

Teachers
Empowered to
Advance
CHange in
MATHematics

Prospective Teachers' Perceptions, Beliefs, and Dispositions Toward Students' Family, Community, and Culture

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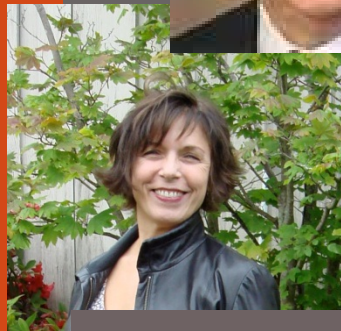
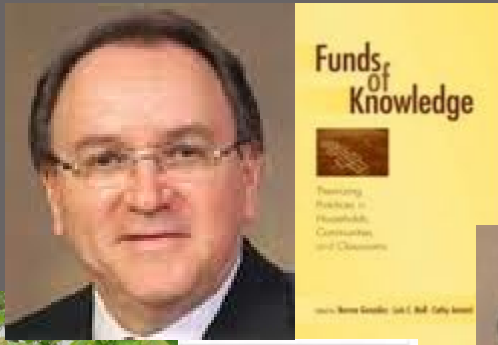
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Theoretical Perspectives



Moll, Amanti, Neff, & Gonzalez, 1992



Gay, 2010



Ladson-Billings, 1994



Lipka, et al., 2005



Leonard, 2008

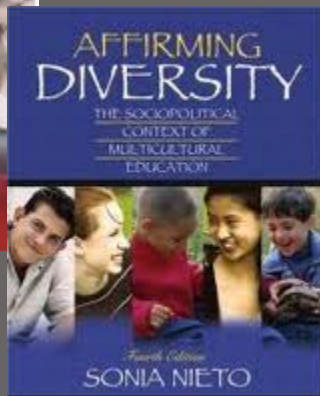


Civil, 2007

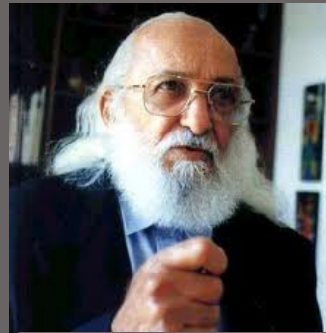


Moschkovich & Nelson-Barber, 2009

Theoretical Perspectives



Nieto, 2004



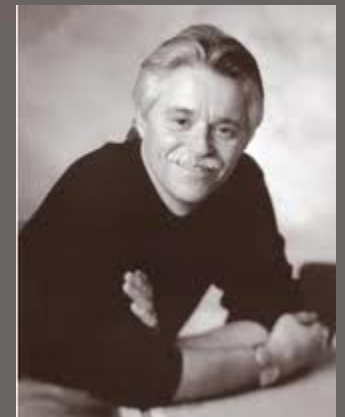
Freire, 1998



Delpit, 1995



Nasir, Hand, & Taylor, 2008



Howard, 1999

79

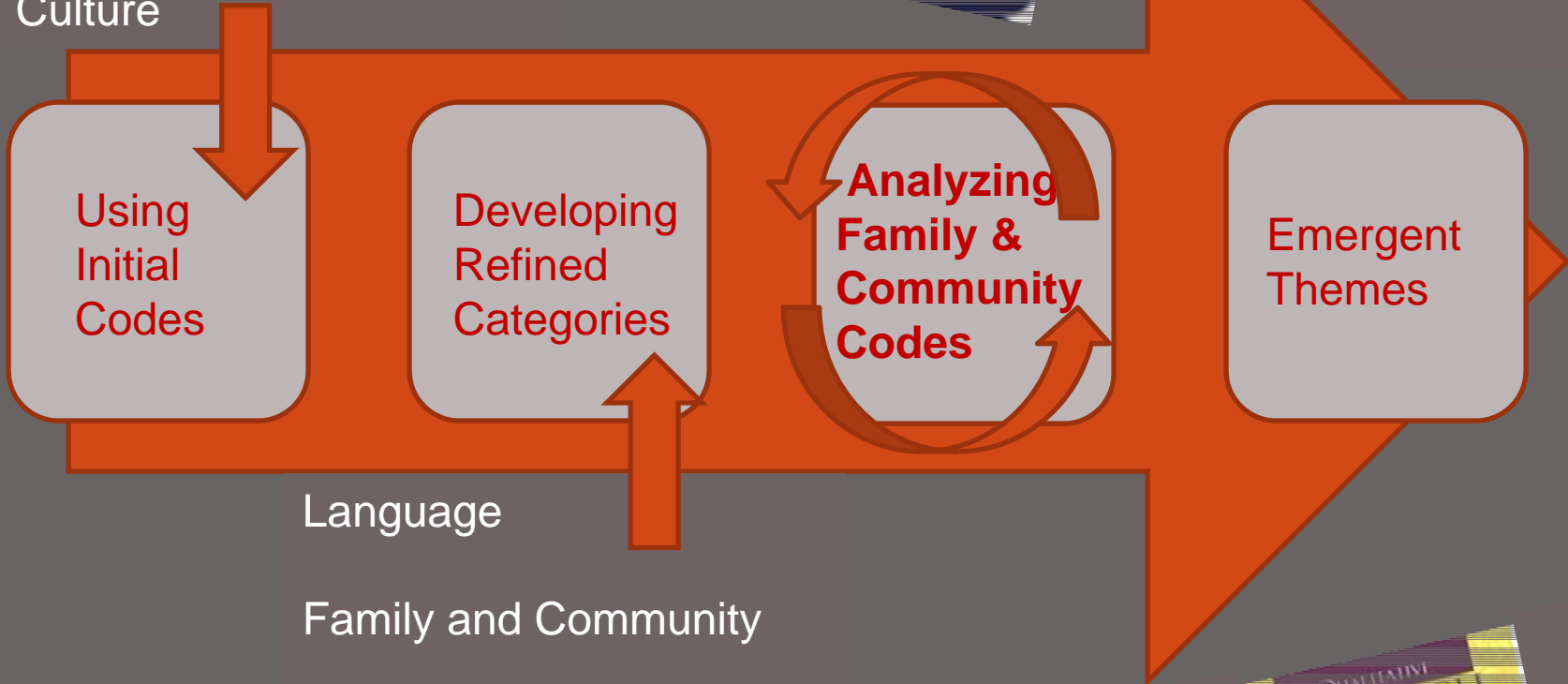
20



PSTs as Teachers

Students as Learners

Role of Language and Culture



Language

Family and Community

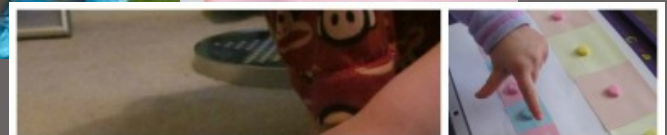
Equity and Social Justice

Students' Mathematical Thinking

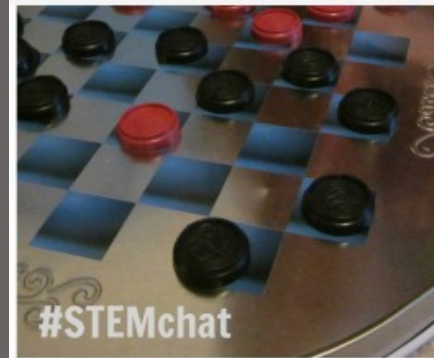
Nature of Mathematics



The Influence of Family and Community on Mathematics Learning



how to raise kids who *love* math



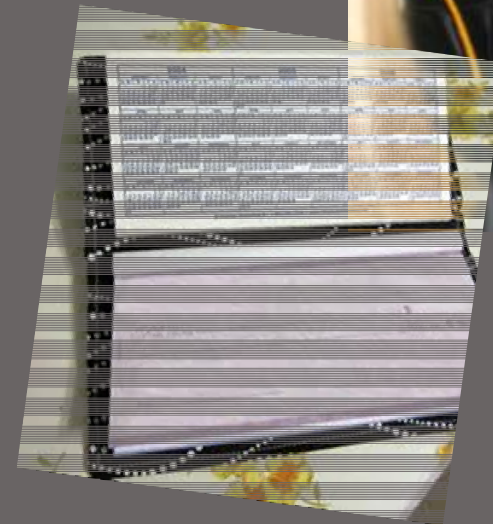
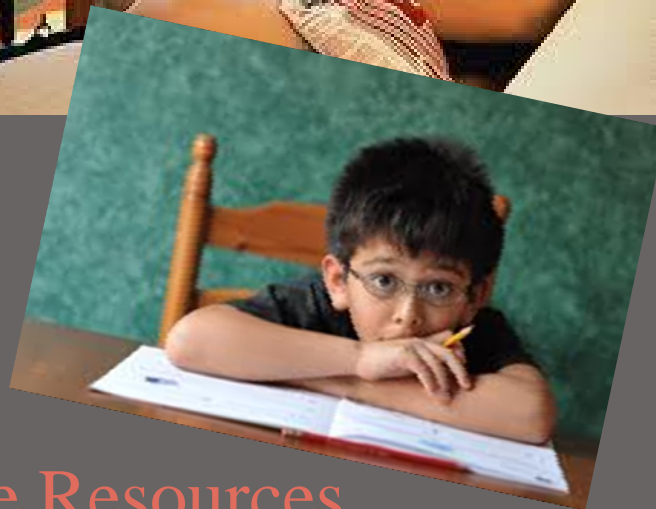
Family Attitudes and Actions

The Influence of Family and Community on Mathematics Learning

Comparisons

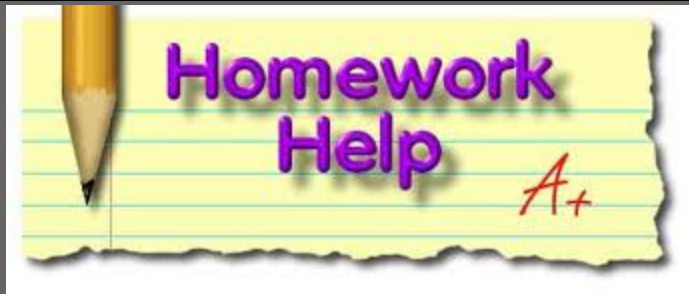


The Influence of Family and Community on Mathematics Learning



Available Resources

The Influence of Family and Community on Mathematics Learning



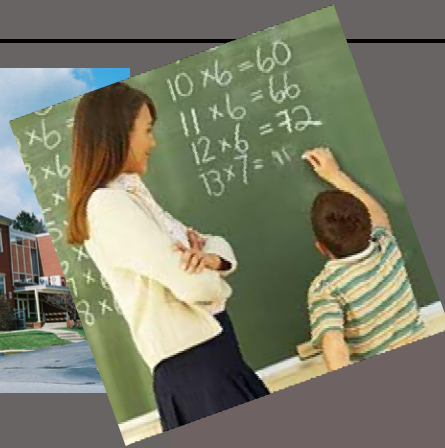
Parental Responsibility

Forming Relationships With Families

PSTs as Learners



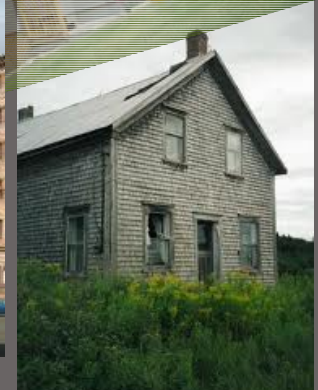
Forming Relationships With Families



Dear Parent,

It was good to talk with you at conferences! I wanted to share with you some positive news regarding Ann. I am so proud and impressed with the way she conducts herself as a person and as an ambassador for our school. As you may know, her class has gotten 2 new students in the last few weeks. She has taken many measures to show them around the school, introduce herself and pay kindness to these new students. It is very hard to come to a new school at this age, and Ann has gone out of her way to make sure they are comfortable.

We are so lucky to have someone so giving here at our school!



Communication

Forming Relationships With Families

Challenges



Drawing on Family and Community Resources in Instruction



$$36 + 47 = 83$$

$$\begin{array}{r} 30 + 6 \\ + 40 + 7 \\ \hline 70 + 13 = 83 \end{array}$$

100's	10's	1's
6	7	8
+ 3 5 8		
9	12	16
9	13	6
10	3	6

$$354 + 200 =$$

$$300 + 50 + 4 + 200 =$$

54

$$300 + 200 = 500$$

$$50 + 4 = 54$$

$$\text{Total} = 554$$

Bringing Home and Community Practices Into the Classroom

Drawing on Family and Community Resources in Instruction



Sending Classroom Practices
Into the Home

Discussion

The Influence of Family and Community on Mathematics Learning



Discussion

Forming Relationships With Families



Discussion

Drawing on Family and Community Resources in Instruction



$$36 + 47 = 83$$
$$\begin{array}{r} 30 + 6 \\ + 40 + 7 \\ \hline 70 + 13 = 83 \end{array}$$

100's	10's	1's
6	7	8
<hr/>		
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10	3	6



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$$\begin{array}{r} 300 + 200 = 500 \\ 50 + 4 = 54 \\ \hline \text{Total} = 554 \end{array}$$



belief
beliefs
ability
day
faith
release
past
total
desires
choose
let
support
trust
longer
behind
positive
see
believe
life
know
limiting
anything
empowering
accept
every
thoughts
goals
create
Every
things
totally
come
now
serve
desire



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Thank you!

For more information
TEACH MATH Website:

<http://mathconnect.hs.iastate.edu>