Reaching for Knowledge in Unison

Do 'Communities of Practice' Support Practice Change?

Findings from a Pilot Study

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Rationale

The health field is in need of new innovative strategies that can transfer evidence-based knowledge, support practice change and the implementation of evidence-based interventions and, ultimately lead to improved health outcomes.

Communities of Practice

Communities of practice (CoPs) are groups of people who share a concern, set of problems, or enthusiasm about a topic, and who deepen their knowledge and expertise about a topic by interacting on an ongoing basis.

They are part of a wider tradition of collaborative small group learning environments related to reflective practice, continuing medical education, education, and adult learning theory.

Practice context

The context for this study is the children's mental health sector in Ontario, Canada, where 120 organizations have been mandated to use the CAFAS measure to monitor outcomes.

Over 5000 CYMH practitioners are trained to reliably rate the CAFAS.

CAFAS™ in Ontario provides training, implementation, and analytic support to these users.

CoPs are one element of our implementation support strategy.

Our annual data reports can be viewed on the web:

http://www.cafasinontario.ca/html/related-reports.asp

Method

CYMH practitioners entering CAFAS reliability training in second wave of provincial outcome initiative

Randomly assigned (clustered by organization) to

(1) CoP (n=17 from 3 centers)

(2) Practice as usual (n=19 from 3 centers)

Outcomes:

1. practice change
2. topic (CAFAS) knowledge
3. satisfaction
4. client outcomes and treatment attrition

Method

Primary (1-5) and Secondary (6-7) Research Questions

1) Does CoP participation lead to greater practice change compared to practice as usual (PaU)?
2) Does CoP participation lead to greater practitioner CAFAS knowledge than PaU?
3) Is CoP support associated with better client outcomes?
4) Do practitioners in a CoP environment report greater satisfaction with this type of implementation support compared to practitioners in PaU environments?
5) How does learning and knowledge sharing occur in a CoP environment (PROCESS)?
6) Do CoP practitioners have a lower rate of client treatment attrition compared to PaU practitioners?
7) Is readiness for change associated with practice change?

Method

Primary Research Hypotheses	Outcome Indicators	Measures	Measurement Intervals
1.CoP practitioners demonstrate greater practice change relative to PaU	•Reported change •Demonstrated change •Commitment to change •Reflective practice	1.Practice change Questionnaire 2.# CAFAS ratings per practitioner 3.Commitment to Change form 4.CoP Reflective Practice Journal	1.Months 1,6,12 2.Months 1,6,12 3.Each of 6 CoPs 4.Each of 6 CoPs
2. CoP Practitioners demonstrate greater CAFAS knowledge	•Degree of CAFAS knowledge	1.CAFAS Knowledge Questionnaire	Months 1,6, 12
3. Client outcomes for CoP clinicians are better than those for PaU clinicians	•Mean difference score	1.Mean difference score between exit and entry CAFAS total score	Pre/post ratings from CAFAS export data @ months 1,6,12
4. CoP practitioners report greater satisfaction with implementation supports than PaU	•Satisfaction with implementation support	1.Satisfaction Questionnaire	Month 12

Method

Primary Research Hypothesis	Outcome Indicators	Measures	Measurement Intervals
5. How does learning and knowledge exchange occur in a CoP environment?	•Discussion •Topics •Main messages •Lessons learned •Process	1.Field notes 2.Interviews	Month 12

Method

Secondary Research Hypotheses	Outcome Indicators	Measures	Measurement Intervals
1.CoP practitioners have a lower client attrition compared to PaU	•Client attrition	1.# closed cases per practitioner 2.# treatment abandoned per practitioner – captured in data exports	Months 1,6,12
2. Readiness for change is associated with practice change	•ORC total practice change score	1.Organizational Readiness for Change scale, Texas Christian University	Month 12

Results – Primary Hypotheses

1) Does CoP participation lead to greater practice change compared to practice as usual (PaU)?

a) *Reported Practice Change (questionnaire)*
t(18) = 1.96, *p* = .065
CoP group reporting higher levels of practice change

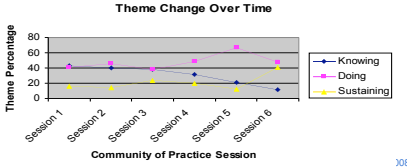
b) *Demonstrated Practice Change (# ratings per practitioner)*
No data

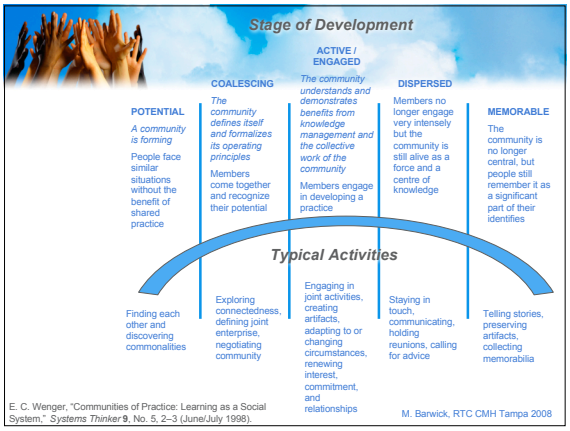
Results – Primary Hypotheses

Commitment to Change (CTC) & Reflective Practice

Coding of CTC statements generated three themes:
- Knowing
- Doing
- Sustaining

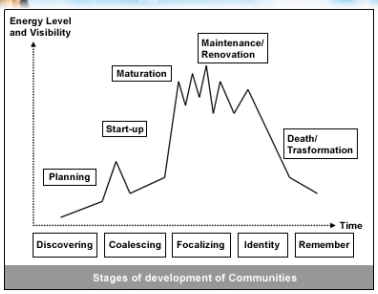
CTC themes changed according to the life stage cycle of the CoP.





E. C. Wenger, "Communities of Practice: Learning as a Social System," *Systems Thinker* **9**, No. 5, 2–3 (June/July 1998).

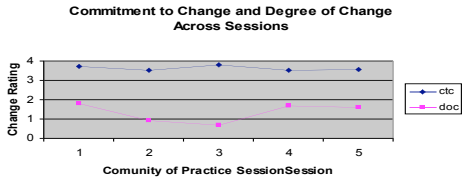
Stages of CoP Development



Wenger, E., McDermott, R. and Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge.* Boston, MA: Harvard Business School Press

Plan vs. Do

CTC ratings were higher than the actual or realized degree of change ratings (what do I plan to do vs. what have I done), suggestive of the complexity and time required for behaviour change.



Results – Primary Hypotheses

2) Does CoP participation lead to greater practitioner CAFAS knowledge than PaU?

$t(18) = 1.88$, $p = .076$

CoP group scoring higher in CAFAS knowledge

Results – Primary Hypotheses

3) Is CoP support associated with better client outcomes?

No data

Results – Primary Hypotheses

4) Do practitioners in a CoP environment report greater satisfaction with CAFAS implementation supports compared to practitioners in PaU environments?

$t(17) = 3.34$, $p = .004$

Clinicians in the CoP group reporting higher levels of satisfaction with CAFAS implementation supports

Results – Primary Hypotheses

4) Do practitioners in a CoP environment report greater use of CAFAS implementation supports compared to practitioners in PaU environments?

$t(17) = 2.04$, $p = .058$

CoP group reporting more use of CAFAS Supports than the PaU group

Results – Primary Hypotheses

5) How does learning and knowledge exchange occur in a CoP environment?

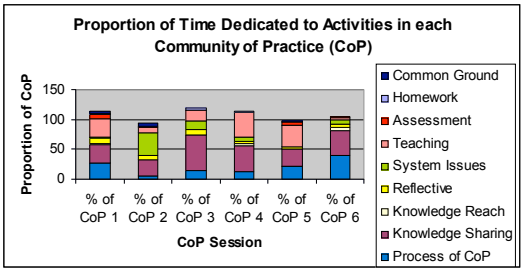
Field notes & interviews

Field note Themes

- Reflective Moment: how things were going for them since the last CoP
- Teaching Moment: specific didactic teaching of core skills related to the CAFAS tool
- Assessment of CoP: anything to do with the methodology of evaluating the CoP
- Sharing Knowledge: included both tacit and explicit knowledge, and member as well as expert knowledge exchange
- Common Ground: instances of agreement and shared experience, reification (?)
- Process/Structure of CoP: instances having to do with the structure or core elements of CoPs, i.e., agenda setting
- Knowledge Reach (beyond): knowledge exchange beyond the CoP event and its membership
- CYMH Systems & Treatment Issues: issues or comments about larger system or treatment issues
- Assigned Learning Tasks (offline): homework assignments

Field note Themes: significance

- These naturally emerging themes identify the type of learning that goes on in this type of forum, and provides a template or guideline for others who may wish to organize CoPs allowing for the types of 'learning moments' we identified in our own work;
  - Opportunities for group work
  - Knowledge sharing (includes experts)
  - Reflective moments
  - CoP structure or management moments
  - Allow members to participate in agenda setting; includes wanting to vent about system issues for instance



Results – secondary hypotheses

6) Do CoP practitioners have a lower rate of client treatment attrition compared to PaU practitioners?

No data

6) Is readiness for change associated with practice change? How?

There were no difference found between the CoP and the PaU on the Readiness for Change (Organizational Readiness for Change) questionnaire.

The implications are that any differences in uptake or implementation were not due to pre-existing RFC constructs.

Implications & Next Steps

1) Pilot findings are significant enough to continue with a larger more detailed study.
2) The Community of Practice model was very well received among CYMH clinicians involved and should be continued as a regionally based CAFAS support strategy.
3) CIHR funding to be sought in March 2008 for further study.

Thank you!

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