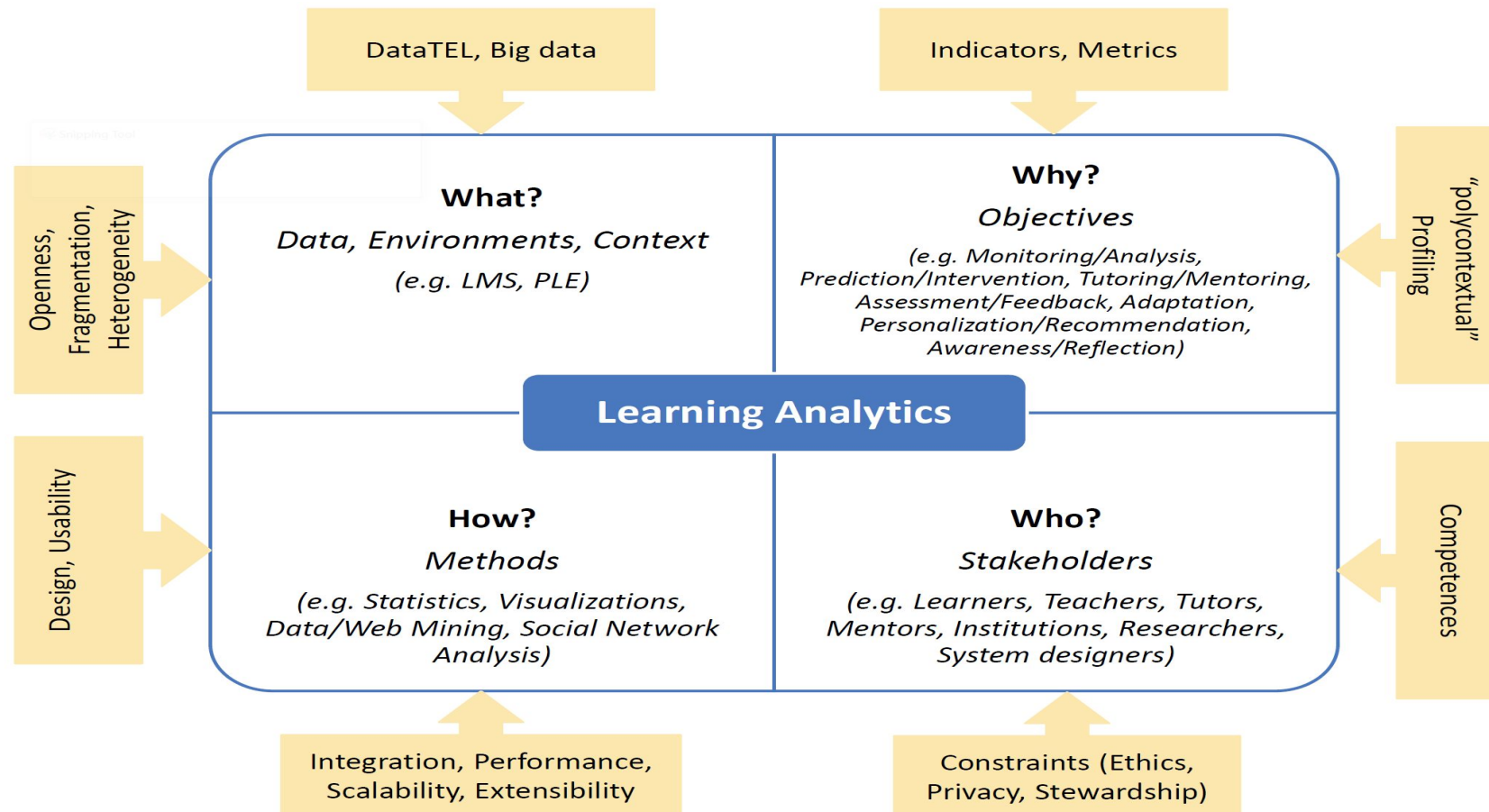


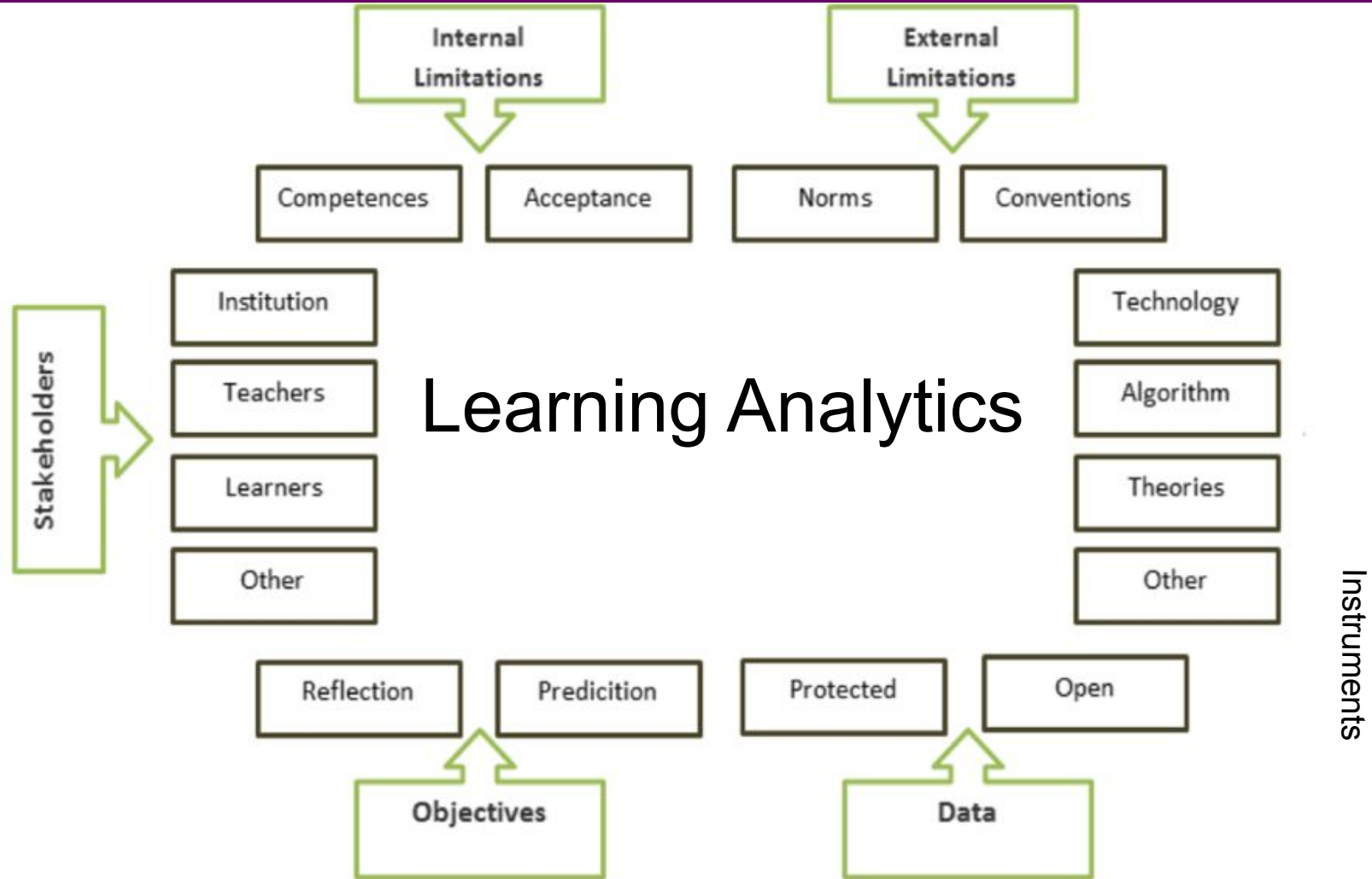
Modelo de referencia de Analítica del Aprendizaje

[Chatti et al. (2012)]



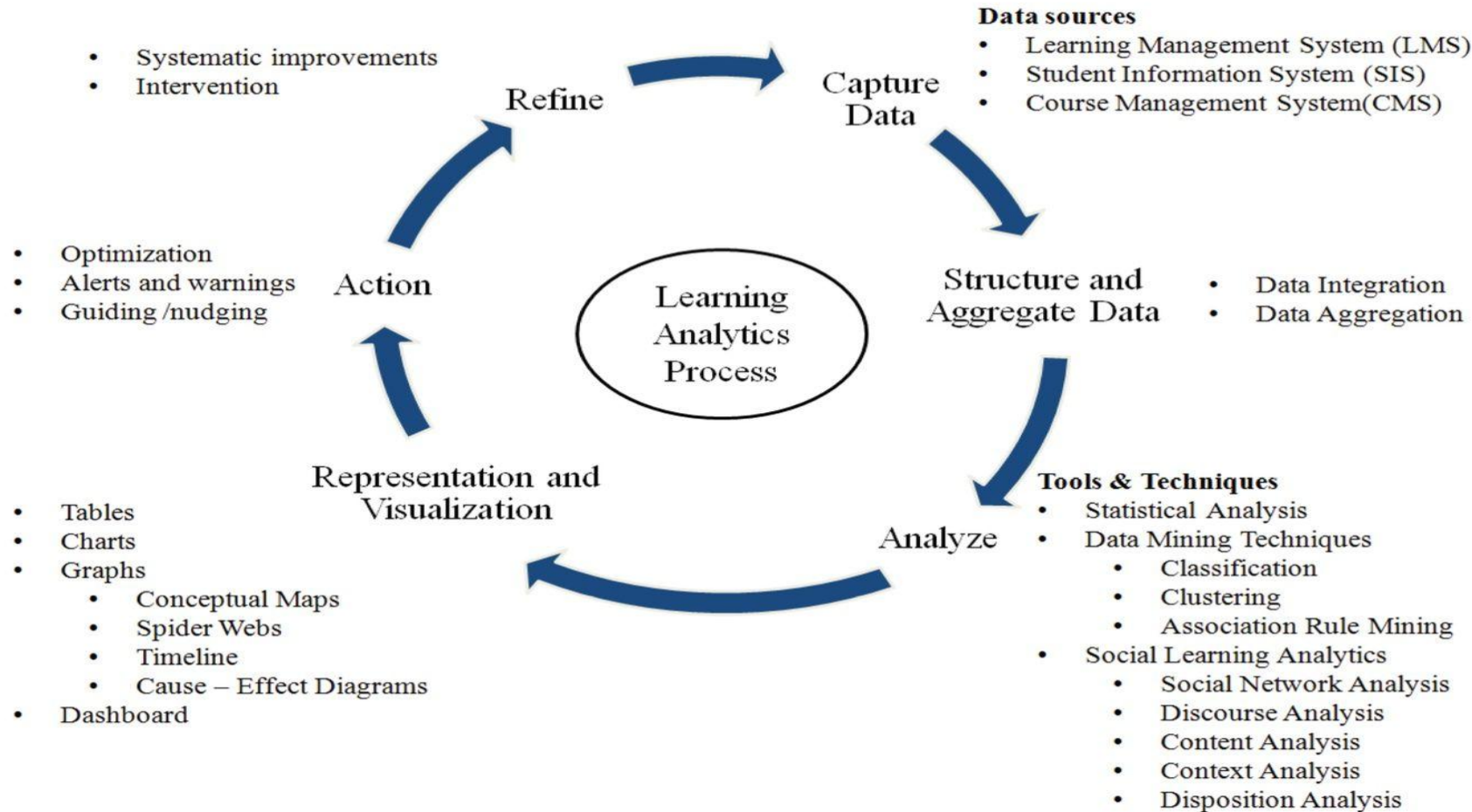
Dimensiones críticas de la Analítica del Aprendizaje

(Greller and Drachsler 2012)



- **Dimension Values:** Stakeholders Data subjects: a group of learners. Data clients: tutor, discussion moderator.
- **Objective Reflection:** Analyse student interactions in a forum discussion, identify network connections between students, and identify isolated students to bring them back into the discussion.
- **Data Protected dataset:** Student interactions and posts in the discussion forum of the LMS.
- **Relevant indicators:** Posts published, posts replied to.
- **Time scale:** what time frame is applied to the analysis?
- **Instruments: Pedagogic theory:** hypothesis is that active participants in a discussion show better learning outcomes. **Technology:** Social Network Analysis (SNA), statistics. **Presentation:** network diagram visualisation, stats table.
- **External limitations: Conventions:** (1) Privacy: is the analysis in accordance with privacy arrangements, are the students properly informed? (2) Ethics: What are the dangers of abuse/misguided use of the data? **Norms:** Are there e.g., legal data protection or IPR issues related to this kind of use of student data?
- **Time scale:** will the students still be able to benefit from the analytics outcome? Is the analysis post-hoc or just-in-time?
- **Internal limitations: Required competences:** (1) Interpretation: Do the data clients have the necessary competences to interpret and act upon the results? Do they understand the visualisation or presentation of the information? (2) Critical thinking: Do they understand which data is represented and which data is absent? How will they use this information?

Proceso de Analítica del Aprendizaje



Referencias

Chatti, M. A., Dyckhoff, A. L., Schroeder, U., and Thüs, H. 2012. "A Reference Model for Learning Analytics," *International Journal of Technology Enhanced Learning* (4:5/6), pp. 318–331. (<https://doi.org/DOI: 10.1504/IJTEL.2012.051815>).

Greller, W., and Drachsler, H. 2012. "Translating Learning into Numbers: A Generic Framework for Learning Analytics," *Educational Technology & Society* (15:3), pp. 42–57.

Siemens, G. (2013). Learning analytics the emergence of a discipline. *American Behavioral Scientist*, 57(10), 1380-1400. Siemens, G., Gasevic, D., Haythornthwaite, C., Dawson, S., Shum, S.

B., Ferguson, R.& Baker, R. S. J. D. (2011). Open Learning Analytics: an integrated & modularized platform. Proposal to design, implement and evaluate an open platform to integrate heterogeneous learning analytics techniques.