

INFUSING TECHNOLOGY INTO THE CLASSROOM: A CASE STUDY IN INTERDISCIPLINARY COLLABORATION

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October 18, 2001
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Abstract:

Effectively incorporating technology into the classroom is paramount at many K-12 and university institutions. Both administrators and faculty have seen pronounced increased in effective learning through the use of multimedia technology when presenting any subject. However, not all teachers can be expected to learn the complex applications that enable effective instruction to their students. New forms of interdisciplinary collaboration need to be invented and investigated. These new forms should incorporate technology more readily and effectively while having a low impact on the already over-burdened schedules of faculty and teachers. Following are the results from a case study of a unique form of support developed through Radford University library's MultiMedia Center and Music Department.

Introduction:

The course, entitled Introduction to Film Music (MUSC 373, Computer Music Composition), incorporates an historic survey of film music media including literature, recordings and film as well as composition assignments. In the assignments, students are required to learn the parameters of different eras' film music and technology (including the limitations) and then create their own soundtracks to "audio blanked" film clips. The assignments were edited on a computer and presented in VHS or CD format to the class. The course's curriculum is based traditional collegiate education themes combined with technology via a collaborative, co-instruction effort between a university music professor and multimedia technologist.

Technologies and composition practices of each medium and time period are presented chronologically and are studied, discussed and experienced through assignments. From Radio to modern film, each era (compositionally and technologically) is delivered.

Results:

The collaboration of the two professionals is mutually educational. Issues arising regarding the intense areas of traditional music and contemporary technology were discussed and resolved by information from both sets of expertise. The findings from this experimental case study offered profound results:

1. Instructors do not bear the burden of 'learning it all' before they incorporate technology into the classroom. In this case study, both professionals concentrated on their expertise and were able to offer students a higher level of scholarship because they were not required to focus on or fumble through unfamiliar subject matter.
2. Instructors are involved in faculty development as they simultaneously impart and absorb expertise in their relationship with the co-teacher. Traditional faculty development in technology requires faculty to attend application-training seminars, often with mixed results. A faculty member may be required to learn an application for up to 100 hours before developing the multimedia materials, which necessitates further time investment. Further, the success rate and information retention is variable at best.

The collaboration offered each instructor an opportunity to learn key features of the other's discipline. Teacher and student alike learned from the classroom presentation of materials offered by each instructor as well as through the preparation of each lecture. This form of faculty development offers a timely and efficient manner of technology training. Further, a higher success rate of information retention was achieved.

3. The student benefits from the interdisciplinary delivery and application of course materials, part of which include the dual perspectives and expertise of the faculty. Moreover, students enjoy a fresh approach and are better informed as a result. By having two professors from different disciplines, the students are able to pose questions to each instructor and draw interdisciplinary parallels between the two professions.

Conclusion:

This course represents an intuitive utilization of resources, and the student reaction makes it an exceptional experience for all persons involved. At its core, this case study evidences a situation of one faculty member actively seeking another for technological and educational insight. Logically, the scholarship of both instructors increases as a result of the collaborative sharing and dissemination of applied knowledge both inside and outside the classroom. The outcome is an interactive, cross-disciplinary study that yields highly successful faculty development while also creating a new and exciting environment for student learning.

As technology is further incorporated into the classroom, it is important that instructors and administrators look for non-traditional ways to create better learning environments through multimedia. Traditional paradigms regarding faculty development-style 'tech training' cannot account for all the learning that is needed in the ever-changing instructional technology field. The case study presented here is simply one way of accomplishing this end.

Film:

A 25-minute documentary film was produced from in-class footage of interviews and discussions, as well as instructor interviews, commentary and samples of student work. This film reveals in detail the efforts made by the instructors, outcomes of the assignments by the students and a candid discussion on issues of teaching collaboratively. The film offers further insight into the results of the experiment and is available from the authors. Contact plewis@radford.edu to order your copy.