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## **Description of the Placement of “Sustainability” in EDCI 372**

### **Elementary Science Methods**

I am incorporating the concept of sustainability into EDCI372, a required science education methods course for all undergraduate elementary education majors. The topic is one that fits well within the curriculum content demands placed on teachers of science in Maryland (as represented in the *Environmental Literacy Principles* endorsed by the Maryland State Department of Education and in the Performance Standards in the *Next Generation Science Standards* endorsed by a majority of states in the USA that focus on humans interaction with the natural environment).

I have identified upfront in my syllabus that sustainability is a key concept for the course. While interns in the course will be encouraged to incorporate sustainability principles in all aspects of their work across the disciplines of science, in my own teaching I will emphasize these two big ideas of sustainability: Environmental Stewardship and Global Warming/Climate Change.

Each semester during my second class meeting, I take my interns on an excursion to the National Botanical Park in Washington, DC where they investigate with local and global perspectives the concept of habitats. In my revised EDCI 372 course I have added an increased focus on environmental stewardship, particularly as it pertains to the endangerment of animals across the world.

A major assignment my interns have in EDCI 372 is to participate in two Peer Conversations. In my revised course I have added consideration of the concept of sustainability to the conversations. Simply put, the purpose of these two small peer group, active teaching, cooperative teaching experiences is to help teacher interns develop confidence and experience in teaching science topics for understanding before they attempt them with diverse elementary students in schools. Two times in the semester (the first session focuses on physical science, and the next session will focus on either life science or earth/space science, the intern chooses) the intern engages in a conversation with a small learning group of your peers in which the intern describes how s(he) would teach a specific science activity that is located in the intern’s school’s science curriculum. The intern will be expected to enhance science activities with the major ideas that are presented in EDCI 372 (i.e., make a significant effort to make connection with the learners’ interests and prior knowledge, incorporate technology, be inclusive, **and consider sustainability issues**) and to actively involve fellow interns by allowing them to see, to try out, and comment on the manipulatives included in the activity. A lesson

plan (in the 5 E format) is due on the day that the Peer Conversation is scheduled. After each Peer Conversation, the intern engages in a short structured conversation on the lesson with peers. A written reflection on the experience is turned with the required lesson plan.

Finally, an entire class session in EDCI 372 is devoted to the topic of Climate Change Education. In my revised version of the course that was impacted by my participation in the 2013 Chesapeake Project, I underscore the conceptual connections between the concepts of sustainability and Global Warming/ Climate Change.