

Week 6 Video 5

Visualization

Other Awesome EDM Visualizations

Other Awesome EDM Visualizations

- ❑ Not an exhaustive list
- ❑ For obvious reasons

Learnograms

- A graph that shows the change in one learning-related variable over time
- Concept and key examples from Arnon HersHKovitz



Learnogram

□ (Schoenfeld, 1992)

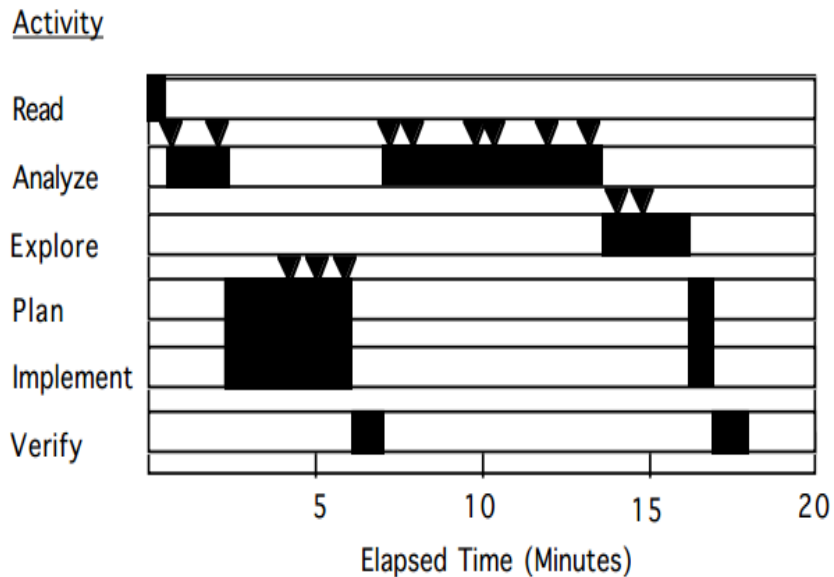


Fig. 4. Time-line graph of a mathematician working a difficult problem

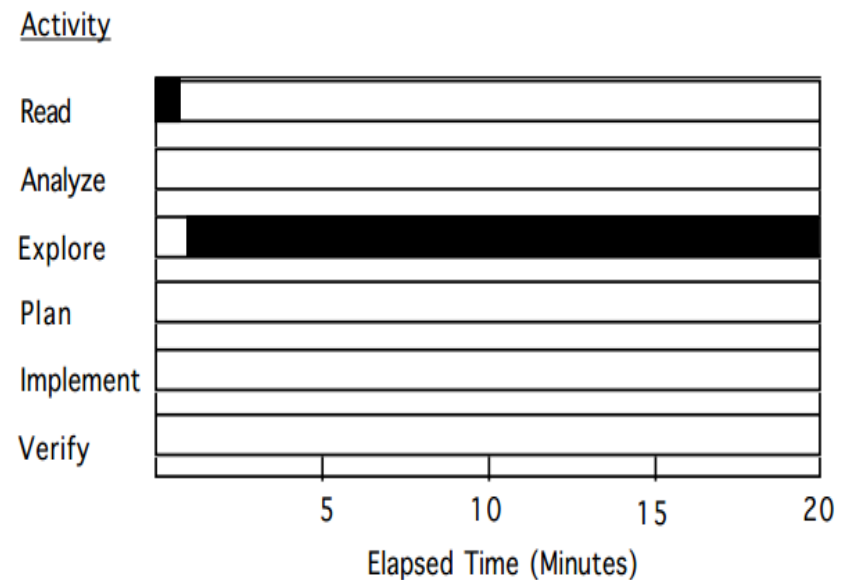
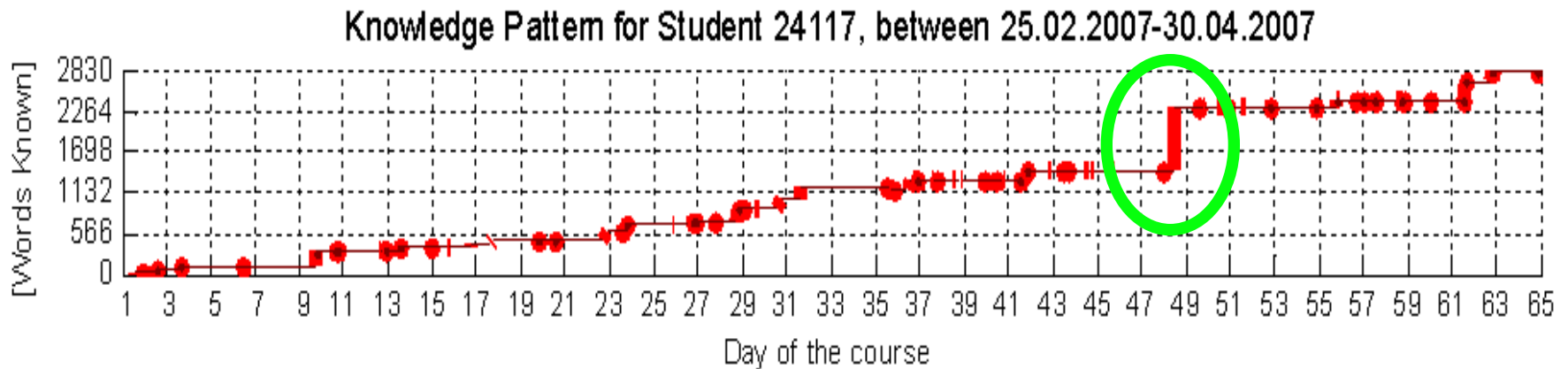


Fig. 3. Time-line graph of a typical student attempt to solve a non-standard problem.

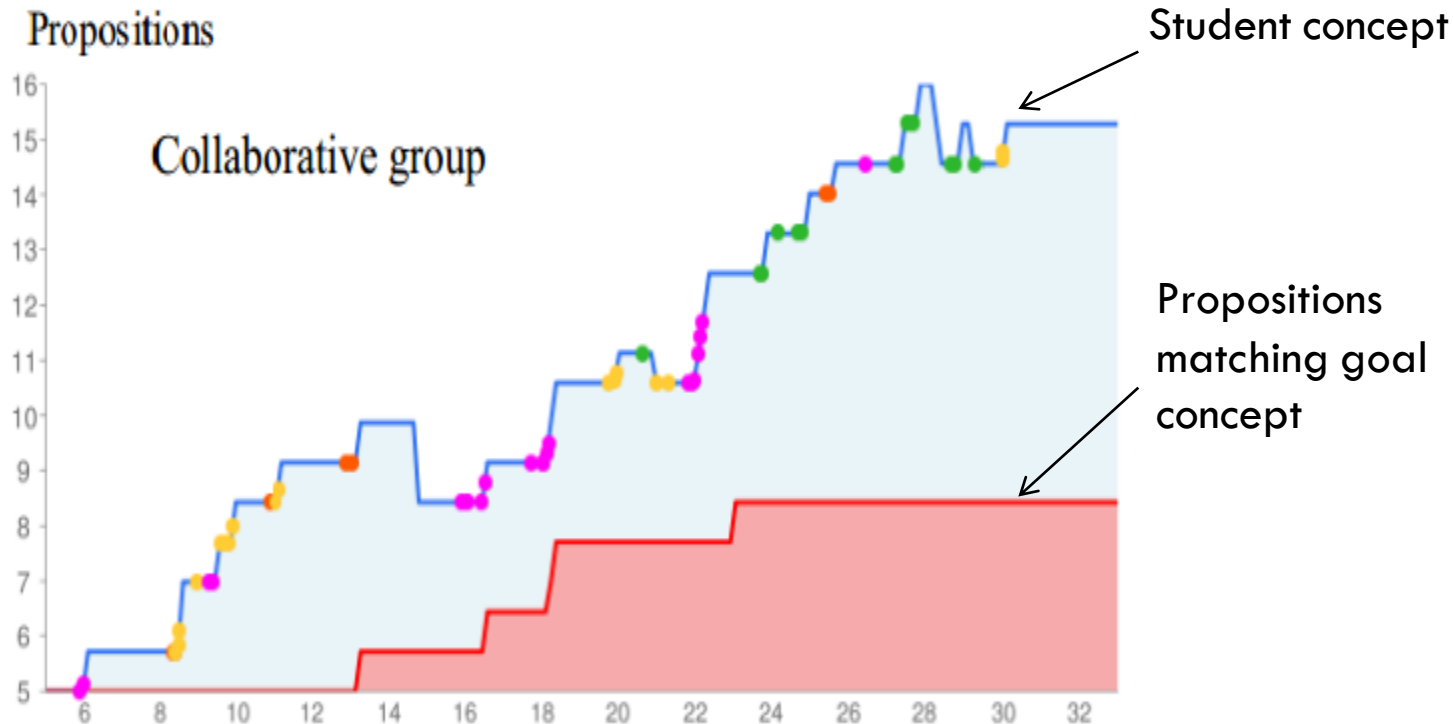
Learnogram

□ (HersHKovitz & Nachmias, 2009)



Collaborative Learning Learnogram

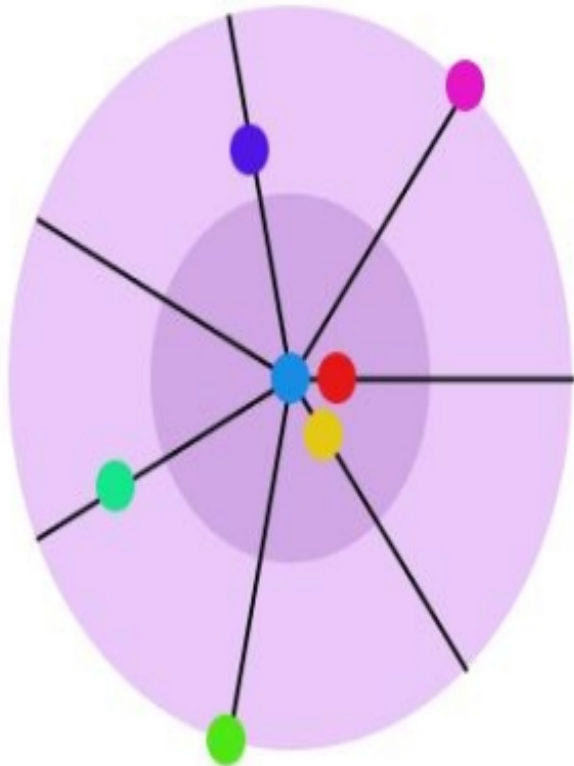
□ (Martinez, Kay, & Yacef, 2011)



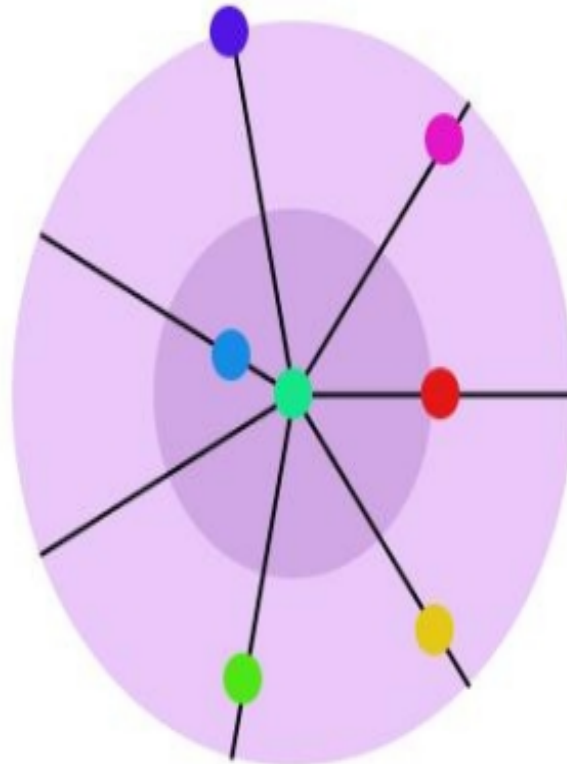
Activity Radar

- (Kay, Maisonneuve, Yacef, & Reimann, 2006)

Group Participation - (Group view) - svn

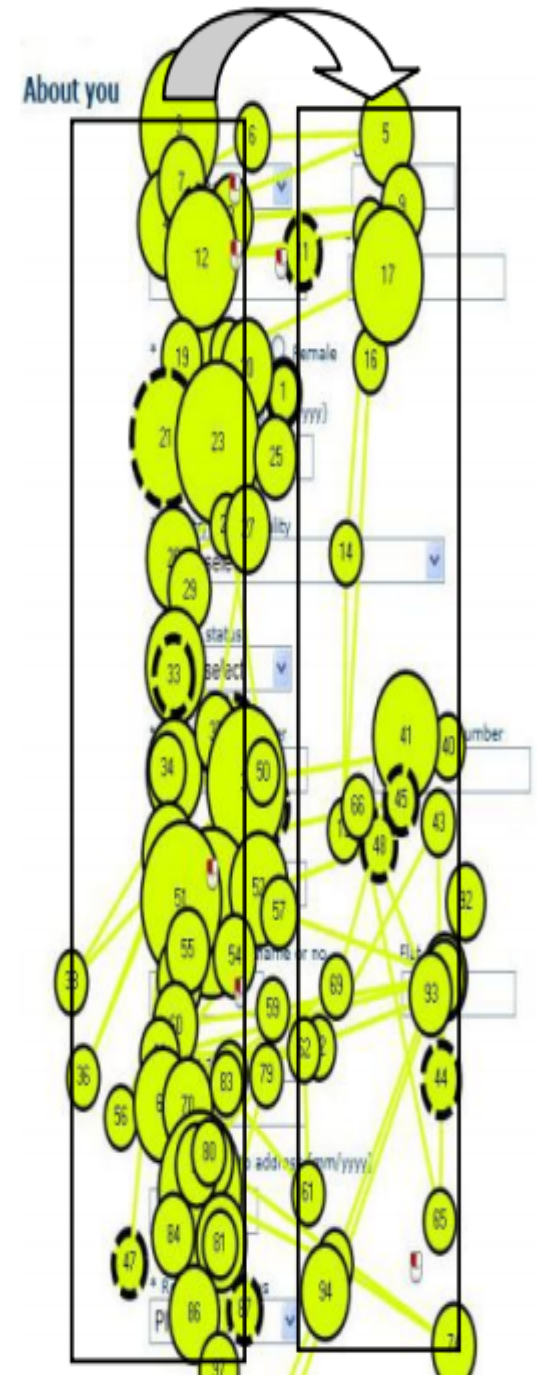


Group Participation - (Group view) - wiki



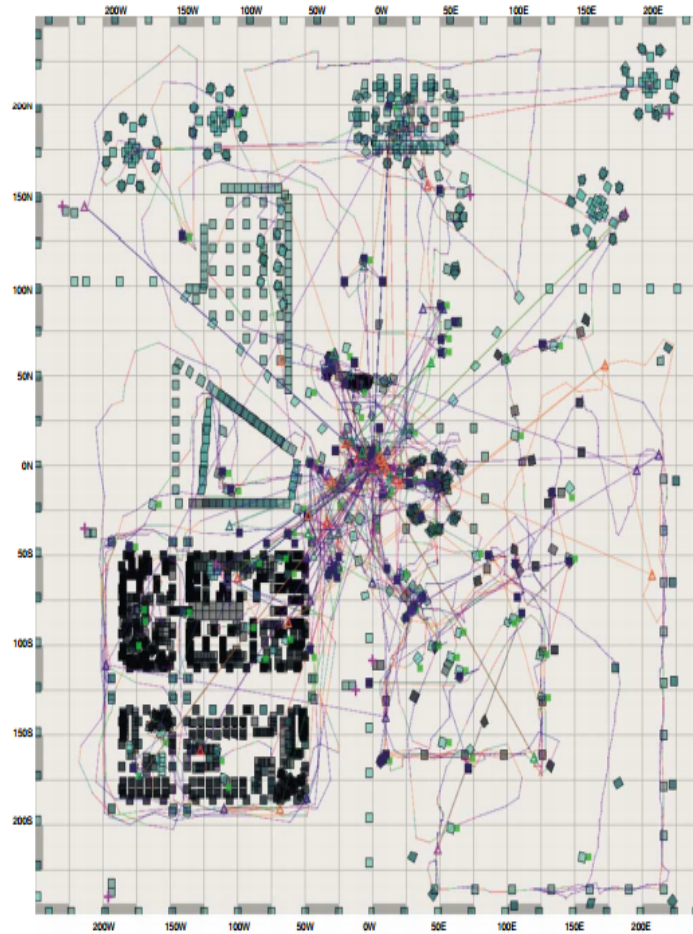
Gaze Plot

□ (Das, McEwan, & Douglas, 2008)



Spatial Usage Maps

□ (Borner & Penumarthy, 2003)



Lots of visualizations

- Goal: get information in a meaningful and quickly perceptible way to an analyst, learner, or instructor (or other stakeholder)
- Coolness will impress people
 - ▣ But the main question is – is it useful?
 - ▣ Useful to think about Tufte's principles from first lecture

Next week

- Clustering and Factor Analysis