



When considering two small communities (grey and blue), the green node is not influential in both the two communities since it only connected to 2 nodes in each community, whereas each grey node are connected with at least 3 nodes in the community.

However, if we consider the union of the two communities, then the green node is connected to 4 nodes, which makes it one of the most influential node in the large community.

What's more, the influence of green node over the union community can be any larger than all other nodes by increasing the number of small communities.