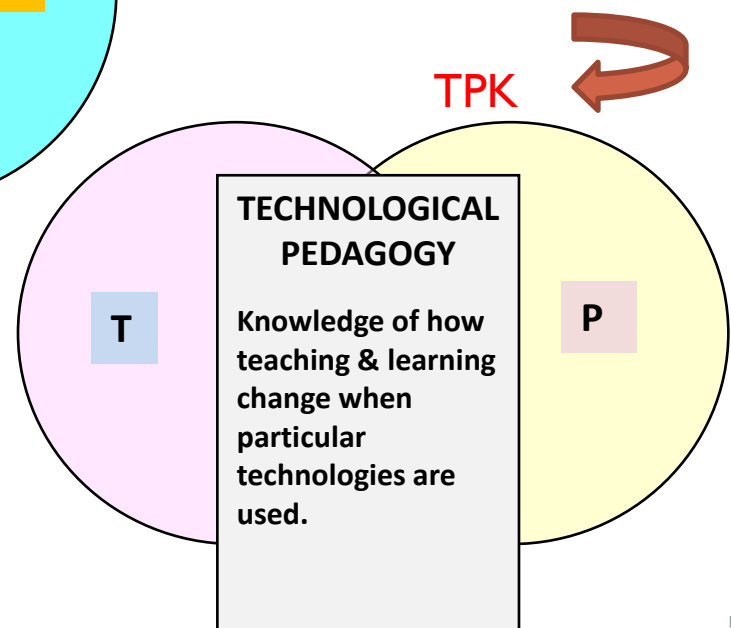
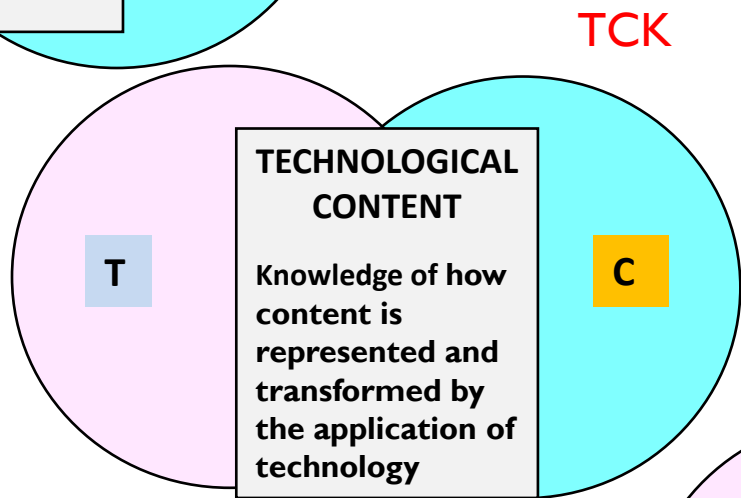
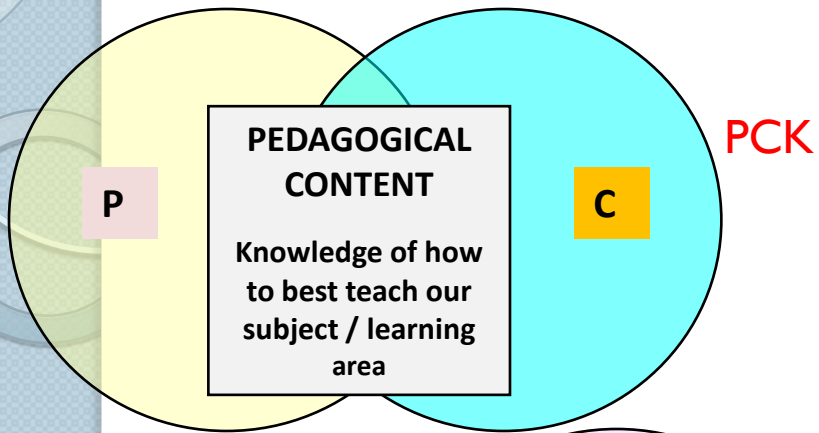
(TK)

Knowledge about technologies and how to use them.

PEDAGOGICAL Knowledge

(PK)

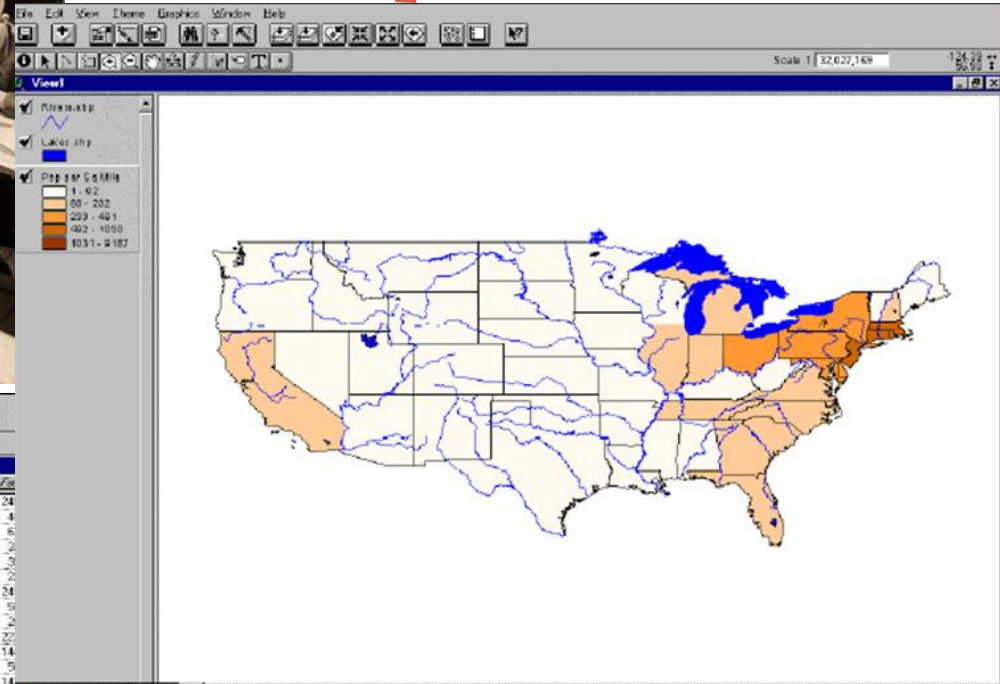
Knowledge of HOW we teach – teaching methods



TCK



Geographic information Systems (GIS)



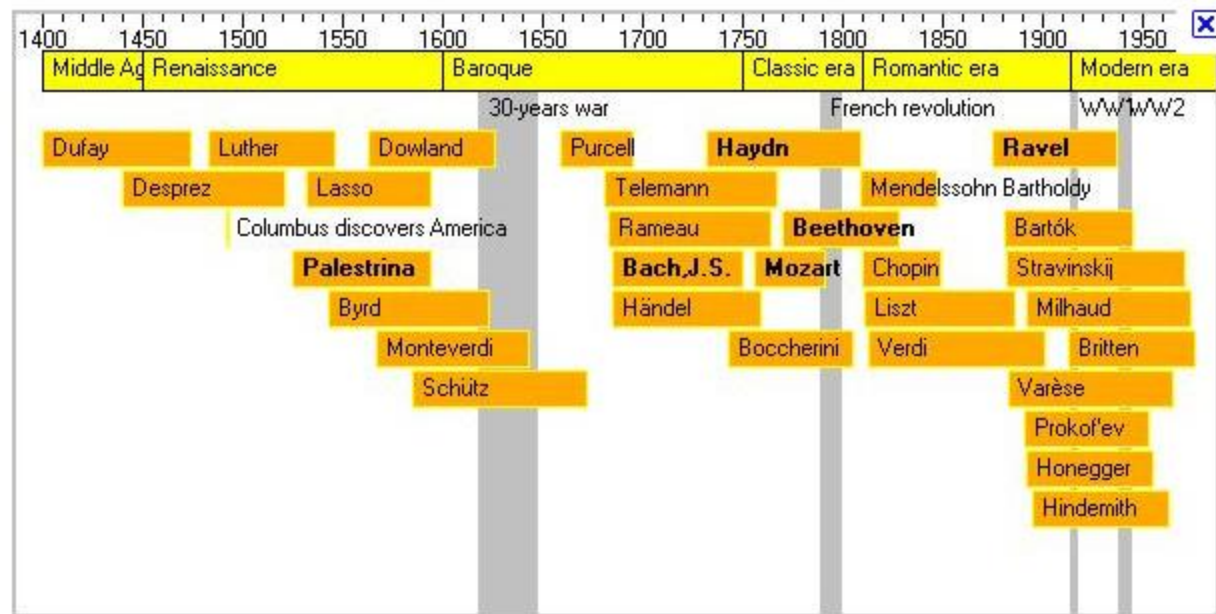
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Database program

TCK...

- [Geometer's Sketchpad](#): Dynamic Geometry Software
- **Timeliner**:



TPK



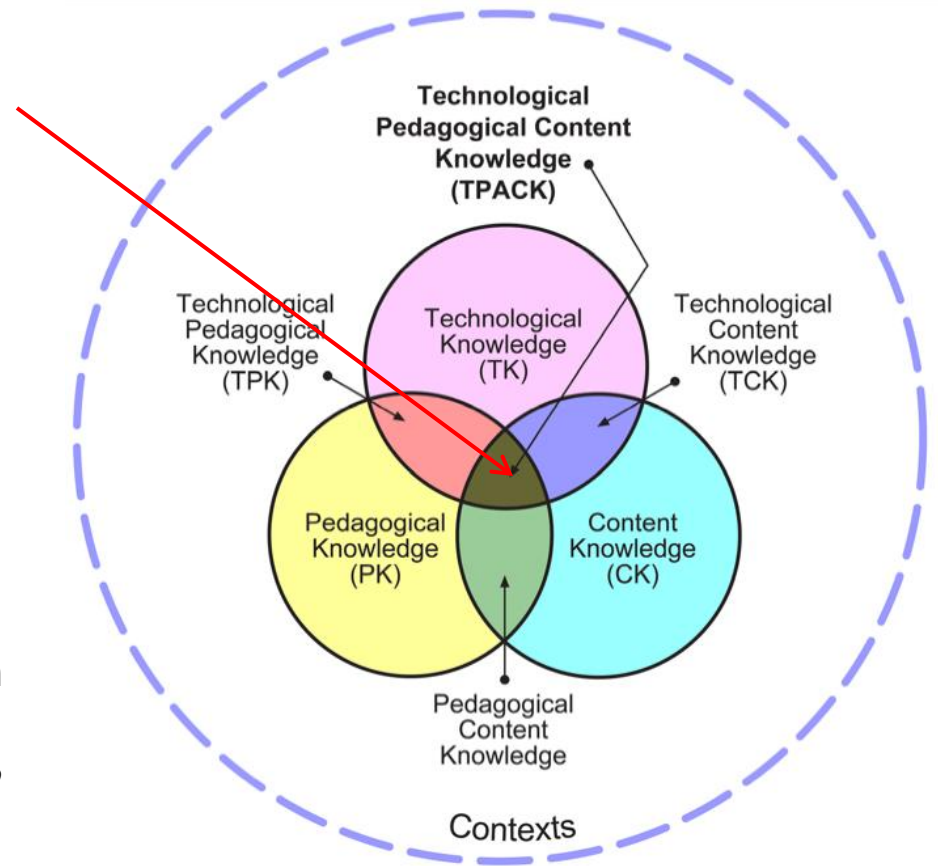
TPK

- Online Discussions by using Google Groups.
- Peer editing, group paper writing, by using a wiki.
- Developing a group PowerPoint Presentation.

THE QUESTION OF THE DAY.....

Technological Pedagogical Content Knowledge (**TPACK**) refers to the knowledge that emerges from an *understanding of an interaction of content, pedagogy, and technology knowledge.*

Q: How can you best use new **technologies** associated with your **content** objectives to **promote student learning**?



Examples:

Applying TPACK Principles To Learning Projects

- Social Studies: A 3rd grade teacher using available technology to help her 3rd grade students understand maps—MapQuest/Google Maps and kidpix:
→ <http://ott.educ.msu.edu/pt3video/>
- Literature: The Lorax Speaks For... (Grades 1-2)- Dr. Seuss book about the environment-- Mixed Media, podcasts, and blogs:
→ <http://room9nelsoncentral.blogspot.com/>
- Social Studies/Language Arts: Vote However You Like (Grade 6 & 7) -- Remixing and Composing music software and video
→ http://www.huffingtonpost.com/2008/10/29/vote-however-you-like-vid_n_139101.html
- More examples:
<http://newlitinstitute2010.wikispaces.com/GotTPACK+2010>

Matching activity types, content, and technologies

- <http://activitytypes.wmwikis.net/>

By Judi Harris & Mark Hofesr

TPACK Guidelines

- TCK: Does the use of technology help represent the content in the most effective ways or maximize opportunities to transform the content in ways that make sense to the “learner?”
- TPK: What pedagogical strategies enable you to get the most of out existing technologies for teaching and evaluating learning?
- TPACK: Above together



Any Questions?

References

- Frameworks for Competency in Teacher ICT Integration.
Retrieved from http://www.schoolnet.org.za/reports/hei/Roos_29Apr10.ppt
- Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A new framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054.
- Mishra, P., & Koehler, M. J. (2008, March). Introducing technological pedagogical content knowledge. Paper presented the *Annual Meeting of the American Educational Research Association*, New York, March 24-28.
- Harris, J., Mishra, P., & Koehler, M. (2009). Teachers' technological pedagogical content knowledge and learning activity types: curriculum-based technology integration reframed. *Journal of Research on Technology in Education*, 41(4), 393-416.