|  |  |  |  |
| --- | --- | --- | --- |
| **What makes a vertex central in a network?**  **(one or more ideas)** | **How do you describe it mathematically?** | **When is it appropriate to use it?** | **How can we capture it?** |
| Lots of one-hop connections from | The number of vertices that influences directly | Local influence matters  Small diameter | Degree centrality |
| Lots of one-hop connections from relative to the size of the graph | The proportion of the vertices that influences directly | Local influence matters  Small diameter | Normalized degree centrality  or or |
| In the “middle” of the graph |  |  |  |

**Objective:** identify what makes a node central in a network, and how could we can capture it