

Expanding the Boundaries: Designing New Media Interdisciplinary Curriculum

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Abstract

The future of New Media depends on the breaking down the walls we find within the higher education. As we attempt to define a New Media major for the 21st century we find we are often hampered by our own 20th century mindsets of curriculum. This paper covers the curricular issues that are common in implementing new media today in higher education.

New media by its very nature is cross-disciplinary

New media students will need to draw upon (pun intended) a variety of skills in their careers. Many of these skills are to be found in other departments than art. For it will be the multitalented that have the clear advantage in our increasingly changing world. As a result, students today will be less likely to pursue a major in pure visual arts or film but are more apt to study a mixture of disciplines. They must understand not just the basics of drawing and design but know something about sound, video editing, text, lighting, interactive design, computer logic structures etc.

While this interdisciplinary approach has been far more common at the graduate level, it now increasingly appears at the undergraduate level for new media. However this can be a double edge sword for the student risks pursuing too many directions and degree becoming just a general survey. In New Media this can all too often result in advanced technical abilities but without art's basic competencies. In trying to find that balance we have to ask: What are the basic competencies for New Media?

Universities have on the whole a variety of interdisciplinary options available; the departments themselves lack a flexibility that exists in private art. Thus, many universities allow individual, highly motivated students to construct their own course of study. However this has generally been limited to only for those students who could justify, or harass advisors into acquiescing, that any single department wasn't meeting their educational needs. In addition, these schools are now discovering that they must mandate a "capstone" experience for these students to link their coursework in one comprehensive project.

The design challenges for New Media Interdisciplinary curriculum?

New Media applications and career tracks
Basic competencies for new media
Boundaries (Speed Bumps and Pot Holes)
Interdisciplinary - courses versus curriculum

Initially, in looking at New Media, we assume that our students will need to know everything we have mastered. Because if worked for us, then it logically follows that it should work for them, and then on top that, the students should add the mastery of the new digital applications. OK, lets see, that should only take them 4... 5... 6...years.... Oops Houston we have a problem...

Secondly, we have to realize that our student's brains are wired differently than ours. Their exposure to computers while growing up has changed them. They not only are use to rapid change, they can adapt faster then we can. Our students today have grown up with the first generation of computers in their home. They do not remember a time when video games were not part of their lives; email, chat rooms, and the web have been as much a part of their lives growing up as TV was in ours. The immediacy of real-time interaction via the Internet is not new to this generation. Next let's look at the set of skills they will need and match courses later (Of course in our day to day advising this would never happen).

The Skills of the New Media Artist

1. Above all the new media artist must be a story teller, with a working knowledge of how all the different artistic, sound, theatrical, and cinematic elements come together to make a film.
2. The new media artist must be a good visual artist with the ability to draw the figure well, and knowledge of structurally strong draftsmanship and perspective. To visualize ideas rather than strictly create representations.
3. The new media artist must learn many of the skills of the cinematographer. The sense of composition and staging that is the stock-in-trade of the live-action cameraman must become second nature to the animator.
4. The new media artist must have a knowledge of acting, not only of human characters, but that of animals, of objects in motion, and water, smoke, fire etc; all of this must be executed with a sense of timing that conveys not only convincing human acting but a feeling of weight, momentum, and inertia.
5. The new media arts must have a working knowledge of sound editing (music, dialogue, and sound effects). The animator should understand the suitability of music, the use of dialogue, the relative levels of the different music, dialogue, and effects tracks, and the synchronization of these tracks into one.
6. The new media artist must acquire a knowledge of set designer - to create space and use light and color to embody the mood of each scene.
7. The new media artist must be a film editor, with the ability to make decisions regarding the rhythm of the cutting, continuity etc.
8. The new media artist today must understand computer logic with the ability to integrate traditional skills with new computer applications. Without prerequisite knowledge of programming language structures, art students are stumped by concepts as fundamental as variables. With scripting integrating into more demanding visual applications teachers can provide script examples but few students will understand how to manipulate the language to solve unique problems.

Currently, students must select a major and hope to take courses in other areas. With the varied set of skills needed, students today will be less likely to pursue just one major in the visual arts, and are more apt to study a combination of disciplines. No single discipline can address all the different needs of new media.

Interdisciplinary options

Remember within academia we are dealing with a variety of solutions that are cobbled together to integrate new media into the curriculum.

Pre-existing interdisciplinary program structures.
New programs
Experimental courses.
Double-Majors

One of the most common solutions in new media is to direct students to one of the pre-existing interdisciplinary university curriculum. Interdisciplinary learning is not new: New interdisciplinary fields have expanded across all subject areas – this has been most evident in the sciences. In fact across campus the number of interdisciplinary programs for undergraduates have doubled in the last decade.

Currently many professors find themselves approving an interdisciplinary approach crafted by these students. This plotting your own course of study requires tremendous energy and self-discipline from the student – from the start of the application process until the delivery of the final project capstone

One of the obstacles that prevent the development of an integrated interactive multimedia design curriculum is that it does not fit nicely into any currently defined field. Universities and schools have begun to develop that attempt to merge the various interests. We see academic programs such as Computer Art, Computer Science, Information Technology, and Communication forming an umbrella structure and offering classes in interactive multimedia, each with its own unique approach to the subject.

Here we can find we have more in common with faculty in other departments (i.e. music, computer science, theater etc) then in our own. However the perils of this is that it puts tenure in the home department at risk.

Boundaries - Speed Bumps and Pot Holes of Academia

Colleagues come not only in all shapes and sizes, but also come in all pedagogues and ideologies.

1. The Ancients versus the News. Ancients believe that the curriculum that "they" created 10 years ago is now etched in stone and to consider changes is a personal affront. We are dumbfounded by their attitude because we forget that from their point of view there is nothing in it for them, only a gradual diminishing of their stature, if not their livelihood. They have no reason to support change and with faculty governance now an institution unto itself it does not bode well. It is in their interest to stop you, and if they can't do that, then to slow you down. The realization that new media has and is changing the way we, as a culture, exchange information is not comprehended by an elitist, head in the sand, luddites attitude.
2. New traditionalist - Older colleagues may have evolved over time from the creators of the new, of forging new visual solutions 20 years ago, to now protecting these art traditions they helped establish. Their motivation may be grounded in allegiance to a specific "physical medium" or a purist point of view of confusing technique as content.

While this "physical traditionalist" may not help the cause we can't overlook the fact that physical mediums can serve new media as a tremendous learning tool. Too often "computer students" don't think things through. The physical medium slows the learner down to fully consider the outcomes as opposed to selecting from variations.

3. Old wine in New bottles syndrome. New media is only wonderful as a tool to assist in the creation of "real art"; it is not a medium, it is a tool. Colleagues seek efficiency for their traditional art. Not unlike the role of photography in the early part of the 20th century. I personally find these people can be helpful initially but then can turn around and be just as detrimental as they wrap themselves in the garb of new media but invariably thwart its growth by siphoning off funds and correcting your "misconceptions" of what is new media.
4. Applied Art versus Fine Art. Is "Applied" a dirty word? To restrict your thinking in terms of "Fine Art" can become a trap for which other alternatives are never considered. There is generally a prejudice that applied imagery "inferior". Applied faculty are frequently treated as if they are a necessary evil to be tolerated or banished to the community colleges. Its unfortunate because all too often a "too" fine art an orientation emphasizes learning to find one's own voice at the expense of learning to visually communicate with others. The concept of user/audience can be lacking. This difference can be fundamental to the success of the new media student.
5. Pre-requisites Interdisciplinary curriculums can be effectively stopped by strict pre-requisites that may be appropriate for the single discipline student. This is continually vexing to me; how can students effectively jump these hurdles without becoming entangled in the system.

As we all attempt to sit down and define an undergraduate major in new media for this new century we must not lose site that we all have to hack it together through political tradeoffs and compromise.

Conclusion

Nicholas Negrofonte believes, that "... we are moving away from a hard-line mode of teaching, which has catered primarily to the compulsive serialist, toward one that is more porous and draws no clear line between art and science or right brain and left".

A cross-disciplinary approach enables students to explore new ideas. As functionality takes precedence over appearance students must have a foundation in visual communication but must understand numerous other areas as the boundary between content creator and software programmer is blurred. The only way to communicate with the other side is to know some of their world.

Plotting your own course of study in new media requires tremendous energy and self-discipline. In New Media we may find computer animators, visual effects artists, game developers, web navigation artists etc. who find interdisciplinary study offers them their only hope getting the curriculum they need.

You never know which schools will emerge in the future with best curriculums in New Media, it may have more to do with luck, politics, dedication, outside money or even the potential of new media itself to go over the heads of academia and reach directly to the student. In the not too distant future the individualized major of today may be tomorrow's newest interdisciplinary department.