Reaching for Knowledge in Unison
Using Communities of Practice to Support Practice Change

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The Problem

The health field is in need of new innovative strategies that can transfer evidence-based knowledge, support practice change and facilitate the implementation of evidence-based interventions, clinical guidelines, and research knowledge more generally.

The Problem

For centuries, we have worked to get new discoveries into practice, and to improve humankind's well-being.

It wasn't easy then, and it's not easy now.

The contexts change, but some things stay the same…some things are universal.

The medieval helpdesk….
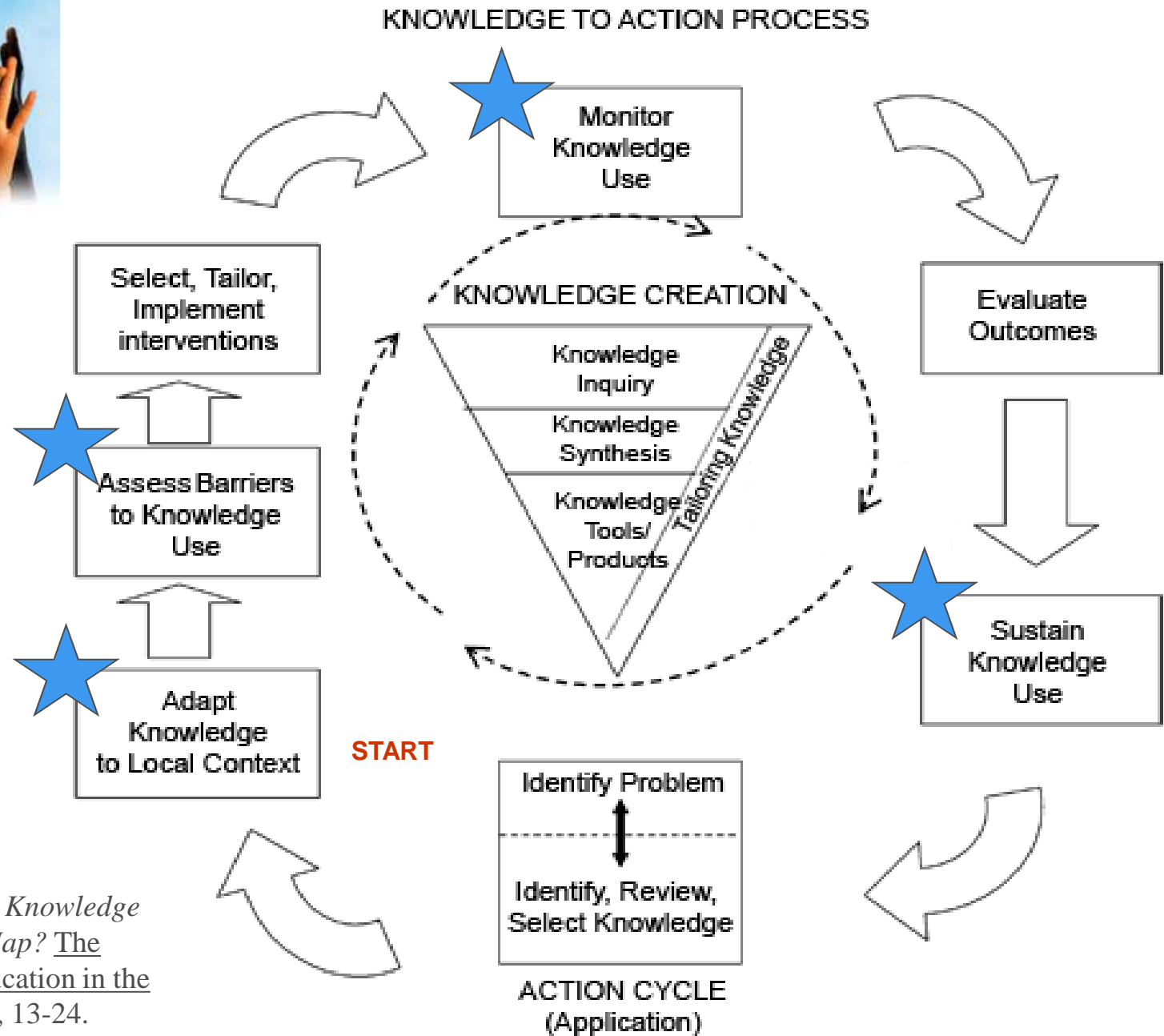
Communities of Practice

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.

CoPs in the Knowledge to Action Process

KNOWLEDGE TO ACTION PROCESS

KNOWLEDGE CREATION

- Knowledge Inquiry
- Knowledge Synthesis
- Knowledge Tools/ Products

Tailoring Knowledge

Monitor Knowledge Use

Evaluate Outcomes

Sustain Knowledge Use

Select, Tailor, Implement interventions

Assess Barriers to Knowledge Use

Adapt Knowledge to Local Context

START

Identify Problem

Identify, Review, Select Knowledge

ACTION CYCLE (Application)

Graham, I.D. et al. *Lost in Knowledge Translation : Time for a Map?* The Journal of Continuing Education in the Health Professions, 26(1) , 13-24.

Benefits to Organizations

In the short-term:

Facilitate the identification of individuals with specific expertise

Foster knowledge sharing across organizational and geographic boundaries

Improve the rate if implementation/uptake of evidence based practices

Improve the quality of research and practice

In the long-term:

Leverage strategic plans

Increase retention of talent

Increase capacity for knowledge development

Support knowledge based partnerships

Benefits to Individuals

In the short-term:

Provide a safe environment for sharing problems

Reduce learning curves

Improve topical knowledge

Foster interaction between junior & senior practitioners

Improve the quality of research and practice

In the long-term:

Providing a forum for expanding skills & expertise

Networking for staying up-to-date in the field

Enhanced professional reputation

Increase marketability and employability

Strengthens one's professional identify

Structural Elements

CoPs can be small, big, long-lived or short lived, co-located or distributed, homogeneous or heterogeneous, inside or across boundaries, spontaneous or intentional (purposeful), unrecognized or endorsed organizationally.

They all share:

- Domain
- Community
- Shared practice

The context

Ontario's children's mental health sector

117 organizations mandated to use a standardized outcome measure to monitor outcomes

Over 5000 CYMH practitioners trained to reliably rate the Child and Adolescent Functional Assessment Scale (CAFAS) but further efforts are required to push uptake in clinical practice

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

CoPs are one element of our implementation support strategy

Regional Community of Practice Meetings

Tool Software training

Organizational & Government Consultation on Outcome Data Use

Consulting in Clinical Application

CAFAS Team

Sustainability Activities
Tracking rater drift, embedding Tool instruction in college curricula & train-the-trainer of in-house sustainability

Telephone & Email Support

Online Wiki Community

Clinical Guidelines for Special Populations
i.e., Aboriginal children and youth

Website
www.cafasinontario.ca

M. Barwick, Centre for Evidence Based Medicine, Oxford UK ◆ December 8-9 2008
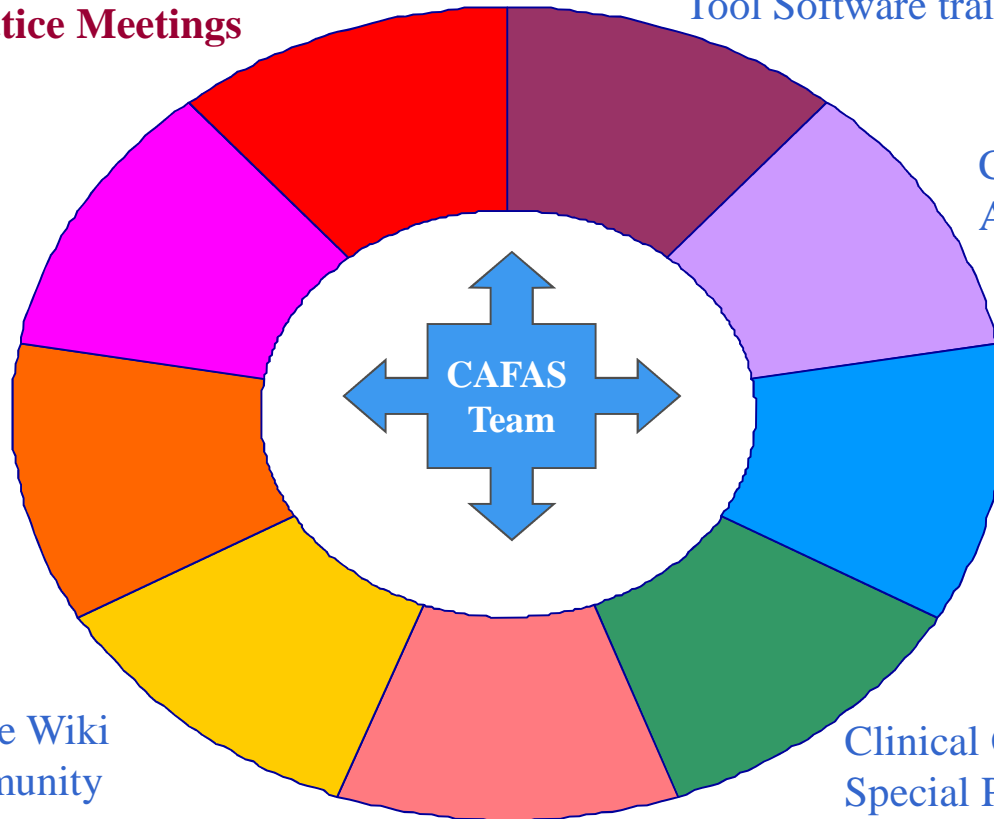
Method

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

Design: Randomly assigned (clustered by organization)

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

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

Procedure: CoP practitioners attended 6 CoP sessions within 12 months; PaU practitioners availed themselves of typical supports

Outcomes of interest:

1.   practice change

2.   topic (CAFAS) knowledge

3.   Satisfaction with and use of implementation supports

4.   client outcomes and treatment attrition

Wanting to Know:

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

2) Does CoP participation lead to greater <u>practitioner CAFAS knowledge</u> than PaU?

3) Is CoP support associated with better <u>client outcomes</u>?

4) Do practitioners in a CoP environment report greater <u>satisfaction with this type of implementation support</u> compared to practitioners in PaU environments?

5) <u>How does learning and knowledge sharing occur</u> in a CoP environment (PROCESS)?

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

7) Is <u>readiness for change associated with practice change</u>?

Measures

Area of Interest	Measures	Intervals
Practice change	Practice change Questionnaire # CAFAS ratings per organization Commitment to Change (intent vs actual CoP Reflective Practice Journal	1.Months 1,6,12 2.Months 1,6,12 3.Each of 6 CoPs 4.Each of 6 CoPs
CAFAS knowledge	CAFAS Knowledge Questionnaire	Months 1,6, 12
Client outcomes	Mean Total CAFAS score between exit and entry CAFAS total score	CAFAS export data @ month 12
Client attrition	# closed cases per organization # treatment abandoned per organization	Months 1,6,12
Readiness for change	Organizational Readiness for Change scale	Month 12
Satisfaction with supports	Satisfaction Questionnaire	Month 12
Process: How does learning and knowledge exchange occur in a CoP?	Field notes Interviews	All sessions

Results

CoP practitioners reported higher levels of practice change than practitioners in the PaU group, evident on a questionnaire and on the number of clients rated on the measure over the year.

Reported Practice Change (questionnaire) No group differences in mean self-reported practice change score between groups at time 1 (baseline) time 2 (6 months) or time 3 (12months).

CoP Practitioners did use the tool more in practice, conducting a total of 72 ratings compared to 13 ratings over the year by the PaU practitioners.

Number of CAFAS Ratings

CoP Group	PaU Group
Org1 - 52	Org 4- 0
Org2 - 20	Org 5 - 0
ORg3 - 0	Org 6- 13
Total:72	Total: 13

Results

CoP practitioners had greater **CAFAS knowledge** compared to practitioners in the PaU group at 12 months
$t(19) = 2.18, p = .05$

There was insufficient CAFAS data to examine **client outcomes or attrition.**

Practitioners in the CoP environment report greater **satisfaction with CAFAS implementation supports** at 12 months compared to practitioners in PaU environments?
$t(17) = 2.74, p = .01$

Groups did not differ on any of the **readiness for change constructs**.

# CoP Process & Content: Field note Themes

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

Commitment to Change

Commitment-to-change (CTC) statements yielded three types of behavioural intents:

(1) <u>knowing statements</u> - characterized by intentions to develop or acquire knowledge necessary to properly implement and use the CAFAS measure in practice

(2) <u>doing statements</u> comprised of intentions to actively implement and use the CAFAS in practice

(3) <u>sustaining statements</u> that pertained to behaviours geared towards sustaining the use of the CAFAS in practice.

Themes Change Over Time

Theme Percentage vs Community of Practice Session

Plan vs. Do
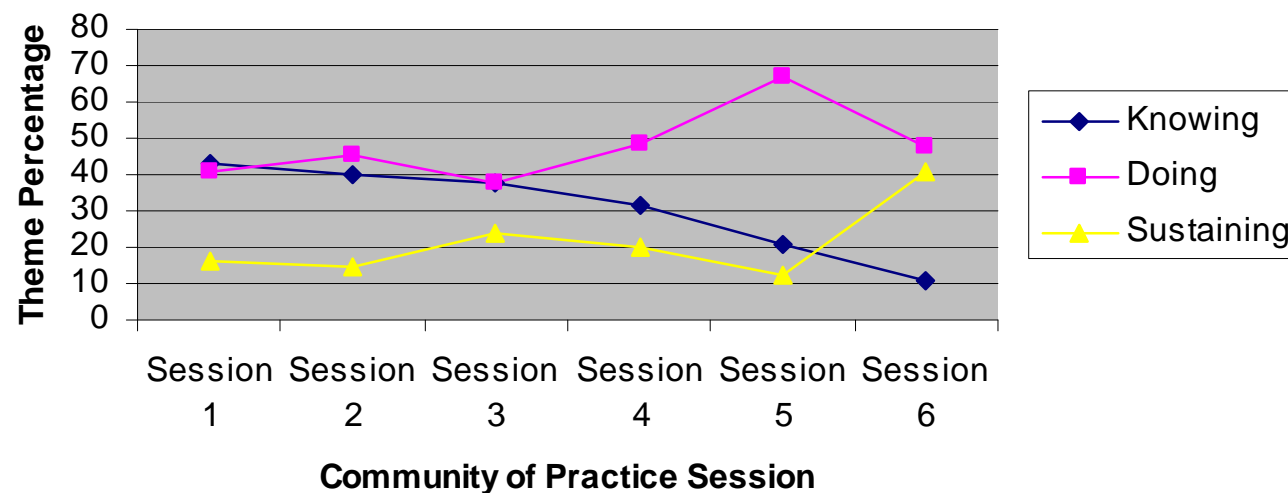
Practitioners' **intent** or commitment to change was greater than their reported **actual** or realized changes in the practice setting (e.g., what do I plan to do vs. what have I actually done) suggestive of the complexity and time required for behavior change $(t(4) = 9.561, p < .05)$.

Commitment to Change and Degree of Change Across Sessions
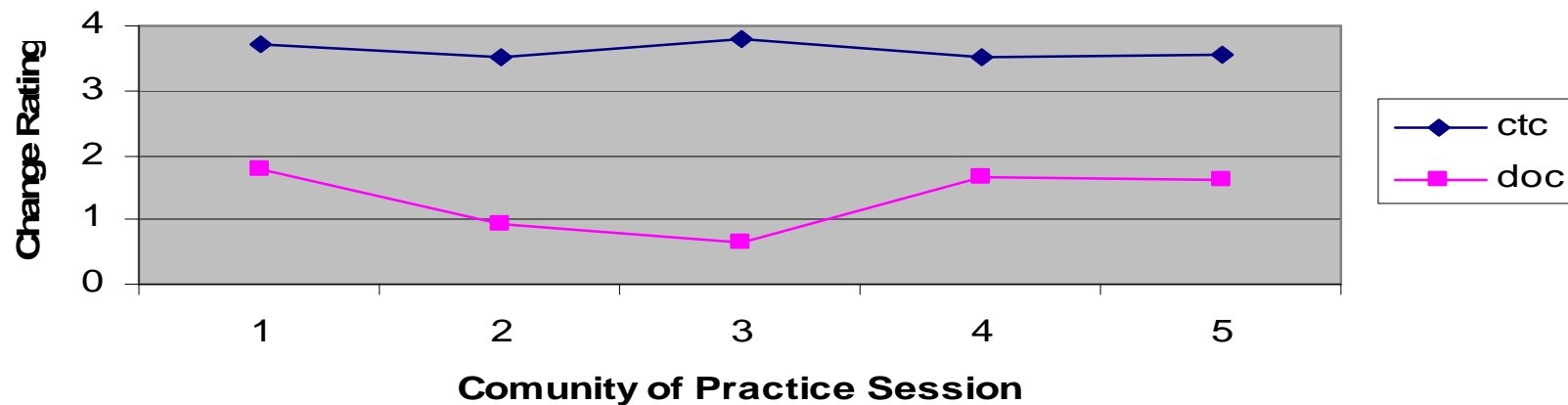
Field note Themes: significance

Learning and knowledge exchange could be described as occurring in distinct 'learning moments.' Nine types of learning moments emerged which provide 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 invited experts)
- ❖ Reflective moments
- ❖ CoP organizational or management moments
- ❖ Allow members to participate in agenda setting; includes wanting to vent about system issues for instance

Distribution of Learning Moments

Proportion of Time Dedicated to Activities in each Community of Practice (CoP)
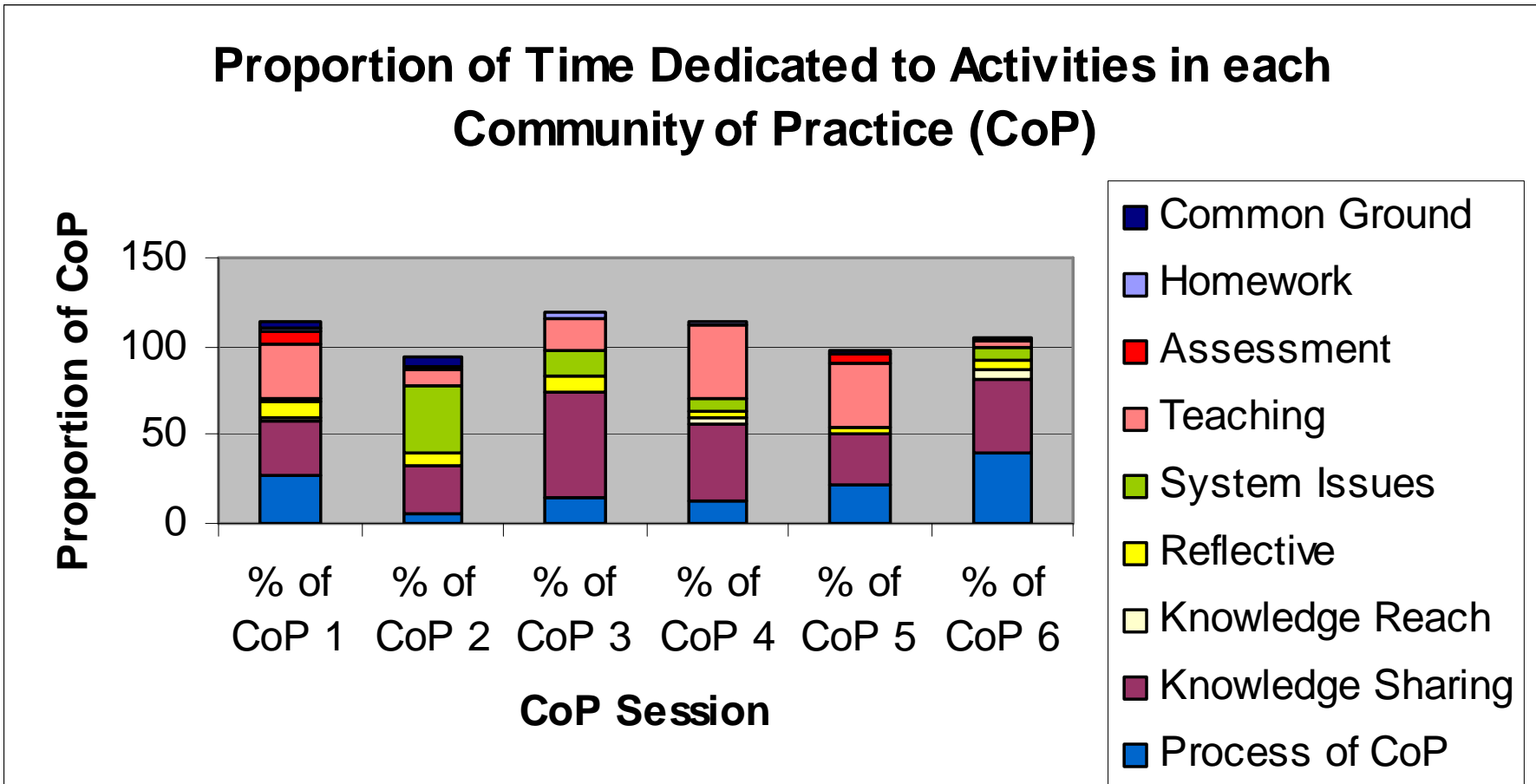
Implications & Next Steps

1) There is empirical evidence that CoPs can facilitate practice change, improve content knowledge, and are well received by practitioners.

2) The Community of Practice model is being continued as a regionally based CAFAS support strategy based on evidence that it was very well received among the CYMH clinicians involved and produced the intended results in uptake and knowledge

3) Moving forward, we have created a wiki based community of practice and intend to secure funds to study how wiki-CoPs support knowledge exchange in 2009.

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Paper to appear in the February 2009 edition of the **Journal of the Canadian Academy of Child and Adolescent Psychiatry** (JCACAP)