VOYAGING FROM THEORY TO PRACTICE IN TEACHING AND LEARNING: A VIEW FROM HAWAI‘I

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Hawai‘i is a place of diverse cultures, ethnicities, and traditions representing a myriad of global regions. Education within such a setting creates a unique opportunity and challenge to create tasks and processes by which all students can learn. The two papers presented in this plenary illustrate how theory and practice in the Hawai‘i setting build on each other, one focusing on teaching and the other focusing on learning. The theories surrounding the two papers may be slightly different to accommodate the foci of the papers. However, both papers use the theories and experiences from practice to address the perspectives of the classroom and the needs of the key stakeholders—teachers and students.

VOYAGING FROM THEORY TO PRACTICE IN LEARNING: MEASURE UP

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Often, research projects begin as an attempt to resolve a problem that has been identified. Measure Up (MU) is no exception. The impetus for this project was the concern in Hawai`i that children coming into middle grades mathematics do not have sufficient background to deal with sophisticated or more complex mathematical topics. Rather than focus on middle grades to ‘fix’ the problem, MU began in an attempt to look at viable options to improve young children’s achievement in mathematics before they reached middle grades. This journey with MU started with a non-conventional view of young children’s mathematics and has led to surprising results in the classroom. Let’s retrace the path that MU has taken by returning to the inception of the project.

The first step in the process began with an examination of theories about mathematical content for elementary students, putting the pedagogical aspects aside for a time. This required more than searching for research on the development of number and operations as typical beginnings for early mathematics. Instead, we first asked ourselves, “What if we were to begin the mathematical experiences of six-year-olds in a way that matches with their spontaneous actions? What kind of mathematics would that entail?” We wanted to step out of the box for a moment and consider other options.

Some educators may argue that counting has to be the place to start and is spontaneous. But as we watched young children, we quickly saw that in play, they compare things. We could often hear them asking, “Do you have more milk than I do? Is your foot the same size as mine?” This is contrary to the notion that early grades have to focus on discrete counting techniques since these spontaneous actions are associated with continuous quantities.

At the same time we considered these factors, we were invited by the Institute of Developmental Psychology and Pedagogy in Krasnoyarsk (Russia) to review research findings by Elkonin and Davydov (1975a). They had considered the same problematic issue of boosting student achievement in the lower grades as well. What we found was a non-traditional way of thinking about what constitutes appropriate mathematics for young children. This led the MU project team to consider issues raised by the findings and to begin to design more current research studies around their theory. Concurrently, the MU project team began to craft tasks based on a mathematics curriculum developed in Russia (Davydov, Gorbov, Mukulina, Savelyeva, Tabachnikova (1999**).** The research design that included research studies and curriculum development immediately established links between theory and practice. A description of these links follows.

First, let's look at the mathematics involved in MU. It is from the mathematics that all other components develop. We'll start with number.

Number is an abstract concept. It represents a quantity that may or may not be obvious but to make it more concrete, children are most often taught to count discrete objects. This constitutes their introduction to number, specifically natural numbers. Even though this approach is common in most elementary schools, it establishes a confusing ritual for children as they move into different number systems. Routines and algorithms are continually altered to fit different number systems since children do not develop a consistent conceptual base that works with every number system. Children see that in natural numbers counting is done in one way and computations have a particular set of algorithms. As they move to integers and rational numbers, algorithms change and counting techniques become less clear.

What Elkonin and Davydov (1975a) proposed was to begin children's mathematical experiences with basic conceptual ideas about mathematics, and then build number from there. Davydov (1975a) hypothesized that concepts of set, equivalence, and power would establish a strong foundation and would allow children to access mathematics through generalized contexts.

Essentially, this means that young children begin their mathematics program without number. They start by describing and defining physical attributes of objects that can be compared. Davydov (1975a) advocated children begin in this way as a means of providing a context to deal with equivalence. To do this, children physically compare objects' attributes (such as length, area, volume, and mass), and describe those comparisons with relational statements like $G < R$. The letters represent the quantities being compared, not the objects themselves. It is important to note that the statements represent unspecified quantities that are not countable at this stage of learning.

In this phase of learning, called the prenumeric stage, children grapple with situations in which they create means to make 1) unequal quantities equal or 2) equal quantities unequal. To do this, they add or subtract an amount and write relational statements to illustrate the action. For example, if $G < R$ and students want to create two volumes that are the same, they could add to volume G or subtract from volume R. First graders observe that regardless of which operation they choose to do, the amount added or subtracted is the same in both operations and is called the difference.

First graders in the MU research study are also able to maintain equal or unequal relationships. As one student noted, “If you add the same amount to both quantities, it stays equal.” Another student noted, “When they’re [the quantities are] unequal, you can take off or add to the bigger one and they stay the same [unequal]. But you can’t take off too much or they make equal.” These understandings form a robust basis from which to develop number ideas.

While equivalence is an important concept, using continuous quantities also allows students to readily develop the notions surrounding the properties of commutativity, associativity, and inverseness. Since these properties are developed from general cases, not from specific number instances, students can more readily apply the ideas across number systems.

A question arises, however, about how these beginnings lead to number development. It actually develops quite naturally through a measurement context. Students are given situations so that direct comparisons are not possible. When students cannot place objects next to each other, for example, to compare length, they are now forced to consider other means to do the comparison. Their suggestions on how to accomplish the task involve creating an intermediary unit, something that can be used to measure both quantities. The two measurements are then used to make inferences. For example, if students are comparing areas T and V, and they use area L as the intermediary unit, they may note that—

> Area T is equal to area L and area L is less than area V. Without directly measuring areas T and V, students conclude that area T must be less than area V. Their notation follows:

$$T = L$$

$$\underline{L < V}$$

$$T < V$$

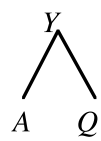
With the use of a unit, students are now ready to begin working with number. Number now represents a way that students can express the relationship between a unit and some larger quantity, both discrete and continuous. Conceptually, the introduction of number in this manner offers a more cohesive view of number systems in general.

Once students start to use numbers, however, the measurement contexts are not left behind. Instead, they become more sophisticated and support the development of “numberness” and operations.

Unit is an important idea that is closely tied to measurement. First graders realize that to count, they have to first identify what unit they are using in order to make sense of the process and the result. At this stage, if asked whether $3 < 8$ is a true statement, these children will respond that you have to know what the unit is. As one first grader commented, “If you have three really big units and 8 really small ones, 3 could be greater than 8. But if you’re working on a number line, then you know that 3 is less than 8 because all the units are the same.” Another first grader noted, when asked to describe what 5 = 5 meant, “It’s probably true unless you have a big 5 and a little 5. Like 5 big units and 5 small units, then it isn’t true.”

Thus counting takes on a different look and feel. Rather than simply counting discrete objects, students can now identify what to count. That is, four orange squares and two green triangles could make a unit. Or, a polygon could be an area unit. This produces a flexibility about counting that is not found in a more traditional approach in which counting is associated with one-to-one correspondence between objects and the counting numbers.

From the early development of equivalence, first graders re-examine some of the situations where they transformed two unequal quantities into equal amounts. Let’s use one of their statements that showed the step used to make the mass quantities equal: $Y = A + Q$. In this context, mass Y is the whole and masses A and Q are the parts. Diagrams can represent the relationship:



Both of these diagrams provide ways of representing the relationships among the parts and whole of any quantity. From these diagrams children can write equations in a more formal way. For example, from the diagrams above, children could write:

$$Y = A + Q \quad Q + A = Y \quad Y - Q = A \quad Y - A = Q$$

You may notice that the statements use the symmetric property of equality. Children understand, from their prenumeric beginnings, that the equal sign is merely a way of showing that two quantities are the same. If they only saw equations of the type 3 + 4 = ?, they would not feel as comfortable in ‘switching’ the quantities around. Kieran (1981) and others have found that the rigidity of such equations creates the misconception that the equal sign indicates an operation.

The part-whole relationships are easily moved to a number context. Children work with specific quantities that are represented by natural or whole numbers to decompose and compose amounts. The number line, created by using a consistent unit, helps students illustrate the part-whole model.

The use of the part-whole concept and the related diagrams can also help first graders organize and structure their thinking when they are working with word or contextual problems. The organizational scheme supports children writing equations and identifying which ones are helpful in solving for an unknown amount, without forcing a particular solution method. For example, students are given the following problem:

> Jarod’s father gave him 14 pencils. Jarod lost some of those pencils, but still has 9 left. How many pencils did Jarod lose? (Dougherty et al., 2003)

They recognize that 14 is the whole, 9 is a part and the lost pencils (x) are a part. There are at least four equations that can be written to describe this relationship.

$$14 = 9 + x$$
$$14 = x + 9$$
$$14 - 9 = x$$
$$14 - x = 9$$

The third equation, $14 - 9 = x$, would be an appropriate choice to solve for the unknown. Some of the students in the MU research study use that method. However, other students choose the use the first or second equations to solve for the unknown amount. Their reasoning follows the compensation method for solving an equation. They ask the question, "What do I add to 9 that gives 14?"

One of the strengths in the Davydov work is the notion that measurement can provide a cohesive foundation across all mathematics. This is especially true as students move to exploring place value. In a typical first- or second-grade class, students might use base-ten blocks (volume) to represent and model place values of number. In MU, students experience a quite different sequence.

Instead of starting with the base-ten system, students revert back to the more general case of place value, linking it to unit. For example, they may be given a table—

K	**N**	
3	6	**B**
2	3	***C***

The table represents the quantities, in this case volume, *B* and *C* that are made from using 3 units of *K* and 6 units of *N* or 2 units of *K* and 3 units of *N*, respectively. The units *K* and *N* begin as unrelated amounts and then are proportional as students gain experience.

These initial activities give students the opportunity to approach place value from multiple measurement perspectives. They can build actual models of place value from a defined given unit that could be length, volume, area, or mass. This cannot be done, however, if the base-ten system is used. The place values get large very quickly and cannot be easily modeled. Thus students begin their place value experiences with base three, four, five, six, and so on. When they move to the decimal system, their understanding of place value has meaning.

As you can see, the mathematics in MU is important. It starts children in a different way and preliminary results from the research components indicate that children have a rich conceptual basis from which to build more complex mathematical thinking.

CLASSROOM IMPLICATIONS: MEASURE UP

While the mathematics component of the Davydov theory appears to be a viable path for young children, the actual implementation in the classroom requires a structure that helps students access the mathematics. Piagetian followers would claim that, in fact, children would not be developmentally ready for such mathematics. This would only be suitable mathematics for older children.

Davydov (1975a), on the other hand, believed that children should begin their mathematics dealing with abstractions in ways that had previously been reserved for older children. He felt that with such a beginning children would have less difficulty transitioning to formal abstractions in later school years and their thinking would have developed in a way that would allow them to have the tolerance and capacity to deal with sophisticated and complex mathematics. He (1975b) and others (Minskaya, 1975) felt that beginning with specific numbers (natural and counting) led to misconceptions and difficulties later when students begin to work with rational and real numbers or even algebra.

So now the question becomes one of how to take the mathematical ideas posited by Davydov and make them come to life in the classroom. To form a theory of instruction, MU project team turned to Vygotsky (1978). Vygotsky identified two ways of thinking about instruction leading to generalizations. One way is to teach particular cases and then build the generalizations from the cases. The other way is to start with a generalized approach and then apply the knowledge gained to specific cases.

It is this second method that MU uses. This is evident in the way the mathematics is introduced. Each new topic begins with a general approach that involves some type of continuous measurement. In grade one, the entire first semester deals only in general contexts with non-specified quantities

The mathematics is now established in strong theory base. However, the theory raised more questions for the MU team. How should instruction be designed that children, who have not been expected to do this mathematics before, will be able to learn? What does this mean in terms of constructing mathematical tasks? Do the mathematical tasks need to be constructed in such a way that allows students free exploration? What roles do the teacher play? What should be expected from students as an indication of their learning?

To approach these questions, MU project team works rigorously in the classrooms. The mathematics sequence is primarily determined by the Davydov research and the instructional approach is wrapped around the mathematics in such a way that it becomes intricately linked together.

MU project team has identified at least six types of instruction used: 1) giving information, 2) simultaneous recording, 3) simultaneous demonstration, 4) discussion and debriefing, 5) exploration guided, and 6) exploration unstructured. The order from 1 to 6 represents a continuum from most teacher active to most student active.

These instructional types are used to guide the design of the pedagogical aspects as well as to document when and how learning occurs. At this point, MU is beginning to create hybrid hypotheses about the role of particular instructional models in the learning process.

SUMMARY

It is evident that one theory alone cannot suffice when moving from theory to practice. The theoretical basis for practice must pull together strong mathematical content with a well-defined instructional design. The marriage of these creates robust student learning.

As theories are merged together in the journey between theory and practice, structures appear that form new foundations and underpinnings. A cycle of theory building linked to classroom practices creates models that impact implementation beyond the research study.

However, even with a strong theoretical design, optimal implementation in the classroom is not guaranteed. The implementation can be enhanced when the theory design is tested in classrooms and instructional materials are created to include practices built from such testing.

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VOYAGING FROM THEORY TO PRACTICE IN LEARNING: TEACHER PROFESSIONAL DEVELOPMENT

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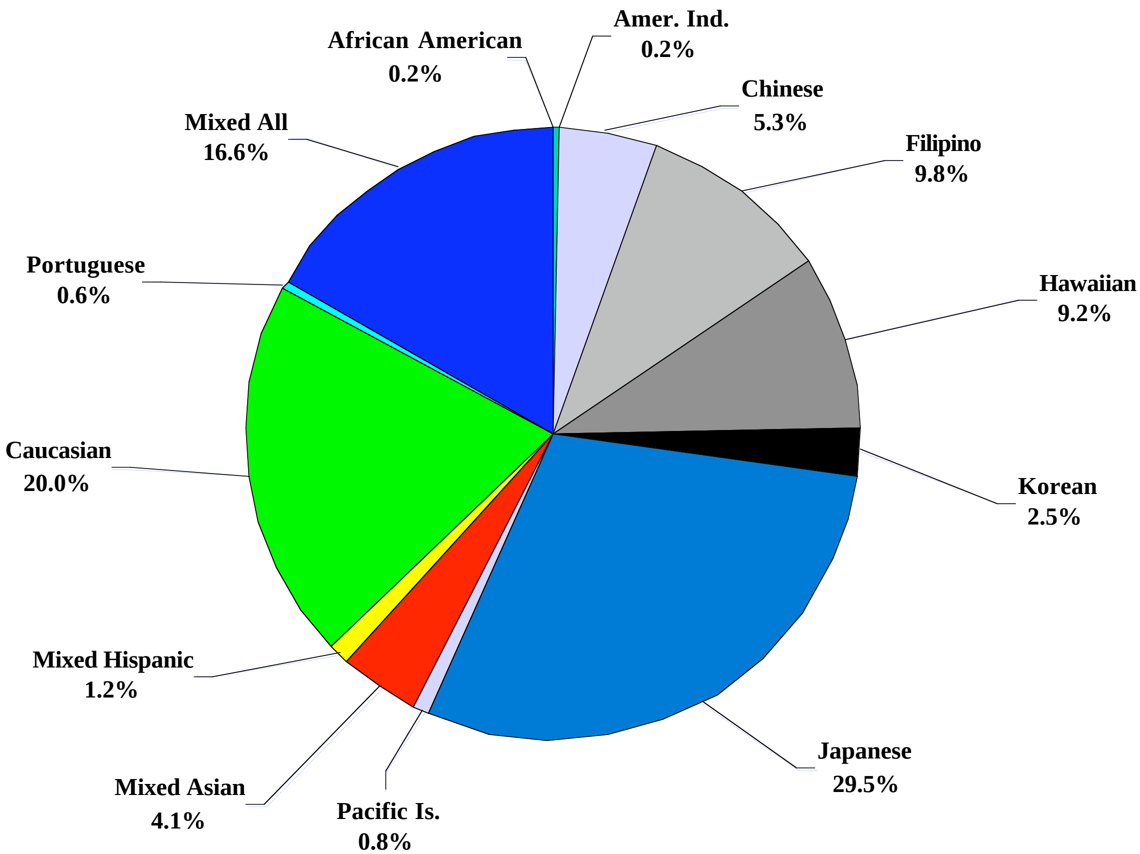
THE DEMOGRAPHICS

The graph below identifies the self-selected ethnicities of the student body population of the College of Education (COE) for the year 2000.

While this graph provides one picture of the diversity of the COE, the reader should be aware that many of our students are of mixed ethnicity. Because of the nature of the instrument used by the COE, individuals selected only one of the choices. Many students, both k-12 and college, pride themselves on their multiple ethnic heritages and many prefer to call themselves “local” rather than choose a single descriptor.



It should also be noted that the categories do not do justice to the diversity within an ethnicity. For example, the designation “Japanese” represents individuals that may be fifth generation Japanese Americans who ancestors arrived in Hawai‘i in the 1860s to work in the sugar cane fields or it may represent students from Japan who arrives just a few months or years ago to attend school here. Within each of the above categories this kind of diversity exists. Furthermore, the designation *Pacific Islander* includes hundreds of different peoples across millions of square kilometers of ocean. Thus, the diversity within a group as just as great as the diversity between groups.

With a focus on theory and practice, the data presented in this graph prompt several questions: As educators interested in the professional development of both preservice and inservice teachers what do we do with these data? What are the implications for teacher preparation and k-20 practice? How does our knowledge of this diversity impact what we teach and how we teach? This second portion of this paper attempts to look at issues related to these questions. The examples, vignettes, and anecdotes presented are based on my personal experiences and reflections from work with teachers and children over the past 13 years in Hawai‘i and across the Pacific, from work on two NFS funded grants that sought to influence mathematics teaching and learning in 10 different Pacific island nations, from work in the design and implementation of the elementary teacher education program for students in Hawai‘i and Samoa, from weekly participation in K-6 classrooms in Hawai‘i, and from endless conversations with students and colleagues attempting to make sense of issues of mathematics education and diversity.

TWO EXAMPLES

The two examples that follow are included to illustrate how diverse experiences and different world views influence our interpretation of situations and result in different ways of making mathematical sense of those situation.s

> Example 1: How many feet does a pig have?
>
> Bai raises both pigs and chicken. Her young son looks out into the farmyard and counts 14 feet, some are pig feet and some are chicken feet. How many animals of each kind does Bai have in the yard?

Problems like this are frequently posed to young children and have often been used as assessment tasks. I have seen the task posed for many years with students arriving at one interpretation and one set of answers. A group of about 30 inservice educators recently encountered the problem for the first time and two distinct interpretations and solutions were offered. The first table shows the approach offered most frequently with two of the correct solutions being one pig, five chickens and three pigs, one chicken:

Pigs	Pig Feet	Chickens	Chicken feet	Total feet
1	4	5	10	14
2	8	2	4	12
3	12	1	2	14

In contrast some participants insisted the correct answers looked like this:

Pigs	Pig Feet	Chickens	Chicken feet	Total feet
5	10	2	4	14
2	4	5	10	14

Which answers were correct? It depends on how the solver views pigs. For the first group, pigs are animals with four feet; for the second group pigs have two feet and two hands. The second table was an example of work of individuals from several island cultures that make a distinction between the front limbs and the back limbs because of how pigs are prepared and shared in these cultures. On first encountering this issue it seemed to be just one of language, but with further probing it is more of how one makes sense of their world. And as mathematics is one tool for making sense, diverse perspectives abound.

> Example 2: Will the sun rise tomorrow?
> Name an event that is certain to happen, name one that is likely to happen, name one that is unlikely to happen, and name one that will never happen.
>
> Certain   Likely   Equally likely and unlikely   Unlikely   Impossible
>
> 1 $\frac{1}{2}$ 0

Example 2 is a scenario often posed to young children in an attempt to get them to develop intuitions about probability and chance. The graphic above was used to represent a continuum along which likelihood can occur. Recently, the question was posed during a professional development activity with teacher educators. It became clear as we identified and discussed events like "the sun will rise tomorrow," that although the participants understood that the expected classification from the cultural view of the person who posed the question was "certain," this was not what the individuals really believed. Their worldviews did not allow for absolute certainty nor for impossibility. While they would agree that past experience indicated that the described event was very highly likely to occur and they were content to label it as *certain*. But *certain* as a classification did not carry the same mathematical meaning for them. As our conversations continued on such distinctions, one participant further explained that in their view, "yes" never means an absolute yes, it always means a maybe. These differences in how the world of certainty is viewed do not indicate a lack of richness or sophistication in the educators' understanding of the mathematics but rather reflects a different way of making sense of the world.

EXPECTATIONS

Teacher expectations have a large impact on what children learn and how they are taught. Working in classroom over the past ten years colleagues and I have had many opportunities to team with teachers in their k-12 classrooms. Very often we take collaborative roles in planning and implementing classroom activities related to our professional development initiatives. During the planning teachers often comment something like "Oh, I don't think my children can do that" or "this is my low class, they will not be able to do that." Their reactions are not based on having completed similar experiences with children, but on their assumptions of what "children like this" can and cannot do. And by "children like this" teachers usually mean minority or low-income students.

In 2001, the Metropolitan Life Survey of the American Teacher focused on the elements of a quality school. One of their findings was that 3/4 of the low income and minority students polled had high expectations for themselves but only 2/5 of teachers in schools agreed with the students' expectations for themselves. The study also found that curricula in schools with greater populations of low–income and high minority schools were believed by the teachers and students in those schools to be less challenging than the curricula in schools with fewer low-income and minority students.

Comparing a square and a rectangle

A teacher posed an assessment task to the children asking them to identify the similarities and differences between a square and a rectangle. The rectangle in the task was twice as long as the square but had the same width. In scoring the paper the teachers was expecting to get answers like:

> They both have four corners. They both have four sides. The opposite sides are equal. The rectangle is longer than the square. The square has four equal sides, but the rectangle does not.

Most children met this expectation. One child offered an answer different from the other children. This child noted that:

> Both figures tessellate. If you combine two squares it will be the same as the rectangle. And if you combine two rectangles it will make a square that is larger than the first square.

The teacher did not recognize the level of mathematical understanding of the child from the work and scored the paper lower than those who provided answers similar to the teachers anticipated answer.

The above vignette is taken from a year-long project to help teachers understand the state curriculum and to help them design assessment tasks aligned with that curriculum. The diversity issue in the rectangle vignette has no strong cultural context, but illustrates diversity in the way one learner may think about a situation differently from the others. It also shows that the assumptions teachers make about what children can and cannot do are often tied to the teachers' own worldview and understanding of the mathematics content. If teachers are challenged in attempting to do the mathematics, they assume that the children they teach will most assuredly have difficulties with the content. A lack of familiarity with a particular topic or approach, and a lack of familiarity and confidence with the mathematics influence teachers' notions of what children can do. Teachers' own experiences in learning mathematics often come from an approach that taught that there is only one way to perform a task, or at least only one efficient way, and they may have trouble accommodating children who think differently

Another aspect of the low expectations of teachers is based on their assessment of the child's ability to perform calculations with the four basic operations. Much of the traditional school curriculum has been skill development and memorization. Many teachers in our professional development efforts have voiced their assumption that because children are not skillful in these computations that the children will be limited in their ability to think mathematically. Surely, computational skills do interfere with children's ability to carry out processes, but many children can think mathematically and often develop interesting and useful strategies for handling conceptual and problem solving situations despite their weakness in computation.

PROFILING

In an effort to identify issues, curricula and strategies for teaching in a culturally responsive manner, the National Council of Teachers of Mathematics (NCTM) published four volumes entitled *Changing the Faces of Mathematics*. Each volume presents a different cultural perspective: Latino, African American, Asian American and Pacific Islanders, and Indigenous Peoples of North America. The strategies offered in these publications are ones that can be applied to children of all cultures but the authors have identified specific context and examples from the target cultural. While the NCTM resources provided a wide range of strategies that may be effective for all students and presented examples of how those strategies can be adapted to a particular group of students, some practitioners have distorted this intention and have chosen to look at the resources as a prescription. Their view seems to be, " If I can identify what you are, I will know how to teach you." Or in a more exaggerated case, "This is how Asian American children learn." They have in effect created an over-generalized profile of an entire ethnic group and fail to understand the potential of developing a strong focus on connecting school mathematics to the personal life experiences of children. Clearly, there are unique characteristics of culture and of place, but such profiling fails to recognize that diversity within an ethnicity is as great as the diversity across groups. It is just that the diversity between groups is so easily recognized in the manifestation of physical characteristics.

INFLUENCING TEACHERS' VIEWS

In Hawai‘i as in many other locations, university students entering the teaching profession complete courses in multicultural education. In these courses preservice teachers learn about characteristics of cultures and instructional approaches found to be effective in teaching all children. There is an attempt to expose and sensitize the preservice teachers to issues of culture, gender, sexual orientation, and diversity. The course experiences have often left our preservice teachers uncomfortable with their own perspectives and orientations, and feeling their own dominant culture is being criticized or blamed for the plight of minority cultures. While, these course experiences do raise sensitivity and awareness, when offered in isolation from work with children, they do little to prepare the beginning teachers for the reality they will face in the classroom.

Our approach has been to place a strong emphasis on field-based teacher education where faculty members take an active role in engaging with the preservice teachers in k-12 classrooms. Preservice teachers complete one to three practica in a classroom with an experienced teacher. This "field" experience offers for a real-world context in which strategies can be trialed and questions posed about specific children with specific differences, problems and needs. It also offers opportunities to identify, acknowledge, and disseminate the interesting and insightful mathematical perspectives of children. The field affords an opportunity to help novices connect learning to the personal lives of their students and to listen deeply to the explanations of children so as to pick up on their rich but subtle mathematical understandings. In the classroom context the regular classroom teacher and the university faculty advisor have opportunities to impact the exposure, reflection, and practices of the novices. At the same time that the faculty members and classroom teachers confront their theories against the reality of the classroom, the preservice teachers can connect the "learning about" experience from campus coursework with the "learning how" experience offered in the field placement.

Inservice professional development provides another challenge. I have ceased believing that systemic change can result from state or district wide initiatives. If I am going to respect the diversity in our teachers and our students, and understand how they make sense of situations mathematically I need to be close to the place where that thinking occurs and that is in individual classrooms and schools. When confronted with a statement like, "They come in here and they know nothing," I have the opportunity of presenting tasks to children and having the novice or veteran teacher see that children often know more and can do more than was anticipated by that teacher.

HIGHER EDUCATION AND DIVERSITY

In our higher education and graduate program it seems that we make an assumption that attention to the students lived experience is a problem or issue for teachers of younger students. Sometimes we treat diversity as a subject of study, but seldom do we alter the requirements of our programs in consideration of these lived experiences. I am not asking for a lower expectation and that is always seems how some interpret this comment. What I an asking for are different expectations. Most of our programs and requirements offer little flexibility to accommodate students whose worldviews and means of documenting their knowledge take a different track. We have often made adjustments in admission policies based on students' opportunity to learn or in the interest of creating a richly diverse academic environment, but once students are in we seem to expect conformity to our western worldview.

The PME conference structure and organization also seems locked into the same academic restrictions of other conferences and organizations. For an international conference seeking a broad base of views and input, the structures we have in place do not seem to promote different ways of presenting and understanding other than the typical paper presentations and "stand and deliver" format. I doubt that something not within the traditional academic framework would actually get past the review process. While I raise these issues, I am at a loss to give specific examples as to how we may accommodate greater diversity. I am so immersed in a specific cultural view that it is often impossible to think outside that framework. Still, I doubt that as a profession we are very open to ways of knowing and sources of evidence different from our own tradition.

Finally, while the focus of this paper has been one of multiculturalism, in Hawai'i and the other Pacific nations there is another agenda, that of indigenous peoples; peoples whose life, land and identity have been altered by the imposition of an outside, dominant, culture. Where issues of multiculturalism are concerned with inclusion and opportunities for full engagement in the mixed culture, indigenous issues are ones of separation where people seek the space and voice to re-establish a lost or stolen identity despite the overwhelming influence of a majority of outsiders. Too often indigenous peoples have had others speak for them and about them, adding to the problem of identity. Therefore other than this brief acknowledgement, I will not speak more about them or for them.

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