

Peer-to-Peer Learning: The Power of Social Networks in Adoption of New Pedagogies

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Diffusion of Pedagogy Now



What makes change sustainable?



Research Questions

1. What are the **characteristics of teacher social networks** in rural primary schools in Tanzania?
2. Who are the **potential influencers** in teacher social networks in rural primary schools in Tanzania, and how might these individuals have **influenced the adoption of pedagogical innovations**?



Methodology

- Sociometric instrument analyzed using social network analysis to calculate quantitative measurements and generate teacher sociograms
- Key informant interviews with teachers to contextualize the SNA findings and gain better understanding of teacher interactions, the content of those interactions, and context
- Focus on teacher discussions of formative assessment as pedagogical strategy of interest



20 schools
in 4 wards



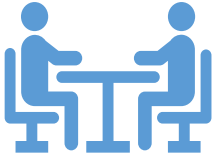
110
educators



KII: 14 teachers
& headteachers



Examining Relationships



Within Schools:

- Frequency of relationship
- Venue/method of contact
- Directionality of advice
- Topics discussed



Across Schools:

- Collaboration frequency
- Self-efficacy re: formative assessment
- Collective efficacy re: formative assessment
- CoL activities
- CoL satisfaction

Examining Culture of Sustainable Adoption



School Culture: informants' perceived expectations of their roles as teachers, perceptions of head teacher's leadership style

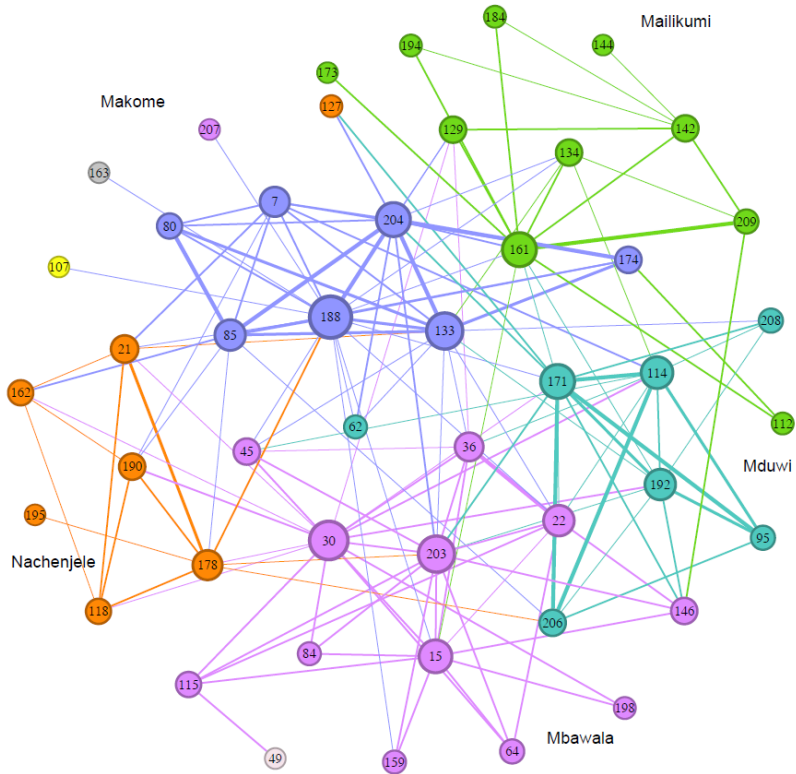


Information Exchange Culture: formal and informal opportunities in their schools and wards for peer exchanges and peer learning such as communities of learning and benefits therein

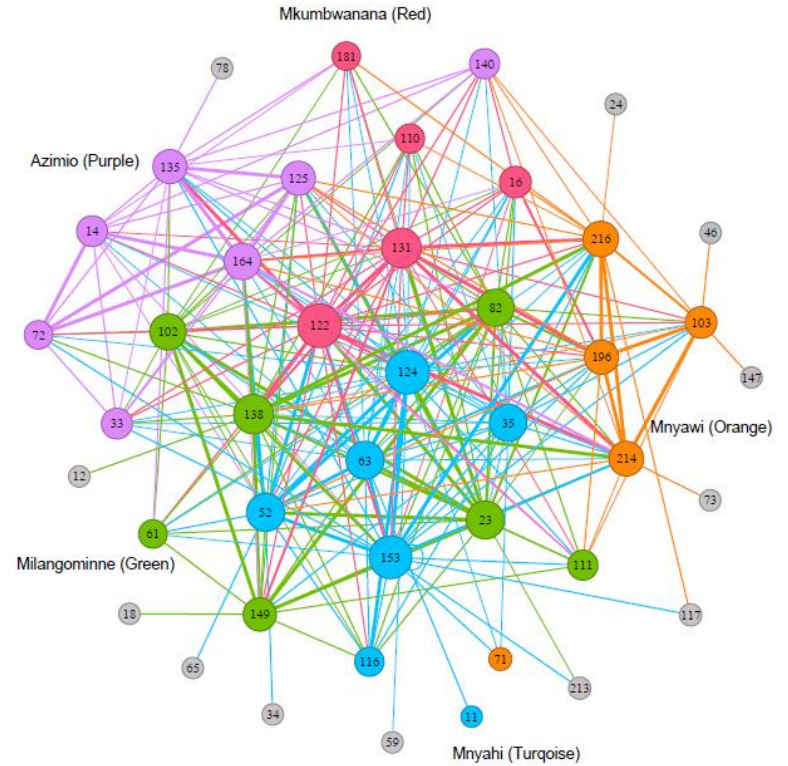


Pedagogy Adoption: attitudes and successes in adopting new pedagogies

Mbawala



Milangominne





Characteristics of Teacher Social Networks

Characteristic	Mbawala	Milangominne
Size (# of Actors)	47	43
Density	0.14	0.30
Total Links in Network	151	267
Average Links per Respondent	6.43	12.42
Average % of Links Outside School	43%	74%
Average Clustering Coefficient	0.53	0.72

Opportunities that Promote Strong Teacher Professional Relationships



Formal within and across-school structures for **observation, peer learning and exchange**



Regularly scheduled **school-level CoLs** with opportunities for practicing new pedagogies



Regularly scheduled **ward-level CoLs** involving collaborative planning and follow-up



Collaborative planning involving exemplary teachers, head teachers, and other potential positive influencers

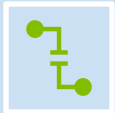
Characteristics of Influencers



Degree: number of links an actor (teacher) has with other actors



Closeness centrality: measures the *indirect* links each individual has, i.e. “friends of friends”



Betweenness centrality: individual’s ability to mediate between pairs of individuals who are not directly connected, i.e. a bridge

Positive Influencers vs. Influencers

Positive Influencers

- Mbawala & Milangominne both had **high percentages of head teachers and strong teachers** ranking in the top five performers of centrality measures (63% and 88%, respectively)
- Individuals interviewed in these wards spoke **excitedly or positively about new strategies**

Negative or Neutral Influencers

- Madimba & Nitekela both had **low percentages of head teachers and strong teachers** ranking in the top five performers of centrality measures (17% and 29%, respectively)
- Individuals interviewed in these wards **spoke negatively about new strategies or were hesitant to take up new strategies**

Conclusions and Recommendations for Future Research



Teachers in rural Mtwara Region have ***extensive social and professional networks*** both within and across schools in their wards



To leverage these networks, we need to understand ***the cohesion of teacher social networks*** and the ***characteristics of persons in positions of influence*** in these networks



Additional ***data on teacher implementation of new pedagogies and learning outcomes*** will allow for more nuanced analysis of the relative impact of teacher social networks

Thank You!

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