
An Update on the Taxonomy for Collaborative Design

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- Taxonomy for collaborative design developed to characterize collaborative design situations [1][2].
- Taxonomy created to support a resistance based model of collaborative design [3].
 - Identify activities to model as resistances to the design process [3].
- 19 of 24 taxa were characterized less than 20% of the time
 - Possibly not emphasized in literature or little research in these areas [4]
- Ambiguity in definition of terms resulted in not providing a characterization [4]

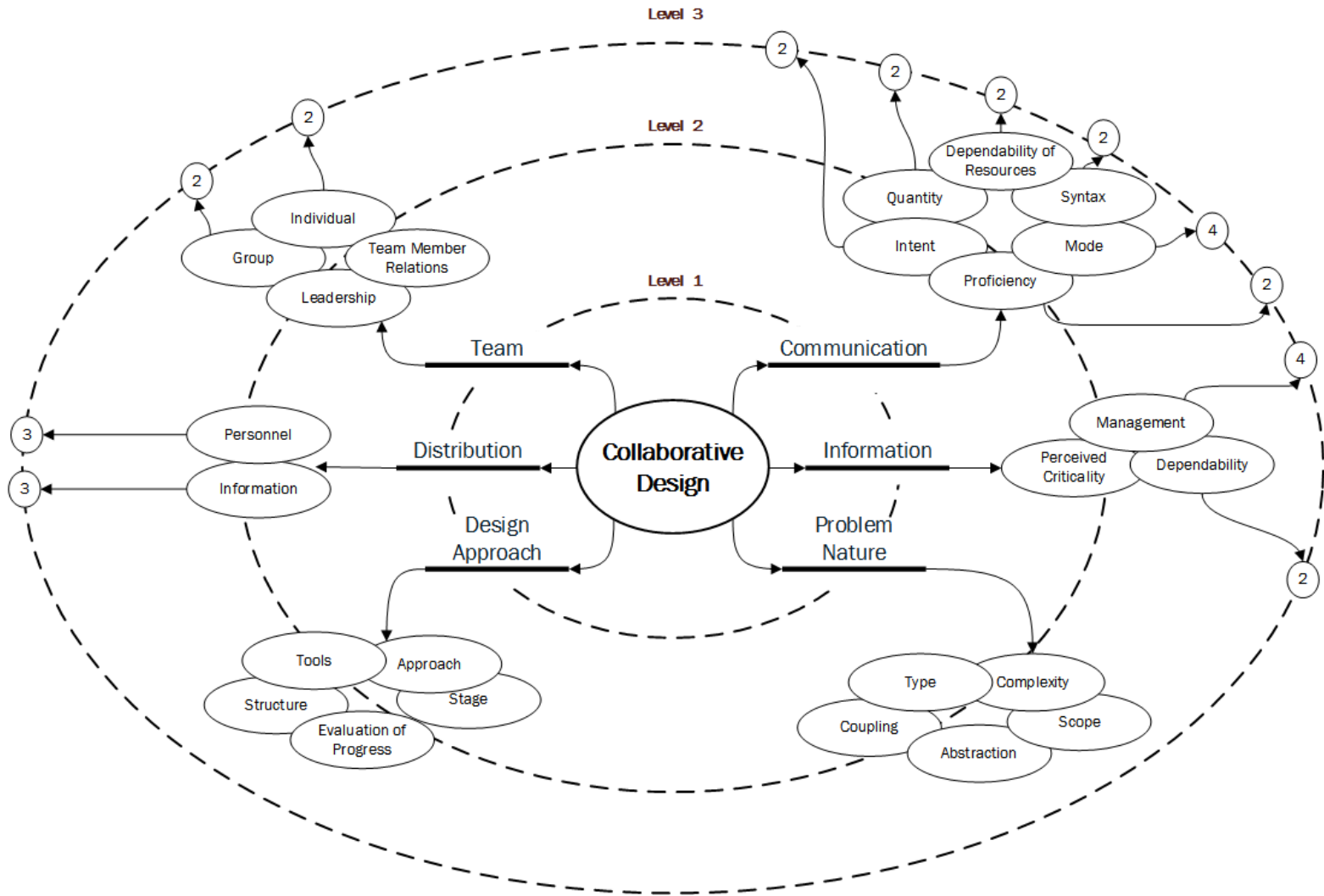
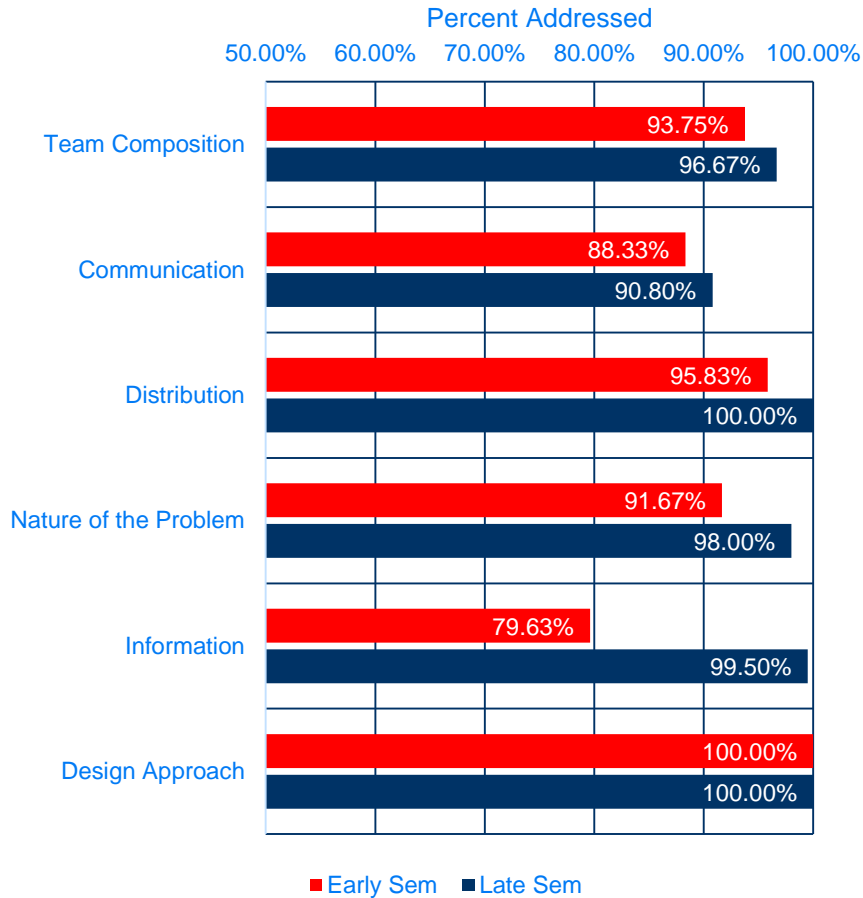


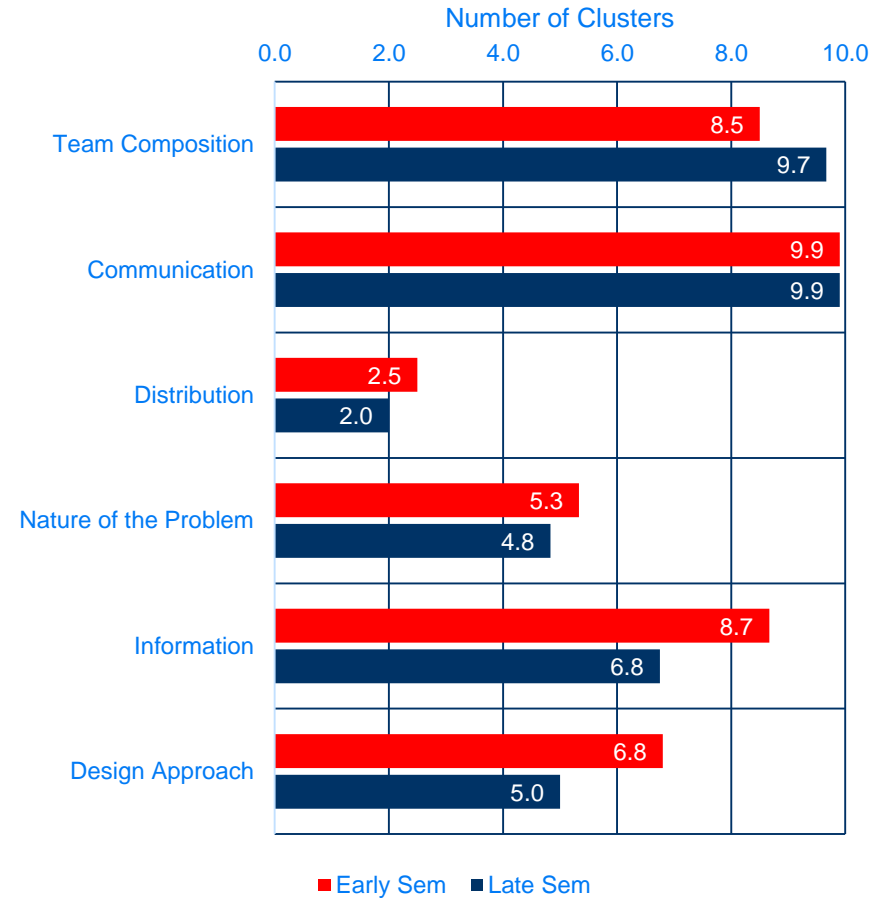
Figure from [4]

- Collaborative Design Taxonomy applied to 25 ME 4020 design teams
 - 1st Iteration: Week 3
 - 2nd Iteration: Week 15
- Motivation
 - Apply taxonomy to design teams
 - Observe changes over the course of the project duration
 - Identify limits of the taxonomy

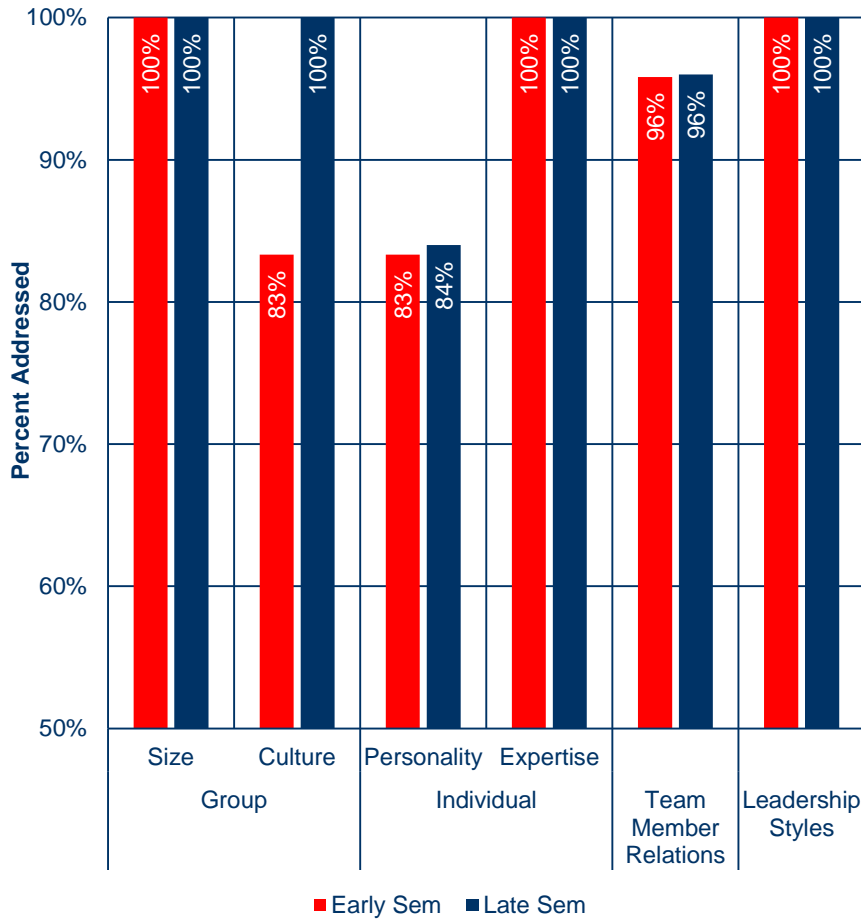
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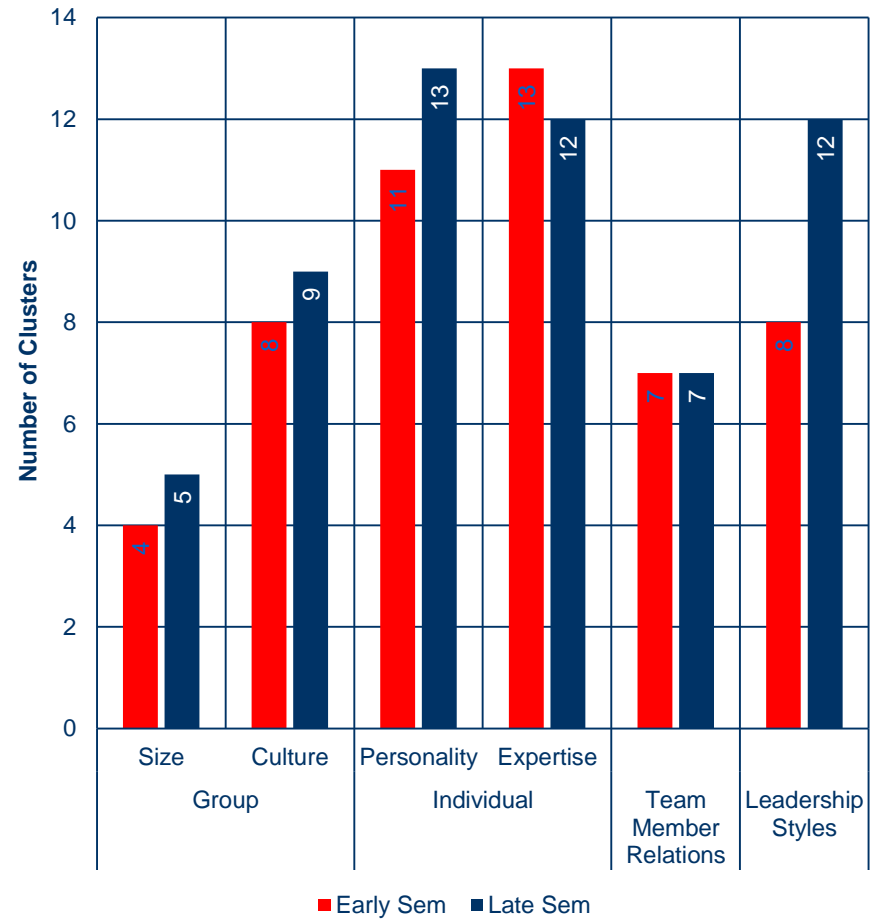
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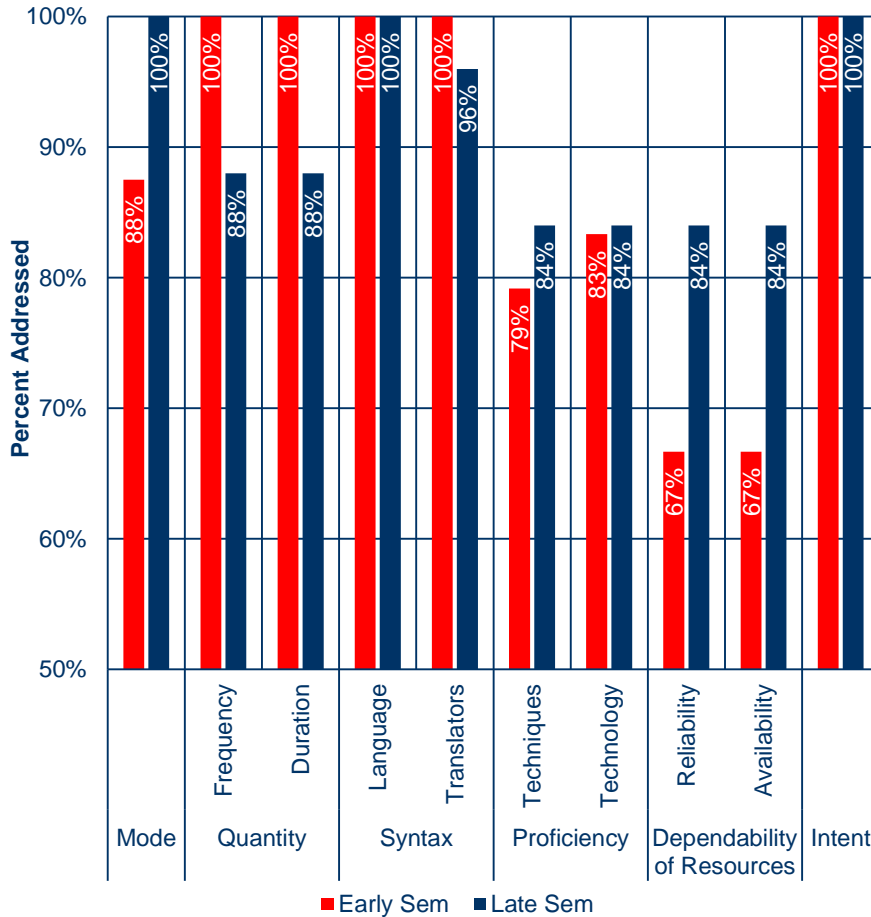
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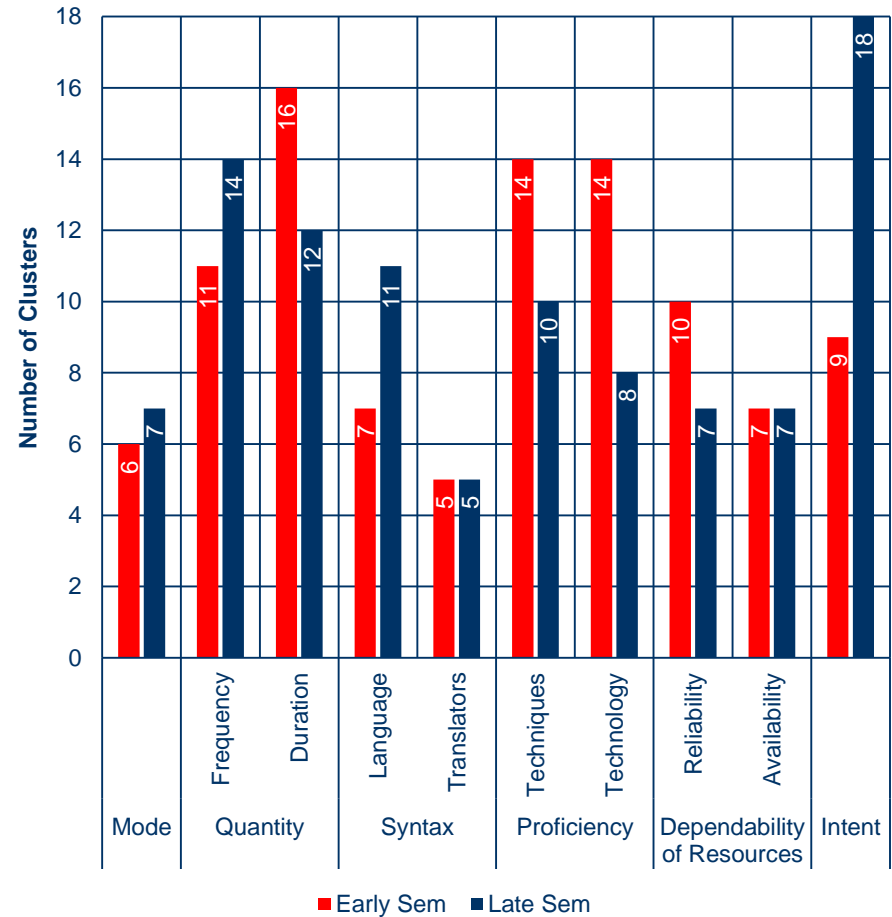
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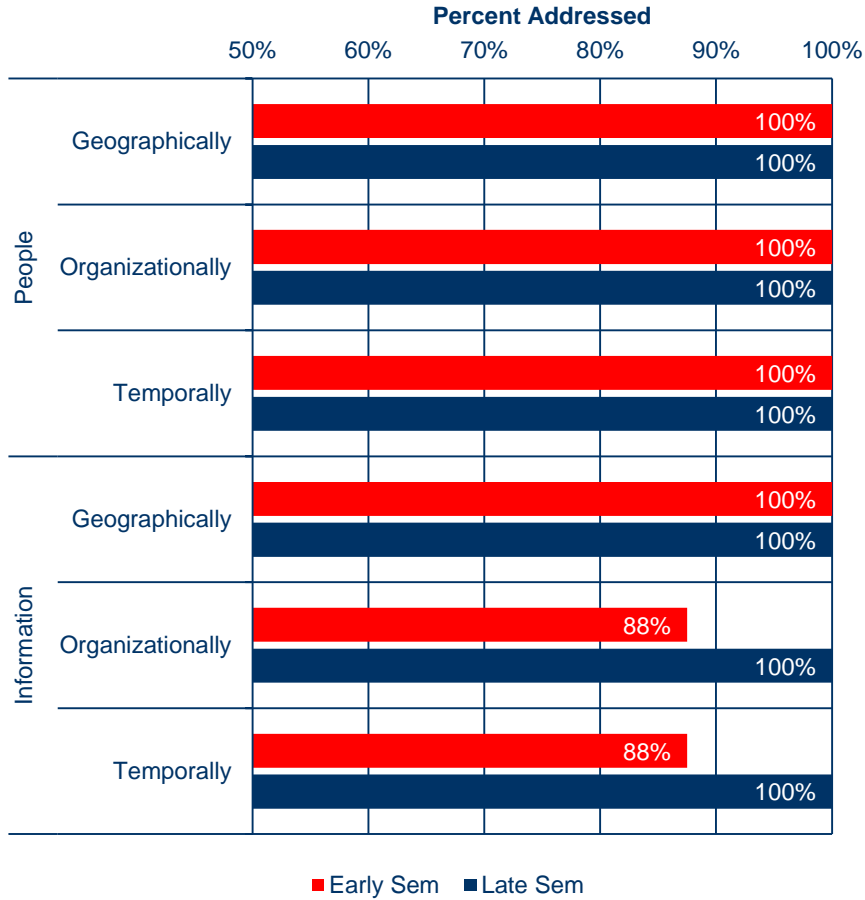
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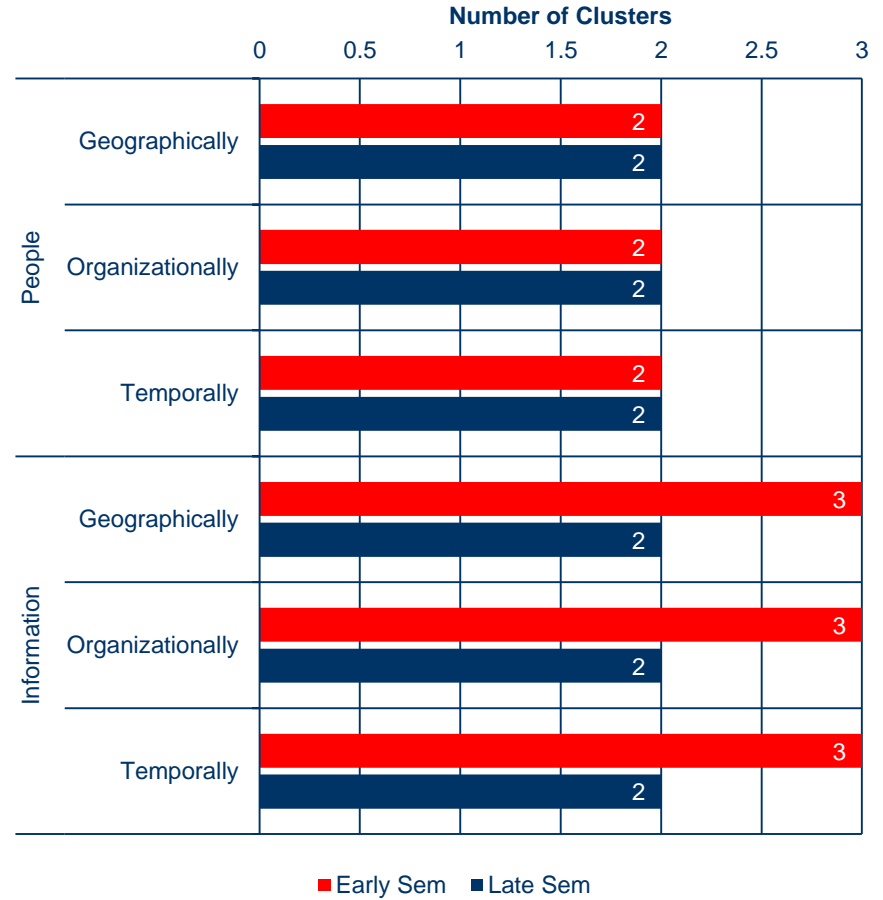
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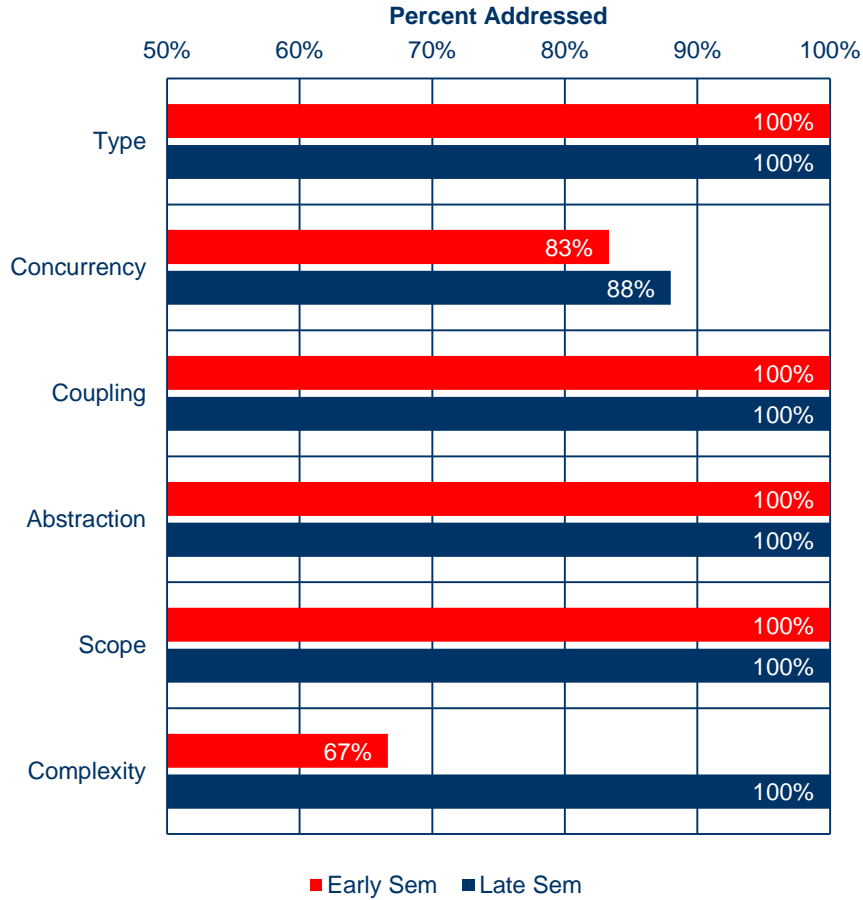
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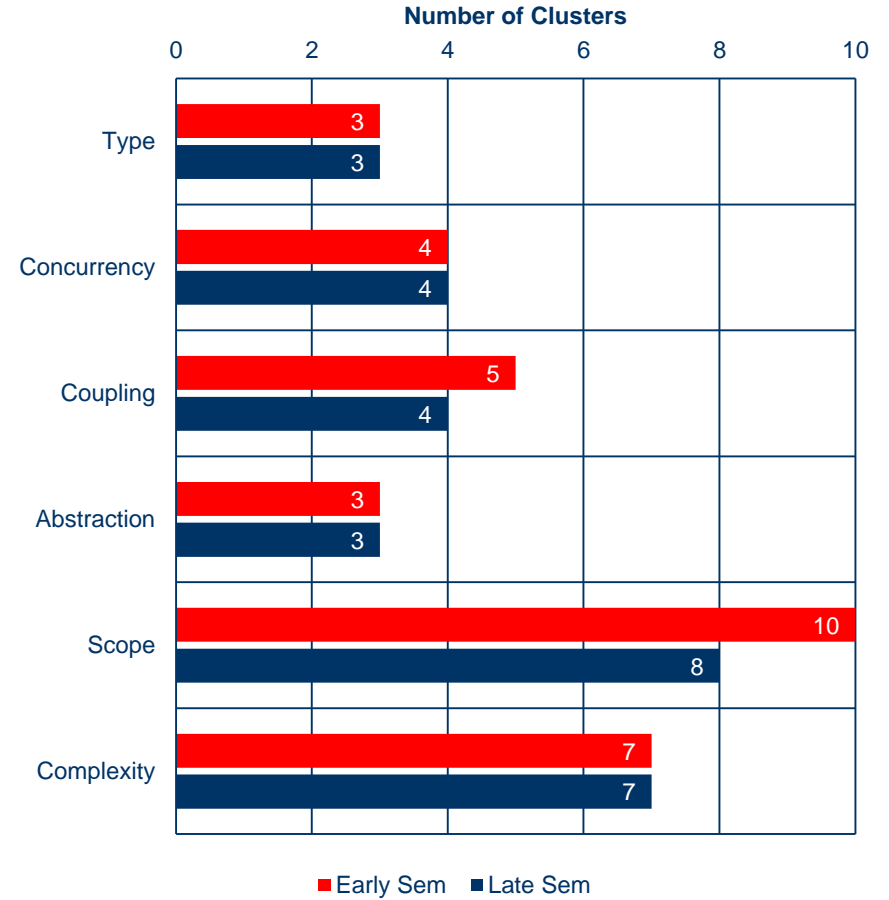
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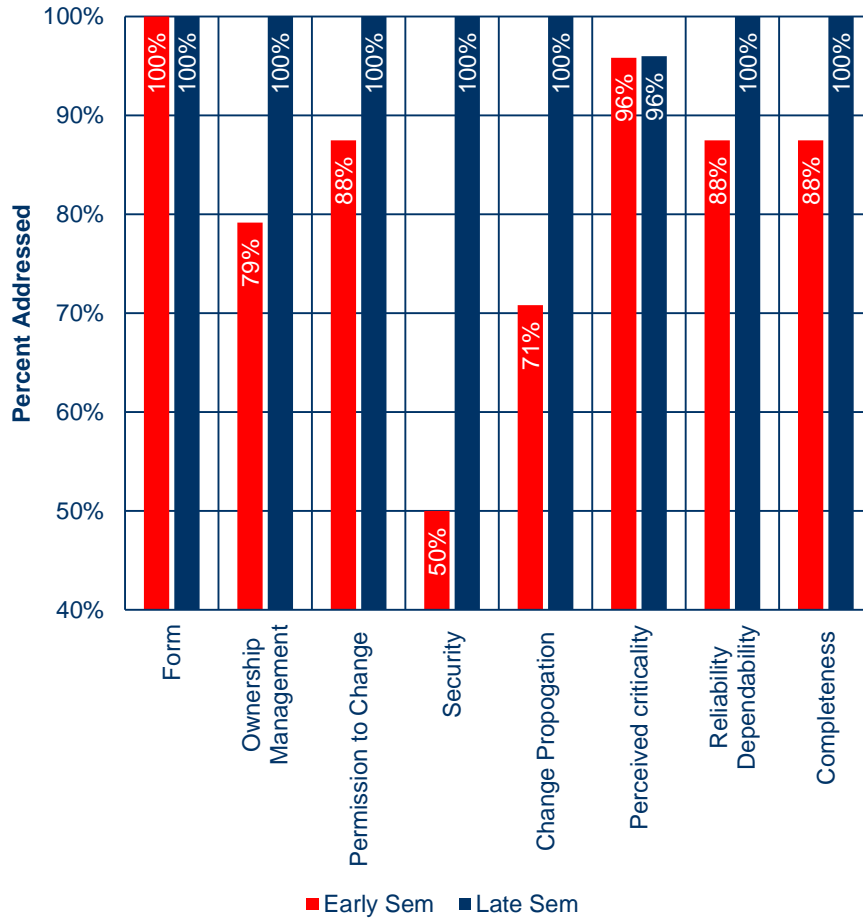
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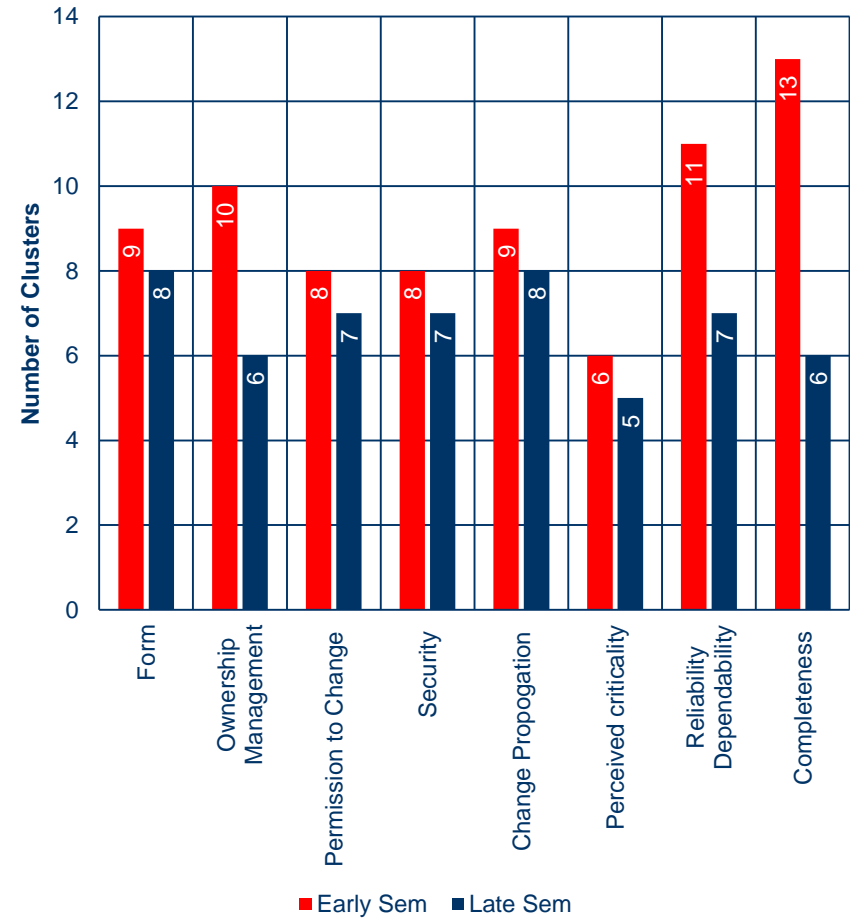
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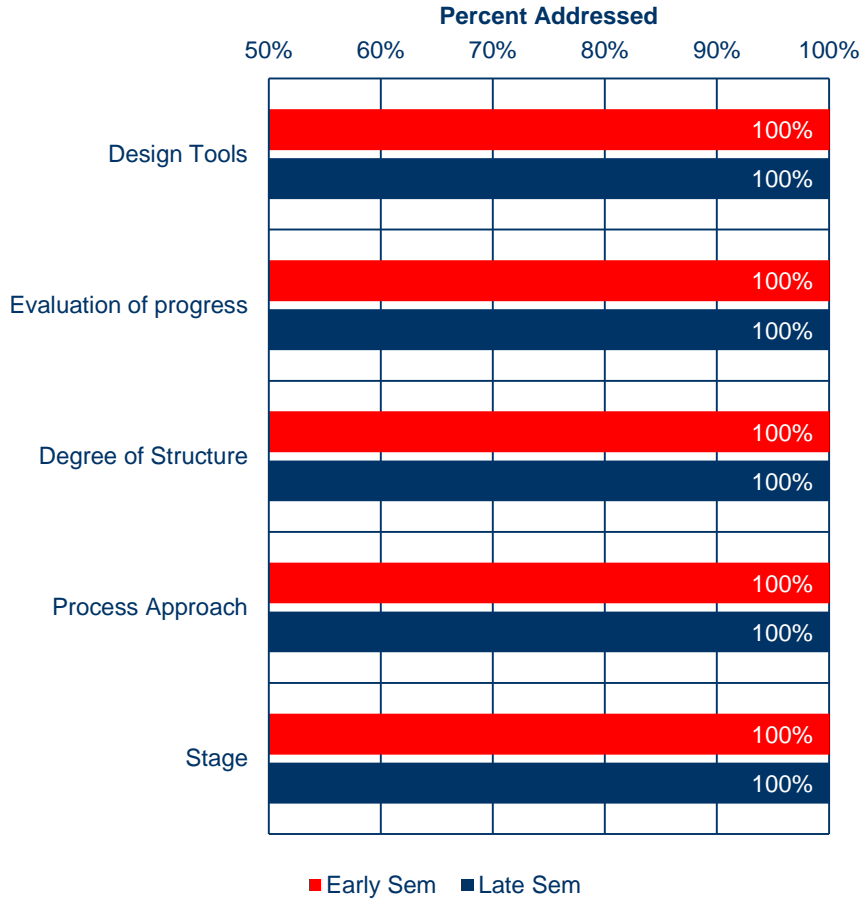
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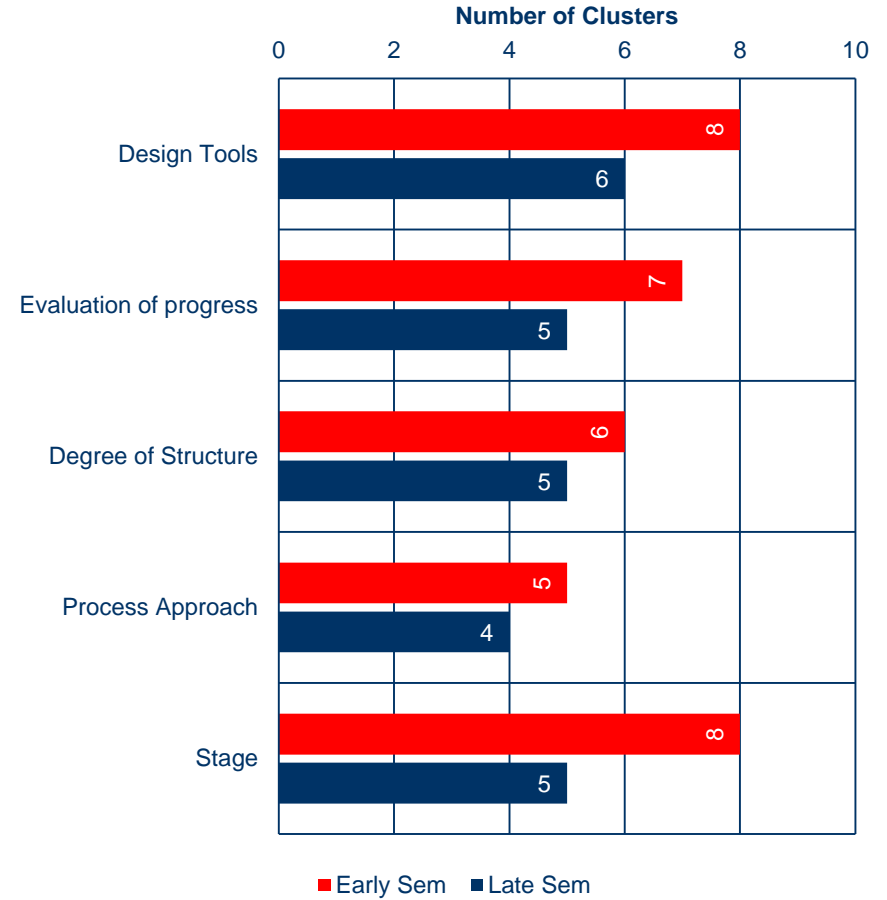
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Number of Clusters



- Compare data collected from ME 4020 study to literature reviewed in January
- Review JED articles from 2009 for collaborative design topics
 - Identify what taxa were covered/not covered
- Compile all results to demonstrate where the research in collaborative design falls short

Thank You For Your Attention
QUESTIONS?

- [1] Ostergaard, K. J., and Summers, J. D., 2009, “Development of a Systematic Classification and Taxonomy of Collaborative Design Activities,” *J. Eng. Des.*, **20**(1), pp. 57–81.
- [2] Ostergaard, K. J., and Summers, J. D., 2003, “A taxonomic classification of collaborative design,” *Proceedings of the 14th International Conference on Engineering Design ICED03*, pp. 617–618.
- [3] Ostergaard, K. J., and Summers, J. D., 2007, “Resistance based modeling of collaborative design,” *Concurr. Eng.*, **15**(1), p. 21.
- [4] Richter, J., Chickarello, D., Stidham, H., O’Shields, S., Patel, A., and Summers, J. D., 2017, “Literature Based Review of a Collaborative Design Taxonomy,” *ICED17 21st International Conference on Engineering Design, Vancouver, BC, Canada.*(unpublished)