SIMON FRASER UNIVERSITY

Summer Session 2000

EDUC 476 - 4
Designs for Learning: Natural Sciences (K-12)
D03.00

Tuesday & Thursday 8:30-12:20

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PREREQUISITE
Educ 401/402

COURSE DESCRIPTION
Knowledge about how individuals learn and make sense of things has changed significantly over the past few decades. Recent research suggests knowledge to be a social construction in social environments. This includes the notion that narrative is a primary form by which human experience and self or identity is made meaningful. Such an understanding is crucial for teachers developing genuine curricula and understanding their role as science teachers. The importance of this new role arises from the need to identify the learner as being "involved" in his or her meaning-making process during social settings.

Central to our agenda, therefore, will be modeling the theme of teacher as "facilitator," rather than teacher as provider of knowledge. Guided by on-line resources and the IRP we will develop our own pedagogical concerns via "writing to learn" and a process of shared identity within our own community. Learning from, and with various science activities will shape our classroom dialogues and writing projects. The guidelines for our course will, as a result, focus on a "process approach" of learning and teaching.

Teachers will learn to build their own low-cost, hands-on/minds-on curriculum materials. And like the students we teach in schools, we will sort and organize elements of our own experiences into personal identities of knowledge.

COURSE REQUIREMENTS
1) BEFORE CLASS STARTS ON (WEEK OF) JULY 4: Students must have carefully read David Smith's article *Identity, Self, and other in the Conduct of Pedagogical Action*, available for photocopy in CET in course box marked "476 - M. Cummings"

2) PARTICIPANTS MUST BE ACTIVELY "ON LINE," PREFERABLY WITH INTERNET ACCESS FROM HOME.

Each class will be followed up with an appropriate internet reading. A subsequent one-page analysis reflecting on how this might impact on one's classroom practice will be due the following class. Value: 4O%

Final assignment will include developing a series of science lessons plans based on a theme appropriate to a particular learning level. Value: 40%

Class participation which includes a group presentation of a science activity is comprised of attendance and preparedness in class. Value: 20%

READINGS
Based on on-line assignments from our web page.