

Thoroughbred Central-An Initiative for Curriculum Integration in Agricultural Education

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Introduction, Need, Purpose, Objectives.

Curriculum integration, state and national standards, technology, curriculum frameworks, and "real-life" learning are terms commonly used in contemporary educational reform. ALL teachers must rely on mutual cooperation to connect their traditional instruction with the world of work and real-world experiences. A team effort involving all academic disciplines is necessary to meet reform and restructuring efforts to achieve state and national standards.

Many educators have identified curriculum integration as an effective means of accomplishing the goal of the interconnectedness of real-life math, social science, science, arts, reading and writing. Nonetheless, Boyer (1995) indicated that interdisciplinary instruction is not occurring in a majority of the elementary and secondary classrooms. Typical barriers addressed to successful curriculum integration include a lack of professional development, planning, curriculum development time, instructional materials and administrative support (Lieberman, 1998). As Gehrke (1993) asserted, "Most teachers have never seen or experienced an integrative curriculum. They have few, if any, images of the forms it can take." McBee (2000) concurs with barriers to integration "including the time and work teachers face to prepare for instruction, lack of available materials and congruent standards, and the deeply entrenched school cultures and attitudes that support more traditionally segmented, by-the-book approaches to curriculum and instruction (p. 254)." Many teacher educators are also unaware of curriculum integration models and have little access of a model for integrated curriculum teaching materials.

Through a project sponsored by the National Council for Agricultural Education, an interdisciplinary model of twenty-five lessons related to the Thoroughbred breeding and racing industries have been developed, field tested, and in-serviced for some teachers. These lessons relate to agriculture, science, humanities, language arts, reading, and social sciences.

Each lesson contains the following components: national curriculum framework standards, objectives, reading exercises, collaborative learning exercises, open-response questions, a holistic scoring guide, and a technological component from the Web site *www.thoroughbredcentral.com*.

The purpose of the poster session is to acquaint teacher educators with the concept of curriculum integration and to examine a viable model for interdisciplinary curriculum integration. Specific objectives are to: discuss different types of curriculum integration, acquaint teacher educators with features of the lessons developed, explore the accompanying Web site and determine methods of utilizing curriculum integration in pre- and in-service courses.

How it works, program phases steps. The twenty-five-lesson set utilizes national curriculum standards in the areas of Language Arts, Mathematics, Science, Social Sciences and Art to relate facts about the Thoroughbred breeding and racing industries to specific content standards. At the direction of the sponsors and advisor council members, gaming is not addressed. The Web site is

for both teachers and student use and is urged to complement the lessons. Lessons are developed into five units related to respective subject area standards. Agricultural teachers could incorporate at least 20 of the 25 lessons to enhance their regular classroom teaching.

Results to date. Through the "Train-the-Trainer" Workshops held in 2000 in Kentucky, Florida and California, about 120 middle and secondary teachers have been serviced in the use of these materials. Workshops for middle school teachers have been held in Kentucky. Ag-ed instructors have commented on the lessons as a practical, convenient method of enhancing science, mathematics, social science, reading and writing instruction. Reading samples featuring practical/workplace, informational, literary and persuasive domains are one of the most popular parts of the package. The most exciting part of the project is the www.thoroughbredcentral.com Web site with interactive materials for teachers and students.

Future plans/advice to others. Plans include working with Ag-ed instructors who are teaching the entire unit to determine the effect of this type instruction on the school assessment scores. Efforts are currently underway to in-service a broader segment of middle and secondary instructors on the project.

Costs/resources needed. Costs are \$25 for the multidisciplinary lesson packet available from the National Council for Agricultural Education, 1410 King Street, Alexandria, VA 22314. Phone 800-772-0939. If presenting at a professional meeting or classroom, Internet access and projection equipment are advised.

References

Boyer, E. L. (1995). *The basic school: A community for learning*. Princeton, N.J.: Carnegie Foundation for Advancement of Teaching. ERIC ED 381284.

Gehrke, N. J. (1993). *Explorations of teachers' development of integrated curriculums*. Palantine, IL. Skylight Publishing Company. ERIC ED 369572.

Hargraves, A. & Moore, S. (2000). Curriculum integration and classroom relevance: a study of teacher's practice. Journal of Curriculum and Supervision, 15 (3) 89-112.

Lieberman, A. (1998) Teachers and principals: Turf, tension, and new tasks. Phi Delta Kappan, 69 (9) 648- 53.

McBee, R. H. (2000). Why teachers integrate. The Educational Forum, 64, (3) 254 - 259.