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A EVALUATION AND PROMOTION OF THE VOCATIONAL HIGH SCHOOL COURSES TRANSFORMED BY INTEGRATED HIGH TECHNOLOGY INNOVATIVE CURRICULUMS

Abstract:

The purpose of this study is to evaluate and promote the vocational high school courses transformed by integrated high technology innovative curriculums and science fair projects. The cooperation platform between the patent projects and factory owners was established and apply integrated high technology innovative curriculum to “specific projects”. By way of participating in “specific projects”, students had enhanced their integrated high technology knowledge, skills and attitudes. The leading project is responsible for planning, division, coordination, execution and holds specific projects competition about mechatronics and construction. Through this promotional project, the vocational high school students will enhance their attainments in integrated high technology and initiative learning habits; the teachers will enhance their professionalism and set professional learning communities.

The main results were as follows:

1. The five participation vocational high schools had upgraded their facility, promote teachers' teaching method and enhance their evaluation technique. As the result, the learning effectiveness of the students had enhanced.
2. Two questionnaires had developed and validated. At same time, three papers had published. Ten winning of science competition had transformed into teaching materials. Especially, students award golden prize of invention in global inventory affairs.
3. The total 30 teachers, five graduate students and about 400 students had directly participated this project. In general all five vocational high school faculty about 4 hundred teachers and a little more than 4000 students had influenced by this project.
4. The web site for this project had developed. In this site, there is the teaching material share with all the teachers in this project. As a result, this site provide professors, teachers, and students as a communicate platform to solve the problem we encountered.
5. Based on the statistical results, students joined this program had enhanced their ability in project making, learning motivation, and team working.

Keywords:

Patent, Science fair work, Cooperation platform, Professional learning community.