CALIFORNIA STATE UNIVERSITY, SAN MARCOS COLLEGE OF EDUCATION Fall 2006

EDMS 543 (Cohort Poway) – Mathematics Education in Elementary Schools

Thursday: 8:00 A.M. – 2:15 P.M. (Valley School - Poway)

CRN: 42641

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Office: Valley School – Poway Class Location

Office Hours: Thurs.: 7:30 A.M. – 7:55 A.M.

College of Education Mission Statement

The mission of the College of Education Community is to collaboratively transform public education by preparing thoughtful educators and advancing professional practices. We are committed to diversity, educational equity, and social justice, exemplified through reflective teaching, life-long learning, innovative research and on-going service. Our practices demonstrate a commitment to student-centered education, diversity, collaboration, professionalism, and shared governance. (Adopted by COE Governance Community, October, 1997).

COURSE DESCRIPTION

This course focuses on how children develop mathematical understanding; children's mathematical thinking; curriculum development; methods, materials, planning, organization and assessment in various elementary school curricula; and curriculum integration. Methods of cross-cultural language and academic development are integrated into the course.

Course Prerequisites

(Admission to the Multiple Subject Credential Program is a prerequisite. Semesters 1-2 of the Integrated Bachelor of Arts and Multiple Subject Credential Program and the consent of the Program Coordinator are also prerequisites.

Course Objectives

- 1. Using reflective writings, teacher candidates will provide ongoing evidence of good depth of understanding as well as application to the classroom, of chosen ideas from weekly assigned readings.
- 2. Using the interview process to apply the pedagogical content knowledge that is being learned in the course, teacher candidates will improve their use of inquiry for assessment purposes by focusing on students' thinking about mathematics to better understand elementary level students with different understandings and plan appropriate interventions.
- 3. By merging theory and practice in order to enable their future students to understand a mathematical topic and make connections among ideas related to this topic, teacher candidates will participate in the design, construction, and presentation of a reform-minded mathematical activity that focuses on students' mathematical thinking.
- 4. By compiling an effective list of resources on a predetermined math topic, teacher candidates will demonstrate evidence that they are able to provide students with access to a balanced and comprehensive mathematics curriculum that promotes and enhances student learning and

understanding, and provides conceptual understanding of the logic and structure of mathematics, problem-solving skills, and computational and procedural skills.

5. By reflecting on and weaving what has been learned in the course during the semester regarding mathematics standards, reform-minded mathematics ideas, constructivist teaching and learning methods which enhance how children think and problem solve, teacher candidates will analyze the curriculum that is currently being implemented in their practicum classroom.

FOCUS QUESTIONS

These focus questions will serve as a guide throughout this course. They will direct our thinking and study as we learn more about teaching children mathematics. When you complete this course, you should have knowledge, understanding, and experiences that will help you answer these questions:

- 1. How do children develop mathematical understanding, competence, and confidence?
- 2. How does the culture of the classroom affect mathematical communication and learning?
- 3. How does the teacher help all children become successful in learning mathematics?
- 4. How will you continue to develop your mathematical understanding, confidence, and competence?
- 5. How does the teacher analyze the curriculum in relation to State Mathematical Content Standards?

Unique Course Requirements

Students will be required to have access to children in grades K-6 for the purpose of conducting a series of math interviews to learn about how children think and problem solve.

Each student will be required to implement and videotape a lesson in his or her observation classroom.

Required Texts

- Van de Walle, J. A. (2007). Elementary and middle school mathematics: Teaching developmentally (6th ed). Boston: Pearson Education, Inc.
 ISBN: 0-205-48392-5
 The text has a companion Web site at: http://wps.ablongman.com/ab_vandewalle math 5.
- California Department of Education (2000). Mathematics framework for California public_schools, kindergarten through grade twelve (2000 Revised Ed.). Sacramento, CA: Author. This document can be found on the WWW at: http://www.cde.ca.gov/re/pn/fd/documents/mathematics-frame.pdf. The Web site contains a downloadable PDF file. There are also copies in the library for checkout.
- Choate, J. S. (2004). Successful inclusive teaching: Proven ways to detect and correct special needs (4th ed). Boston: Allyn and Bacon

You are required to access the following Web sites and materials for this course.

- National Council of Teachers of Mathematics (2000). Principles and standards for school mathematics. Reston, VA: Author. This document can be found at: http://standards.nctm.org/
- Star Test Blueprints for Standards Items (grades 2-7) http://www.cde.ca.gov/ta/tg/sr/documents/bpcstmath2to7.pdf

Authorization to Teach English Learners

This credential program has been specifically designed to prepare teachers for the diversity of languages often encountered in California public school classrooms. The authorization to teach English learners is met through the infusion of content and experiences within the credential program, as well as additional coursework. Students successfully completing this program receive a credential with authorization to teach English learners.

(Approved by CCTC in SB 2042 Program Standards, August 02)

Teacher Performance Expectation (TPE) Competencies

The course objectives, assignments, and assessments have been aligned with the CTC standards for the Multiple Subject Credential. This course is designed to help teachers seeking a California teaching credential to develop the skills, knowledge, and attitudes necessary to assist schools and district in implementing effective programs for all students. The successful candidate will be able to merge theory and practice in order to realize a comprehensive and extensive educational program for all students. You will be required to formally address the following TPEs in this course:

CTC Standards Alignment:

The course objectives, assignments, and assessments have been aligned with the CTC standards for Multiple Subjects Credential. The following standards are a primary emphasis in this course:

- Standard 3: Relationship between Theory and Practice
- Standard 4: Pedagogical Thought and Reflective Practice
- Standard 5: Equity, Diversity and Access to the Core Curriculum for All Children
- Standard 8A: Pedagogical Preparation for Subject-Specific Content Instruction by MS Candidates (Mathematics)

Teacher Performance Expectation (TPE) Competencies:

Primary Emphases:

- TPE 1a-Subject Specific Pedagogical Skills for MS Teaching (Mathematics)
- TPE 2-Monitoring Student Learning During Instruction

Secondary Emphases:

- TPE 3-Interpretation and Use of Assessments
- TPE 4-Making Content Accessible
- TPE 5-Student Engagement
- TPE 6a-Developmentally Appropriate Practices in Grades K-3

- TPE 6b-Developmentally Appropriate Practices in Grades 4-8
- TPE 6d- Developmentally Appropriate Teaching Practices for Special Education:
 Teaching the Special Education Population in the General Education Environment
- TPE 7-Teaching English Learners
- TPE 8-Learning About Students
- TPE 9-Instructional Planning
- TPE 10-Instructional Time
- TPE 11-Social Environment
- TPE 13-Professional Growth
- TPE 14-Educational Technology in Teaching and Learning

College of Education Attendance Policy

Due to the dynamic and interactive nature of courses in the College of Education, all students are expected to attend all classes and participate actively. At a minimum, students must attend more than 80% of class time, or s/he may not receive a passing grade for the course at the discretion of the instructor. Individual instructors may adopt more stringent attendance requirements. Should the student have extenuating circumstances, s/he should contact the instructor as soon as possible. (Adopted by the COE Governance Community, December, 1997).

If you miss one class session or are late (or leave early) more than two sessions, you cannot receive a grade of "A". If you miss one and a half class sessions, your highest possible grade is a "C+".

If possible, please discuss with the instructor any extenuating circumstances that will cause you to miss class <u>prior</u> to your absence. Attendance will be taken at each class session. Furthermore, grades on assignments turned in late will be lowered unless **prior arrangements** have been made with the instructor. Absence is no excuse for not turning in assignments, as they may be sent electronically (e-mail) to the instructor.

Students with Disabilities Requiring Reasonable Accommodations

Students must be approved for services by providing appropriate and recent documentation to the Office of Disable Student Services (DSS). This office is located in Craven Hall 5205, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Students authorized by DSS to receive reasonable accommodations should meet with their instructor during office hours or, in order to ensure confidentiality, in a more private setting.

Course Requirements and Grading Standards

<u>ASSIGNMENTS</u> (The relative weight for each assignment is indicated as a percentage of the total course grade)

Detailed assignment guidelines and scoring rubrics (course packet) will be provided electronically to each student for all written assignments below. The course calendar/topics schedule is attached to this syllabus.

Reading Assignments

(15%) - Each week students will write a "meaningful" paper on the material assigned to be read for that week. Each assignment will be worth 5 points. These writings should be <u>one page</u> in length (use an "11" font, line spacing of 1.5, with **only** your name and class session number as a heading), and should clearly articulate your thoughts <u>on the assigned readings</u> and how you might specifically apply what you learned from the articles as a teacher in the classroom. Please do not repeat verbatim from the readings. Other assignments may be given that will substitute the written reflection but <u>not</u> the reading assignment. These will require more than 1 page in length.

Student Interviews (Critical Assessment Task – CATs)

(20%) - You and one of your classmates will conduct three different student interviews based on questions provided in class. Each interview is worth 5 points. For each interview, you will pose mathematical problems to any one student at a predetermined grade level. The purpose is to get you to begin thinking about students' mathematical understanding, to learn how to effectively pose questions, and interpret the meaning of students' answers, and to provide you with an opportunity to interact with students.

Mathematical Resources & Lesson (Critical Assessment Task – CATs)

(30%) – You will first compile resources on a predetermined mathematical topic (15%) and then design a lesson that you will present and videotape in an elementary class (15%). The purpose of this activity is to help you learn how to design effective mathematical activities, to provide you with an opportunity to begin compiling mathematical resources, and to provide an opportunity for you to practice teaching mathematics in an authentic classroom setting.

Curriculum Assignment (Critical Assessment Task – CATs)

(20%) – You and another student will review the mathematics curriculum currently being used in your classroom (e.g., a textbook) at one grade level and write a short paper that investigates the curriculum alignment with the CA Content Standards and current high stakes assessments. Students will also provide their general thoughts and concerns related to the curriculum (e.g., how the curriculum might need to be altered to make strong connections between mathematical concepts and procedures).

Individual Creative Projects

(10%) – Literature book: Develop (conceptualize and draft) a children's literature book that can be used to teach a mathematics concept and present it to the class. As a part of your personal and professional growth, you will begin to understand the context of how to design materials that provide access to all students and stimulate students' imagination in facilitating the learning of mathematics.

Active Participation, Collaboration, and Professionalism

(5%) - Defined as actively engaging and contributing in all class discussions and activities, students will be evaluated daily. In addition, students participate in math menu activities and group alternative algorithm activities. A <u>positive attitude</u> is an important component for establishing the definition for active participation and collaboration. In addition, the student will be expected to exhibit professional behavior and demeanor at all times.

All University Writing Requirement

All CSU students must demonstrate competency in writing skills as a requirement for graduation. At Cal State San Marcos, students complete the graduation writing assessment through the All-University Writing Requirement. This requirement mandates that every course at the University must have a writing component of at least 2,500 words (approximately 10 pages). The writing requirement for this course will be met through weekly writings, student interview analyses, the creation of a lesson plan and mathematical resources, and the curriculum analysis assignment.

CSUSM Academic Honesty Policy

Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All written work and oral assignments must be original work. All ideas/materials that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks.

Students are responsible for honest completion of their work including examinations. There will be no tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor's attention. The instructor reserves the right to discipline any student for academic dishonesty in accordance with the general rules and regulations of the university. Disciplinary action may include the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole."

GRADING SCALE: Grades for this course will be based on the following grading scale:

A A	93% - 100 % 90% - 92%
B+ B B	. 83% - 87 %
C+ C	. 73% - 77 %

Exemplary "A" Students:

- Demonstrate serious commitment to their learning, making full use of the learning opportunities available and searching out the implications of their learning for future use.
- Complete all assignments thoroughly and thoughtfully toward the goal of developing in-depth math projects.
- Make insightful connections between all assignments and their developing overall understanding of mathematical concepts; they continually question and examine concepts in a genuine spirit of inquiry.
- Students show a high level of achievement of course goals.

"B" Students:

- Simply comply with the course requirements and expectations.
- Complete all assignments, usually thoroughly and thoughtfully.
- Usually connect assignments to their developing overall understanding of mathematical concepts; may be satisfied with accepting their learning as it is received without deeply examining concepts or seeking a higher level of understanding.
- Students show reasonable achievement of course goals.

"C" Students:

- Demonstrate an inconsistent level of compliance to course requirements and expectations.
- Complete all assignments with limited thoroughness and thoughtfulness.
- Make limited connections between assignments and their developing overall understanding
 of mathematical concepts; may not be open to examining concepts on a deeper level and may
 actually dismiss the importance of such inquiry.
- Attempt, but show limited progress in achieving course goals.

Remember! You are required to maintain a B average (3.0 GPA) in your teacher education courses to receive a teaching credential in the State of California.

Curriculum Review Assignment EDMS 543

		Nearly		
	Developing	Meets	Meets	Exceeds
TPE 1, 1a	Candidate's	Candidate's	Candidate's	Candidate's
Subject Specific	analysis of the	analysis of the	analysis of the	analysis of the
Pedagogical skills	curriculum will	curriculum will	curriculum will	curriculum will
for MS Teaching	demonstrate little to	demonstrate some	demonstrate	demonstrate
Assignment	no understanding	understanding of	considerable	exceptional
(Teaching	of how to teach the	how to teach the	understanding of	understanding of
Mathematics in a	state adopted	state adopted	how to teach the	how to teach the
MS Assignment)	academic content	academic content	state adopted	state adopted
	standard in	standard in	academic content	academic content
	mathematics.	mathematics.	standard in	standard in
			mathematics.	mathematics.
TPE 4	Candidate's	Candidate's	Candidate's	Candidate's
Making Content	analysis of the	analysis of the	analysis of the	analysis of the
Accessible	curriculum will	curriculum will	curriculum will	curriculum will
	demonstrate little to	demonstrate some	demonstrate	demonstrate
	no understanding in	understanding in	considerable	exceptional
	the use of	the use of	understanding in	understanding in
	pedagogical	pedagogical	the use of	the use of
	strategies that will	strategies that will	pedagogical	pedagogical
	provide all students	provide all students	strategies that will	strategies that will
	access to the	access to the	provide all students	provide all students
	mathematics	mathematics	access to the	access to the
	curriculum.	curriculum	mathematics	mathematics
			curriculum	curriculum
TPE 6, 6a, 6b	Candidate's	Candidate's	Candidate's	Candidates's
Developmentally	analysis of the	analysis of the	analysis of the	analysis of the
Appropriate	curriculum will	curriculum will	curriculum will	curriculum will
Teaching Practices	demonstrate little to	demonstrate some	demonstrate	demonstrate
in Grades K-3 & 4-	no understanding in	understanding in	considerable	exceptional
8	the use of	the use of	understanding in	understanding in
	developmentally	developmentally	the use of	the use of
	appropriate	appropriate	developmentally	developmentally
	teaching practices.	teaching practices	appropriate	appropriate
			teaching practices	teaching practices

Secondary TPE's for this Assignment ➤ TPE 9 – Instructional Planning ➤ TPE 10 – Instructional Time

Lesson Presentation Assignment

EDMS 543

		Nearly		
	Developing	Meets	Meets	Exceeds
TPE 1, 1a	Candidates' lesson	Candidates' lesson	Candidates' lesson	Candidates' lesson
Subject Specific	plan and	plan and	plan and	plan and
Pedagogical skills	presentation	presentation	presentation	presentation
for MS Teaching	demonstrates little	demonstrates some	demonstrates	demonstrates
Assignment	to no	understanding of	considerable	exceptional
(Teaching	understanding of	how to teach the	understanding of	understanding of
Mathematics in a	how to teach the	state adopted	how to teach the	how to teach the
Multiple Subject	state adopted	academic content	state adopted	state adopted
Assignment)	academic content	standard in	academic content	academic content
	standard in	mathematics	standard in	standard in
	mathematics		mathematics	mathematics
TPE 4	Candidates' lesson	Candidates' lesson	Candidates' lesson	Candidates' lesson
Making Content	plan and	plan and	plan and	plan and
Accessible	presentation will	presentation will	presentation will	presentation will
	demonstrate little	demonstrate some	demonstrate	demonstrate
	to no	understanding in	considerable	exceptional
	understanding in	the use of	understanding in	understanding in
	the use of	pedagogical	the use of	the use of
	pedagogical	strategies that will	pedagogical	pedagogical
	strategies that will	provide all students	strategies that will	strategies that will
	provide all students	access to the	provide all students	provide all students
	access to the	mathematics	access to the	access to the
	mathematics	curriculum	mathematics	mathematics
	curriculum		curriculum	curriculum
TPE 6, 6a, 6b	Candidates' lesson	Candidates' lesson	Candidates' lesson	Candidates' lesson
Developmentally	plan and	plan and	plan and	plan and
Appropriate	presentation will	presentation will	presentation will	presentation will
Teaching	demonstrate little	demonstrate some	demonstrate	demonstrate
Practices – Grades	to no	understanding in	considerable	exceptional
K-3 & 4-8	understanding in	the use of	understanding in	understanding in
	the use of	developmentally	the use of	the use of
	developmentally	appropriate	developmentally	developmentally
	appropriate	teaching practices.	appropriate	appropriate
	teaching practices.		teaching practices.	teaching practices.

- Secondary TPE's for this Assignment

 ➤ TPE 2 Monitoring Student Learning During Instruction
 - > TPE 5 Student Engagement
 - TPE 9 Instructional Planning
 TPE 10 Instructional Time

 - > TPE 11 Social Environment

Lesson Resources Assignment

EDMS 543

		Nearly		
	Developing	Meets	Meets	Exceeds
TPE 4	Candidates'	Candidates'	Candidates'	Candidates'
Making Content	resources and	resources and	resources and	resources and
Accessible	descriptions will	descriptions will	descriptions will	descriptions will
	demonstrate little	demonstrate some	demonstrate	demonstrate
	to no	understanding of	considerable	exceptional
	understanding of	how instructional	understanding of	understanding of
	how instructional	resources can help	how instructional	how instructional
	resources can help	provide all	resources can help	resources can help
	provide all	students with	provide all	provide all
	students with	access to a	students with	students with
	access to a	balanced and	access to a	access to a
	balanced and	comprehensive	balanced and	balanced and
	comprehensive	curriculum.	comprehensive	comprehensive
	curriculum.		curriculum.	curriculum.

Secondary TPE's for this Assignment

- > TPE 1a Subject-Specific Pedagogical Skills for MS Teaching Assignments (Teaching Mathematics in a MS Assignment)
- > TPE 5 Student Engagement

Student Interviews Assignment

EDMS 543

		Nearly	3.5	
TEDE 1 1	Developing	Meets	Meets Candidate's	Exceeds
TPE 1, 1a	Candidate's	Candidate's		Candidate's
Subject Specific	assessment and	assessment and	assessment and	assessment and
Pedagogical	recommendations	recommendations	recommendations	recommendations
skills for MS	from the student	from the student	from the student	from the student
Teaching	interview	interview	interview	interview
Assignment	demonstrates little to	demonstrates some	demonstrates	demonstrates
(Teaching	no understanding of	understanding of how	considerable	exceptional
Mathematics in a	how to teach the state	to teach the state	understanding of how	understanding of how to teach the state
Multiple Subject	adopted academic	adopted academic content standard in	to teach the state	
Assignment)	content standard in		adopted academic	adopted academic
	mathematics	mathematics	content standard in	content standard in
TDDE 4	C 1' 1 . (.) .	C 1: 1 . (.) .	mathematics Candidate's	mathematics Candidate's
TPE 2	Candidate's	Candidate's		
Monitoring	assessment and	assessment and	assessment and	assessment and
Student Learning	recommendations	recommendations	recommendations	recommendations
During Instruction	from the student interview	from the student interview	from the student	from the student
Instruction			interview	interview
	demonstrates little to	demonstrates some	demonstrates considerable	demonstrates
	no understanding of how to monitor	understanding of how to monitor student	understanding of how	exceptional
	student learning and		to monitor student	understanding of how to monitor student
		learning and how to effectively make use		learning and how to
	how to effectively make use of this	of this information	learning and how to	<u> </u>
	information when		effectively make use of this information	effectively make use of this information
	teaching.	when teaching.	when teaching.	when teaching.
TPE 3	Candidate	Candidate	Candidate	Candidate
Interpretation	demonstrates little to	demonstrates some	demonstrates	demonstrates
and Use of	no understanding of	understanding of how	considerable	exceptional
Assessments	how to effectively	to effectively assess	understanding of how	understanding of how
Assessments	assess students'	students' content	to effectively assess	to effectively assess
	content knowledge	knowledge through	students' content	students' content
	through the use of	the use of student	knowledge through	knowledge through
	student interviews.	interviews.	the use of student	the use of student
	student interviews.	interviews.	interviews.	interviews.
			micryicws.	interviews.
TPE 4	Candidate's	Candidate's	Candidate's	Candidate's
Making Content	recommendations	recommendations	recommendations	recommendations
Accessible	from the student	from the student	from the student	from the student
recessione	interview	interview	interview	interview
	demonstrates little to	demonstrates some	demonstrates	demonstrates
	no understanding in	understanding in the	considerable	exceptional
	the use of	use of pedagogical	understanding in the	understanding in the
	pedagogical	strategies that will	use of pedagogical	use of pedagogical
	strategies that will	provide all students	strategies that will	strategies that will
	provide all students	access to the	provide all students	provide all students
	access to the	mathematics	access to the	access to the
	mathematics	curriculum	mathematics	mathematics
	curriculum		curriculum	curriculum
		1		

Secondary TPE's for this Assignment

- > TPE 5 Student Engagement
- > TPE 6, 6a, 6b Developmentally Appropriate Practices in Grades K-3 & Grades 4-8.
- > TPE 8 Learning about Students and TPE 9 Instructional Planning

Date	Topic and Assignments (Tentative)	Readings
Session 1A	Introduction to Mathematics Education	2 - Exploring What It Means to do Mathematics
8.24.06	Developing Mathematical Understanding	3 -Developing Understanding in Mathematics
Part 1	Characteristics of Effective Classrooms: Overview of	
	Instructional Practices	
G : 1D	Problem Solving	4 -Teaching Through Problem Solving
Session 1B	Math Content Standards (CA and NCTM): Introduction	
Session 2A	CA Mathematics Content Standards	This document is available on:
8.31.06	Group presentations of assigned standards	http://www.cde.ca.gov/re/pn/fd/documents/mathe
		matics-frame.pdf.
	Assessment – Connecting Instruction with Assessment	6 – Building Assessment into Instruction
Session 2B	Interviews	
	How Children Learn Through Problem-Solving Development: Cognitively Guided Instruction	5 - Planning in the Problem-Based Classroom
Session 3A	Special Populations: Creating Inclusive Classrooms	7 - Teaching Mathematics Equitably to All
9.07.06	Article summary/critique on Math and Special Needs due	Students; Article per student's choice
7.07.00	Number Sense I: What it Means and How We Can Help Children	9 - Developing Early Number Concepts and
Session 3B	Develop It.	Number Sense
	Number Sense II:	10 - Developing Meanings for the Operations
	Classification of Word Problems for Addition and Subtraction	The state of the s
	Practice Interview Due	
Session 4A	How All Children Can Construct Efficient Mental Tools for Fact	11 - Helping Children Master the Basic Facts
9.14.06	Mastery.	
Session 4B	Number Sense III:	12 - Whole-Number Place-Value Development
	Developing Understanding of Place Value	
	Place Value Interview due	
** 1	Place Value Lesson Presentation	
Session 5	Demonstration of Curriculum Assignment	
9.21.06	Number Sense IV:	13 - Strategies for Whole Number Computation
	Developing Flexible Methods of Computation, Mental Strategies,	14 – Computational Estimation with Whole
** 2	and Estimation.	Numbers
** 2	Addition/Subtraction OR Multiplication/Division interview due (turn in only one interview)	
	Add/Subtraction OR Multiplication/Division lesson	
	presentation	
Session 6A	Fractions	16 -Developing Fraction Concepts
9.28.06	Constructing Understanding of Fractions; Fraction Computation	and a construction of the construction
	Fraction interview due	17 - Computation with Fractions
	Fraction lesson presentation	
** 3	2 Tuesdon Proponentia	
Session 6B	Measurement - Customary and Metric system	20 -Developing Measurement Concepts
	Measurement interview due	
** 4	Measurement lesson presentation	
Session 7A	Geometry – Developing Geometric Reasoning and Spatial Sense	21 - Geometric Thinking and Geometric
10.05.06	Geometry interview due	Concepts
** 5	Geometry lesson presentation	
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Session 7B	Probability & Data Analysis – Developing meaningful experiences	23 - Exploring Concepts of Probability 22 - Concepts of Data Analysis
	Exploring concepts of chance, simple and independent events	22 – Concepts of Data Analysis
** 6	Probability & Data Analysis interview due	
	Probability & Data Analysis lesson presentation	
	Last day to turn in curriculum assignment Taskstream Posting	
Session 8	Algebraic Reasoning and Functions – Exploring patterns,	15 – Algebraic Thinking: Generalizations, Patterns
10.12.06	variables, and equations. Developing function concepts.	and Functions
** 7	Algebra lesson presentation	19 – Proportional Reasoning
,	Equation Tiles – grades 4-6	24 – Concepts of Exponents, Integers, Real Numbers
	Algebra Lab Gear- grades 6-8	, megers, real ramours
	Presentation of Creative Projects	
Technology	This competency will be infused throughout the course. Use this	8 – Technology & School Mathematics
₩	chapter as an ongoing reference.	

SB 2042 - AUTHORIZATION TO TEACH ENGLISH LEARNERS COMPETENCIES

DADTO	DADTA
PART 2:	PART 3:
	CULTURE AND
· ·	CULTURAL DIVERSITY
AND CONTENT INSTRUCTION	
I. Theories and Methods of Bilingual	I. The Nature of Culture
Education	
A. Foundations	A. Definitions of culture
B. Organizational models: What works for whom?	B. Perceptions of culture
C. Instructional strategies	C. Intra-group differences (e.g., ethnicity, race, generations, and micro-cultures)
II. Theories and Methods for Instruction In and Through English	Physical geography and its effects on culture
A. Teacher delivery for both English	E. Cultural congruence
instruction	L. Cultural congruence
B. Approaches with a focus on English language development	II. Manifestations of Culture: Learning About Students
C. Approaches with a focus on content	A. What teachers should learn about their
area instruction (specially designed	students
English)	D. Harrida ada ara ara la ara ala aridda da
D Working with paraprofessionals	B. How teachers can learn about their students
D. Working with paraprofessionals	C. How teachers can use what they learn
	about their students (culturally responsive pedagogy)
III. Language and Content Area	
Assessment	III. Cultural Contact
A. Purpose	A. Concepts of cultural contact
R Methods	B. Stages of individual cultural contact
D. Wethous	5. Stages of marviadar cultural contact
C. State mandates	C. The dynamics of prejudice
D. Limitations of assessment	D. Strategies for conflict resolution
E. Technical concepts	
	IV. Cultural Diversity in U.S. and CA.
	A. Historical perspectives
	B. Demography
	METHODOLOGY OF BILINGUAL, ENGLISH LANGUAGE DEVELOPMENT, AND CONTENT INSTRUCTION I. Theories and Methods of Bilingual Education A. Foundations B. Organizational models: What works for whom? C. Instructional strategies II. Theories and Methods for Instruction In and Through English A. Teacher delivery for both English language development and content instruction B. Approaches with a focus on English language development C. Approaches with a focus on content area instruction (specially designed academic instruction delivered in English) D. Working with paraprofessionals III. Language and Content Area Assessment A. Purpose B. Methods C. State mandates D. Limitations of assessment

Lesson Plan Format

I. CONSIDERATIONS BEFORE THE LESSON

Facts about the Learners

Who are my students and how do they learn?

What forms of communication do my students use?

Content/Context

Content area(s) or discipline(s)

Grade level(s)

Content standards addressed

Lesson's Objectives

Prior knowledge and skills

Product/Assessments

In what varied authentic ways will students demonstrate accomplishment of the objectives? What criteria will you use to judge students' success for each objective?

Management/Discipline Considerations

What materials and resources are needed?

How will you incorporate technology?

How will you handle the room arrangement?

How will you handle student grouping?

How will you handle student transitions and misbehavior?

II. OPENING THE LESSON/ INTO

Anticipatory Set - How will you motivate and focus students?

III. PROCESS/STEPS OF INTRUCTION/ THROUGH

A. Teacher Input

- 1. How will you describe and model skills?
- 2. How will you provide examples and non-examples?
- 3. How will teach to the objective(s)?
- 4. How will you actively involve all students?
- 5. What will the teacher do?
- 6. What will the student do?

B. Guided Practice

- 1. How will students practice alone?
- 2. How will you check for understanding?
- 3. What will your interventions consist of if the objectives are not being met?

C. Independent Practice/Formative Assessment

What benchmark criteria will you look for to assess if students are meeting the objectives?

D. Closure/Summative Assessment

How will you have students summarize their learning?

How will you assess students have met the objectives?

IV. AFTER THE LESSON/BEYOND

A. Transfer

How will your structure opportunities for students to continue practice and transfer learning?

B. Reflection

- 1. What went well in the lesson and was it relevant and worthwhile?
- 1. What evidence do you have that the lesson went well?
- 2. What changes will you make to enhance learning?
- 3. What benefits do these changes have for the students and your effectiveness as a teacher?