Tool: "Meaningful" Checklist for Teachers (Pre-Service & In-Service)

To assess how well your proposed project meets the definition of "meaningful" we've developed this checklist based on a review of "best practices" in the research literature. The sources for each item on the checklist are provided in parentheses and you can view the literature review by clicking on this [link].

As part of your project do you...

- engage and model for teachers exemplary pedagogy, that is, interdisciplinary, hands-on, inquiry-based learning and teaching practices (AbuSharbain, 2002; Desimone et al, 2002; Guskey, 2003; Loucks-Horsley et al, 1996; Shephardson & Harbor, 2004)
- assess teachers' knowledge and attitudes about the field site and experiences prior to the field visits to determine misconceptions and misgivings or fears (*may be as important for teachers as for students although we found no research related to adults*)
- assess teachers' knowledge prior to the educational experience so that you can build on what they already know (Guskey, 2003)
- orient teachers to the field site before the field experience, that is, where they will go and what they will do, and what, if any, natural hazards they will or won't encounter (*may be as important for teachers as for students although we found no research related to adults*)
- _____ provide teachers with multiple field experiences in the local watershed (Huntoon et al, 2001)
- allow exploration time (scavenger hunt or similar guided exploration) on the first field visit to help reduce the novelty and familiarize teachers with the site (*may be as important for teachers as for students although we found no research related to adults*)
- allow for exploration and reflection time at the site during each visit, in addition to doing meaningful "work" (Huntoon et al, 2001)
- _____ provide teachers with materials for their classrooms that are grade-level specific and appropriate (Guskey, 2003)
- _____ provide teachers with clearly written/stated objectives for the materials you provide (Guskey, 2003)
- _____ provide teachers with materials that at a minimum are aligned to state standards and ideally help their students meet the state standards (Guskey, 2003)
- provide educational activities/experiences that develop teachers' content knowledge and pedagogy, as well as special skills (if needed to teach the content) and student assessment skills (Guskey, 2003; Loucks-Horsley et al, 1996)
- enable teachers to engage in real practice, that is, scientific research or environmental actions such as habitat restoration (Huntoon et al, 2001; Shepardson et al, 2002; Shephardson & Harbor, 2004)
- _____ give teachers time to reflect, practice and plan what to do in their classroom with their new knowledge and experiences (Guskey, 2003)
- _____ build or strengthen teachers' "learning community" for the sharing of common issues and/or experiences (Guskey, 2003; Loucks-Horsley et al, 1996)

give teachers time to address their concerns/worries about changes in themselves, their teaching, their school and students as a result of the educational experiences you provide (Guskey, 2003).