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SCIENCE AND ARTS APPROACH INTO THE FILIPINO CLASSROOM

by: **Leonardo M. Apales** Teacher II E.C. Bernabe National High School

As the world is consistently changing, the need for innovative and creative citizens also arises. Creative economy in the Philippines is reported to account for 2.23 million in export and 915 million in services, based from United Nations Conference on Trade and Development. The creative economy includes industries those which are based on creativity and individual skill such as advertising, animation, music, film, architecture, design, new media, and literature. To answer the ever-growing need for Filipino graduates who have the skills to sustain the demand for creatives, a science and arts approach can be integrated in our education sector.

First, we have to recognize that both scientists and artists engage in similar practices and help learners make connections so they can access a range of possibilities for understanding and communicating about their world, stated by Fulton et. al., in 2016. This is at the core of employing science and arts approach in the teaching learning process.

Second, albeit seemingly opposites, arts and science have processes that are present in both fields. Common processes in the sciences and arts include noticing, wondering, exploring, visualizing, and communicating. For example, learners visualize ideas to make meaning. In the arts, leaners create visual and perform compositions to make abstract meanings concrete. In the sciences, on the other hand, learners design experiment or create models to think about solutions to a problem.

Thus, teaching science and arts together can help learners make meaningful connections, by promoting engagement with ideas rather than teaching of concepts according to Pugh & Girod, in 2007.



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For example, based on Needle et. al., in 2007, two of the article's authors — an art professor and a biology professor — collaborated with a project for an advanced biology, nursing, art, and computer science majors. The project involved a scientific research that used digital imaging of the brain of the zebrafish which is a newly favored laboratory animal. These contemporary and innovative teaching and learning practices were a success for the participating art and science majors of the university.

Some of the more practical applications of science and arts approach in classroom are letting learners compare and contrast different types of leaves using techniques of visual arts and encouraging students to use recyclable materials to create a classroom clock. Teachers can also integrate science and arts approach in the application of social studies specifically when curating and printing photographs that reflect sociological and historical concepts. Educators can also visit museums and laboratories in lesson explorations; thus, making learners understand concepts and ideas more comprehensively and accurately.

Third, we should recognize the truth that on the whole, Filipinos are generally a race of creative people. Filipino singers, filmmakers, and artists are seen as global changemakers. With such diverse pool of existing creative talents, the education sector should use the potential of its creative industries and help learners gain competitive edge in the global market.

This approach is a confirmation of the famous statement by an American biochemistry professor and author Isaac Asimov which stated that there is an art to science, and a science in art. Indeed, the two are not enemies, but different aspects of the whole.



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