

**Tracking and explaining convergence efforts
among schools of journalism and mass communication**

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Wilson Lowrey

George Daniels

The University of Alabama

Lee B. Becker

University of Georgia

An article in *Editor & Publisher Magazine* seven years ago outlined the challenge facing journalism and mass communication programs: new curricula for training “a new breed of journalists who need to be armed with a mix of skills and abilities tailored for a journalist being transformed by technology into an uncharted world of interactive media” (Yovovich, 1996). Last summer *Quill*, ran a journalism education cover story asking “What will they need?” The cover image of a student with a backpack filled with broadcast equipment, a reporter’s notebook, and a computer reflects the uncertainty about “convergence” on the part of many in the industry and in JMC schools.

For most JMC schools the first steps have been tentative, but there has been substantial movement toward merging separate tracks in the schools. One recent survey study found that around 85 percent of JMC schools say they have begun to pursue curricula that address media convergence. This is somewhat surprising given the lack of real movement toward media convergence in the industry, apart from a handful of high-profile, often-cited cases.

The question arises, what is driving movement toward convergence in the schools if the market does not presently demand this change? Through a national survey of JMC schools, this study attempts to answer this question and to paint a more accurate picture of movement toward convergence among the schools. This study proposes a possible conceptual framework for (1) assessing the degree to which JMC programs have moved from traditional “medium-specific” curricula to curricula that trains students across multiple media platforms and (2) explaining the mechanism behind this curriculum movement (or lack of movement). A number of predictors are proposed to explain degree of convergence and attitudes toward convergence in JMC programs. These predictors include external factors deriving from the economic and professional environments of schools, as well as internal factors reflecting size, structure, faculty make-up and nature of the curriculum.

Degree of convergence in the industry

On its face, the most obvious stimulus for convergence efforts in schools would be a perception that convergence in the media industry is a current or future reality. However, evidence from studies of convergence efforts in the industry does not justify such a perception. There have been some experimental efforts in the industry, but many of these have experienced a variety of obstacles, stemming from lack of resources to cultural problems within media organizations. Zavonia and Reichert (2000) found that online publications working hand-in-hand with their print partners were termed “anomalies” (Zavoina & Reichert, 2000). A study by Chan-Olmsted and Park (2000) showed that broadcast stations were mostly re-purposing their existing news product for the Internet rather than capitalizing on unique advantages of the Web and creating content especially for that platform.

Few local TV stations or newspapers are presently engaging in convergence efforts. In a recent study, 7.5 percent of TV staff and 3.1 percent of newspaper staff surveyed reported being required to take part in convergence efforts by their organizations (Criado and Kraeplin, 2003). Even the success of high-profile convergence efforts in the industry has been called into question. For example, recent research on the widely-publicized convergence operation involving *The Tampa Tribune*, WFLA-TV and Tampa Bay Online.com shows it is more cross-promotion than convergence (Flanagan & Hardenbergh, 2003).

A number of constraints on convergence in the industry have been cited. These include incompatibilities of culture and work processes between broadcast and print journalists (Killebrew, 2001; Singer, 2003), lack of training (Singer, 2003), lack of financial resources and the lack of modern multimedia editing systems (Stone, 2002). Clearly the merged media world predicted by many is not a current reality. Nevertheless, the literature suggests that an increasing number of journalism programs are pursuing a converged approach to their curriculum.

Convergence efforts among JMC schools

John Pavlik, former director of Columbia School of Journalism’s Center for New Media, authored an influential report (2001) recommending JMC programs follow the lead of media organizations that were creating newsrooms that cut across media boundaries (Pavlik et al.,

2001). Since, the cry for converged curriculum has grown louder. Over the last three years there have been nearly 20 panels on the topic of converged media at conventions of the Association of Educators in Journalism and Mass Communication. One recent study found that around 85 percent of JMC schools have begun to pursue curriculum that addresses media convergence, though most schools still maintain separate tracks for print and broadcast (Criado and Kraeplin, 2003). A second study conducted at roughly the same time found that about half of a self-selected sample of 300 JMC schools have made some changes to curriculum to address convergence (Huang, Davison, Shreve, Davis, Bettendorf & Nair, 2003).

A dominant response to changes in the industry is to add on to existing curriculum structures. In a subsequent article, one of the co-authors of Pavlik's 2001 report said it would be "far easier to conceive of building a new media sequence to complement traditional sequences than to consider incorporating new media into all of the courses that we teach" (Henderson, 2000). Historically, broadcast and print education programs have often responded to perceived industry change by adding courses – often reluctantly – rather than by revising the core curriculum. After much debate, speech departments added radio broadcasting courses in the 1930s (Niven, 1960), and in the 1980s and 1990s there was much debate among programs of journalism and mass communication about adding computer-based courses for teaching news gathering online and digital production techniques (Ducey & Yadon, 1981; DeFleur & Davenport, 1993).

The tendency in curricular reform to meet change halfway is not unique to schools of journalism and mass communication, according to Larry Cuban (YEAR?), a leading scholar of education reform. Schools are organizations, and as such, they tend to "absorb external pressures for change and convert them into routine add-ons compatible with existing perspectives" (p. 217). Change does take place, however. Usually it is a result of external factors including cultural, social, legal and economic pressures, though administrators, teachers and even students have some measure of influence (Cuban, ???). Often these internal influences serve to constrain change. Responses to external factors are often cosmetic and serve mainly to show external groups that schools are responsive to their concerns. Schools wish to be viewed

by the public as worthy of continued endorsement, and fundamental changes in structure and process may not be necessary to convey this image (Cuban, ????).

A handful of studies have examined current convergence efforts among schools of journalism and mass communication, and these studies have suggested a number of factors affecting decision-making. A study of a converged student newsroom at Brigham Young University revealed cultural obstacles to convergence. Print journalism students were found to be most skeptical about the operation beforehand, while broadcast majors were most amenable. Interview data collected afterward showed that students viewed the converged newsroom as undermining their medium-specific identity (Hammond, Petersen, & Thomsen, 2000.) Similarly, Artwick (2002) likened convergence efforts at Washington and Lee to the process of “dismantling silos,” and Utsler (2001) found that medium identification was also a strong initial concern of students and faculty at the University of Kansas, as was lack of faculty skills across media forms. However in a later article Utsler (2002) reported that faculty opposition had diminished, due in part to a team-teaching strategy that compensated for some faculty lacking multimedia skills (Utsler, 2002).

It is clear that for academic units pursuing convergence, curriculum change is being fueled by something other than hard evidence of widespread convergence in the industry. Schools depend on the resource of media jobs for their students, but it seems doubtful that these jobs will involve converged skills in the near future. Perception of changing trends as well as perception of a school’s legitimacy in the eyes of fellow institutions may be the most important stimuli here. Studies also reveal obstacles to convergence efforts. Among the most prevalent are faculty and student resistance stemming from entrenched structures and cultures, and resource constraints. A causal model is needed to examine the relative importance of these and other external and internal factors.

CONCEPTS AND HYPOTHESES

Descriptive model – stages along a continuum

It is assumed in this study that there is a theoretical continuum that runs from schools that are not converged to schools that are fully converged. Three stages of JMC multimedia curricular reform are offered in this model: *static*, *supplementary*, and *realigned* (See Figure 1). It is assumed that there can be overlap among these stages.

Programs at the *static* stage have opted not to change their curricula at present. This stage emphasizes medium-specific training over multimedia training.

Programs in the *supplementary* stage value specialization in addition to cross-training. They also have a curriculum with separate media platform tracks, but these programs have added tracks or sequences in an effort to address convergence. It is assumed that programs at this stage are reacting to their perceived changes, but they are not thoroughly rethinking the conceptual foundations of their overall curriculum.

A program in the *realigned* stage has opted to reconceptualize and reshape its overall structure based on these new concepts. This stage entails a greater commitment to change than the supplemental stage. Altering existing tracks has a stronger effect on the overall faculty, many of whom have a stake in the knowledge areas and technologies that underlie the separate tracks, as studies of converged curriculum make clear. These programs are not “hedging their bets.” They have de-emphasized specialization in favor of multimedia cross-training.

Causal model

To better understand programs' positions on this continuum, we must better understand the mechanism that drives them to these positions. Both the literature on media convergence and the educational literature on curriculum change suggest that educational programs, like most organizations, are subject to external and internal pressures on decision-making, and that these pressures may be tangible or perceived.

A number of models in the organizational literature focus on the importance of environmental factors in predicting organizational decision-making. Organizations are, to a great degree, creatures of their environments (Scott, 1992). However, in the case of decision-making about converged curriculum, schools are not experiencing a great deal of pressure from the

external marketplace. Institutional theory from the organizations literature offers an explanation. This theory holds that organizational decision-makers are not primarily motivated by tangible pressures from their environment. They are instead mostly motivated by a perceived need to maintain the impression of legitimacy. Organizations are likely to mimic other organizations and/or their environment so that their organization is perceived – by the public, by clients, by fellow professionals – as socially and culturally legitimate. In a changing, uncertain environment, organizations are likely to seek commonalities with a wider variety of institutions and organizations in their environment (Finkelstein, 1997; Pfeffer & Salancik, 1978; DiMaggio & Powell,). In so doing, they may change their structures, and these structural changes help the organization gain both the legitimacy and resources needed to survive (Meyer and Rowan, 1977).

Of course environmental influences are only part of the explanation. Factors deriving from the organization itself are also important because they constrain the influence of external factors. For example, pressures from the environment can only create change if the organization possesses the internal resources to devote to the change process. The size and the structure of an organization also play important roles in shaping organizational priorities and potentialities.

A number of hypotheses may be generated from these ideas. In each case hypotheses purport to explain either the degree to which a curriculum is already converged or the degree to which faculty favor pursuing a converged curriculum. As discussed, “converged curriculum” is conceptualized as the degree to which the curriculum is structured for training across media platforms.

The first hypothesis proposes that schools associated with professional organizations should be more likely to pursue convergence. This is because “cutting edge” change is given legitimacy through such organizations, exposure to such ideas are more likely through professional channels, and organizations tend to mimic one another as a response to uncertainty.

H1a: Programs with professional associations are more likely than programs not associated with professional associations to pursue a converged curriculum.

H1b: Faculty at programs with professional associations are more likely than faculty at programs not associated with professional associations to favor pursuing a converged curriculum.

The second hypothesis is based on the premise that organizations experiencing uncertainty seek to be “more like” their institutional environment. This is especially the case for institutions on which the organization is dependent for resources. News organizations supply journalism programs with resources in the form of jobs and internships for students, grants and adjunct faculty. It should be the case therefore, that the more JMC programs perceive that news organizations are pursuing convergence, the more JMC programs will pursue converged curriculum and the more open to convergence will be the faculty.

H2a: The greater the perception by programs that the news industry is moving toward convergence, the more converged the program’s curriculum will be.

H2b: The greater the perception by programs that the news industry is moving toward convergence, the greater interest in pursuing a converged curriculum there will be among faculty.

Uncertainty about the recent flow of resources should drive schools toward a converged curriculum. This is because uncertainty should drive organizations to make connections with a wider variety of media platforms to increase knowledge and reduce uncertainty. Students are one resource for educational programs. It is proposed here that programs that have dropped recently in the crucial resource of enrollment should be more likely to pursue cross-media expertise and training – i.e., a converged curriculum. Their faculty should also be more open to the idea of a converged curriculum, or at least to the idea of experimenting with the existing curriculum.

H3a: The greater the drop in recent enrollment levels, the more converged the school’s curriculum will be.

H3b: The greater the drop in recent enrollment levels, the greater interest in pursuing a converged curriculum there will be among faculty.

External governing bodies also impose constraints on organizations seeking change. For example, ACEJMC accreditation restricts number of credit hours required in journalism and mass communication programs. Non-accredited programs should have more flexibility and would therefore be freer to experiment with the curriculum restructuring necessary to pursue multimedia journalism or convergence.

H4a: Non-ACEJMC-accredited programs are more likely than ACEJMC-accredited programs to pursue a converged curriculum.

H4b: Faculty at non-ACEJMC-accredited programs are more likely than faculty at ACEJMC-accredited programs to favor pursuing a converged curriculum.

Though the impetus to change is likely to originate from beyond the school, internal factors are likely to shape a school's ability to adapt to environmental pressures. According to recent studies on convergence efforts at JMC schools, factors such as resources, program structure, faculty expertise and competing priorities play important roles in shaping curriculum.

The size of programs should shape convergence efforts. Larger programs are more likely to be differentiated into different media emphases (broadcast, print, etc.) and are therefore most likely to experience political obstacles to convergence. It should be noted, however, that larger programs are generally very visible and are therefore under more pressure to be "on the cutting edge." This would suggest larger programs would move toward a converged curriculum. Nevertheless, it is proposed here that greater differentiation (i.e., less merging of tracks) will most likely be the result of greater organizational size.

H5a: The larger the program the less likely it will pursue a converged curriculum.

H5b: The larger the program the less likely faculty will favor pursuing a converged curriculum.

A shortage of internal resources should constrain efforts to change curriculum. An important resource is faculty time. At programs with fewer students per faculty member, faculty should have more time to work on curriculum matters.

H6a: The lower the ratio of faculty to students, the more likely a program will have pursued a converged curriculum.

H6b: The lower the ratio of faculty to students, the greater interest in pursuing a converged curriculum there will be among faculty.

A related notion is the factor of having a graduate program. The more integral the graduate program is to a school, the less time faculty will have to spend on undergraduate matters – which is the level at which convergence efforts take place.

H7a: The larger the graduate program is relative to the rest of the program, the less converged the school's curriculum will be.

H7b: The larger the graduate program is relative to the rest of the program, the greater interest in pursuing a converged curriculum there will be among faculty.

The location of the school within the overall university structure should have an impact on the degree to which schools decide to pursue a converged curricula. Schools that are independent units should have fewer administrative constraints on pursuing non-traditional directions, such as converging curricula. Faculty at schools that are independent units should perceive that they have greater autonomy to pursue such changes.

H8a: Programs that are independent units are more likely to pursue a converged curriculum than programs that are not independent units

H8b: Faculty at programs that are independent units are more likely to favor pursuing a converged curriculum than faculty at programs that are not independent units.

Finally, it should be the case that faculty have an influence on the decision to pursue converged curriculum. This would seem obvious, but of course administrative decision are under pressure from a variety of sources, faculty only being but one of these. It should be the case that the more faculty are interested in a converged curriculum, the more converged the curriculum should be.

H9: The stronger the faculty interest in pursuing a converged curriculum, the more likely the program will train students across media types.

Method

Data derive from findings from the 2003 *Annual Survey of Journalism & Mass Communication Enrollments* which has been conducted annually since the 1930s and is presently conducted at The University of Georgia. A combination of the *AEJMC Directory* and *The Journalist's Road to Success: A Career Guide* produced 466 listings of schools. Questionnaires were mailed to administrators of each program. Three subsequent mailings were sent and follow-up phone calls were made as needed to obtain data from non-responding schools. The questionnaire asked the administrators to provide information on enrollment by year in school, by sequence and by demographic categories, as well as number and type of degrees granted. Administrators were also asked questions about attitude toward converged curriculum, degree of convergence in present curriculum and perception of industry trends toward convergence. Ultimately data were obtained for 463 programs, though there was variation in the detail and precision of the information provided.

Degree of converged curriculum was measured on a three-point scale question, "To what degree does your curriculum incorporate training across media types? (1 = Specializes in particular media types more than learn across media types, 2 = Students both learn skills across media types and specialize, 3 = Students learn across media types more than specialize). Degree to which the faculty favored pursuing convergence was measured on a five-point scale by the question, "How interested is your faculty in pursuing a converged curriculum" (1 = Not at all

interested, 5 = Very interested). Converged curriculum was defined for respondents as a curriculum that emphasized training across media types more than specializing in a single media type.

Program affiliation with ASJMC was obtained through official membership files, and data for accreditation with ACEJMC were obtained from listings on the Web and from the AEJMC Directory. Both of these measures were scored as dichotomous. Just under half were members of ASJMC, and just under a quarter were accredited by ACEJMC. Perception of industry trends in convergence was measured by asking administrators “How interested do you think employers are in training graduates across media types?” and “How interested do you think employers will be in five years in training graduates across media types?” These measures were summed ($M = 8.25$, $s.d. = 1.6$, range = 2 to 10). Drop in enrollment level was measured by computing percent change between enrollment levels in 1996 and 2002 (1996 data were obtained from the 1996 enrollment survey) and scoring all increases in enrollment as zero (so that the measure only assesses degree to which enrollment level dropped – programs that increased had a zero amount of drop ($M = -.08$, $s.d. = .18$)).

Program size was measured through enrollment figures for 2003 ($M = 393.4$, $s.d. = 463$). Ratio of faculty to students was computed using enrollment size and faculty size measures from the survey. Full-time faculty counted as one, and part-time faculty counted as half of one ($M = .06$, $s.d. = .05$). Size of the graduate program relative to the rest of the program was computed by computing a ratio between number of enrolled graduate students (Ph.D. and master’s) and the total number of students enrolled ($M = .05$, $s.d. = .12$). Finally, the program’s status as an independent unit was measured by asking administrators whether their program was an “independent school or college, or a unit in a larger college” (yes = 16.4%).

Hypotheses were assessed in two ways. First, both dependent variables were regressed on predictors. In the model two blocks of predictors are tested. The first block consisted of the external predictors from hypotheses 1 to 4. The second block consisted of the internal predictors from hypotheses 5 to 8. The regression analysis will show if external factors hold up as predictors after controlling for internal factors, and beta coefficients are used to test individual hypotheses.

Because relationships between independent and dependent variables are somewhat exploratory, these relationships were also assessed in bivariate analyses. Crosstab analyses were also conducted, and where these results differed from the regression analysis, they are discussed.

Results

Data show that enthusiasm is high for converged curriculum and for the role of Web-based media in schools' curricula. Just under 85 percent of respondents say their current curriculum either emphasizes learning across media platforms (31.7 percent) or both learning across and specializing (52.6 percent). Exactly three-quarters of program administrators say their faculty are either interested or very interested in pursuing a converged curriculum. Just under 70 percent say they believe employers in the media industry are interested or very interested in hiring graduates trained across media. Just over 70 percent have at least one course designed to teach online or Web-based journalism skills. Two in 10 have a sequence in Web-based media, and 60.5 percent say they want to add one.

To explain variability of Degree of Convergence, the variables were regressed on external predictors, resulting in an R-square of .057 (Table 1). Adding the block of internal predictors increased the R-square to .115, though there is still much unexplained variance in the dependent variable. In the second regression model, the block of internal predictors explained 27% of Faculty Interest in Convergence (R-square = .27) The addition of internal factors did not improve the R-square substantially, increasing the R-square only to .28. Overall then, predictors explain Faculty Interest more successfully than Degree of Convergence. Internal factors were more important in explaining Degree of Convergence than they were in explaining Faculty Interest. External factors – due largely to the factor of Perception of Industry Hiring – were more important in explaining Faculty Interest than they were in explaining Degree of Convergence.

Hypothesis 1a received no support in either the regression analysis or the bivariate analysis. The beta coefficient for ASJMC membership was low (-.11, see Table 1), and more importantly, it predicted in the opposite direction – ASJMC membership correlated with not having

a converged curriculum (Table 2). Hypothesis 1b received no support in the regression analysis ($\beta = .02$). Thus there is no support here for the idea that professional involvement correlates with degree of converged curriculum or with faculty interest in convergence.

Hypothesis 2a, which proposes that the perception of industry hiring leads to converged curriculum, receives little support from the regression analysis, though the coefficient is somewhat stronger in the bivariate analysis (.13). Overall, support is weak for this hypothesis. However Hypothesis 2b receives strong support, as Perception of Industry is by far the most important predictor in regression analyses of faculty interest in pursuing a converged curriculum ($\beta = .51$). Clearly perception of industry trends drives attitudes about convergence in the schools.

Hypothesis 3a predicts that a recent drop in student enrollment will lead to a converged curriculum, but neither regression analysis nor bivariate analysis support this prediction ($\beta = .07$, $r = -.04$). Hypothesis 3b, which predicts enrollment drop will lead to increased faculty interest in convergence, also receives no support.

Regression and bivariate analyses lend some support to the proposition that lack of accreditation predicts a converged curriculum ($\beta = -.15$, $r = -.30$), as suggested by Hypothesis 4a. However Hypothesis 4b is not supported, as lack of accreditation fails to predict Faculty Interest.

Hypotheses 5a and 5b predicted that size of the program, as measured by student enrollment, would predict convergence and interest in convergence, but regression analysis does not support these predictions. However size does have a moderately substantial relationship with Converged Curriculum in the bivariate analysis ($r = -.23$), which suggests some support for Hypothesis 5a.

Hypotheses 6a and 6b receive no support from regression or bivariate analyses. The ratio of students to faculty is not a determining factor in the likelihood of schools having converged curriculum or in the likelihood faculty will support such an effort.

In the regression analysis, greater emphasis on graduate program (percent of students that are graduate students) predicts schools will be more likely to have a converged curriculum in

the curriculum. However this is opposite to the direction predicted in Hypothesis 7a, and therefore Hypothesis 7a receives no support. There is little relationship between emphasis on graduate program and Faculty Interest, and therefore Hypothesis 7b is not supported.

Hypotheses 8a and 8b received some support in the regression analysis. Schools with an independent status were moderately more likely to have a converged curriculum (.13) and to have faculty who supported convergence (.11).

To test Hypothesis 9, Faculty Interest was correlated in a bivariate analysis with Degree of Converged Curriculum. The correlation was .243, which suggests a fairly strong relationship between these factors.

Finally, though the dependent variable Converged Curriculum is primarily conceptualized in this study as a continuous variable (less converged to more converged), it may also be treated as a nominal variable. Doing so allows for analysis of importance of predictors of pursuing each of the three stages of converged curriculum. Therefore crosstab analyses were also conducted for hypotheses predicting Degree of Convergence. Percentage differences in the crosstab analyses were fairly similar to findings from regression and bivariate analyses, but they tended to be more supportive of hypotheses.

Perception of industry hiring was split at the median and dichotomized in order to cross it with Degree of Converged Curriculum. The crosstab analysis shows that 29 percent of the schools that thought industry was less likely to hire cross-trained graduates had curriculum that mostly trained students across media types, while 37 percent of those who thought it more likely industry would hire cross-trained graduates had such a curriculum. There is therefore some additional support for Hypothesis 2a, that perception of the industry influences curriculum.

Crosstab results also lend support for Hypothesis 5a, which proposes a relationship between program size and degree of converged curriculum. At 42 percent of small programs (enrollment figures were divided at the median), students learn across media types more than specialize, while the same is true at only 21 percent of larger programs. Crosstab analysis provides some degree of support for Hypothesis 6a, which posits that ratio of faculty to students should have an impact on degree of converged curriculum. Just over a quarter of schools with

fewer faculty per students have curriculum that trains students across media types, and more than 36 percent of schools with a higher faculty-to-student ratio have curriculum that trains students across media types.

Discussion

Results suggest external factors, largely through the strength of perceived industry interest in hiring, are generally more important than internal factors. Faculty interest in convergence, which is an internal factor, does have a strong influence on converged curriculum – however, this faculty interest is driven mostly by perception of industry hiring.

When coupled with the strong interest across programs in pursuing converged curricula, the strength of perception of industry hiring suggests it is highly important that departments assess industry trends accurately. Yet it appears these assessments may be off base. Results here show that almost a third of journalism and mass communication programs train students across media types, and 75 percent have faculty who are interested in pursuing converged curriculum. Yet recent studies of convergence in the industry suggest few media organizations have taken substantial steps toward convergence. It should be noted that in one recent study (Huang et al., 2003), news staffs expressed interest in hiring students with multimedia skills. It should be noted however, that this study included only self-selected data, which was likely to include a high percentage of convergence enthusiasts.

The prominence of faculty perception of industry trends lends support to Institutional Theory, which proposes that the need for public legitimacy is at least as important as tangible pressures in shaping decision making about change. It also lends support to much of the literature on curriculum change, which suggests schools pursue trends to appear legitimate and cutting edge. Results also point out the importance of keeping up with the industry. Though it is not surprising that schools would seek to accommodate the industry, competing interests, such as teaching and research interests, political divisions within schools or internal philosophical differences are much weaker factors. Clearly this strength of relationship shows the degree to which schools feel they depend on the industry.. At any rate, faculty and administrators should evaluate media trends as carefully as possible so as not to

Perception of industry hiring was less important in predicting actual movement toward converged tracks, though there was some support for this relationship in the crosstab analysis. In fact none of the factors tested were strong predictors of converged curriculum in the regression analysis, though the constraints of accreditation and program location within the university were moderately predictive. Those programs that had fewer constraints from accreditation standards and from administrative oversight within the university were somewhat more likely to experiment with merging traditionally separate media tracks. Administrative independence of the program was also somewhat predictive of faculty interest in converged curriculum.

Interestingly, programs that had a stronger graduate emphasis were somewhat more likely to pursue a converged curriculum, which was opposite to the expectations that programs with a strong undergraduate interest would focus more on revising undergraduate curricula. It may be that many programs with strong graduate programs have high profiles in the profession and are therefore under more pressure to adapt to perceived industry trends.

Crosstab and bivariate correlation analysis both provided support to the idea that larger programs are less likely to pursue converged curriculum. They provide roughly the same measure of support for the proposition that at schools with more students per faculty, curriculum is more likely to be based on the traditional structure of separate media specializations. Presumably this is because faculty have less time to create new curricula.

Overall, results suggest programs that pursue training across media do so because faculty want to pursue convergence, and this faculty interest is driven by the perception – real or imagined – that the industry is moving toward converged platforms and will require a labor force that is equipped to handle working across media. Results also show that a number of factors do constrain the decision to pursue converged curriculum. In particular accredited programs and programs that are not independent units within their university apparently find it more difficult to pursue new directions such as training students across media tracks.

Table 1: Degree of Converged Curriculum and Faculty Interest in Converged Curriculum regressed on internal and external predictors.

	Degree of Converged Curriculum (N = 433) R-sq. = .057 (external predictors only) R-sq = .115 (full model)	Faculty interest in converged curriculum (N = 433) R-sq. = .265 (external predictors only) R-sq = .284 (full model)
EXTERNAL PREDICTORS		
ASJMC membership	-.11*	.02
Estimate of industry interest in hiring students trained across media types	.10	.51
Percent change in enrollment drop from 1996 to 2002	.07	.04
Accreditation (0 = not accredited, 1 = accredited)	-.15	-.03
INTERNAL PREDICTORS		
Size of program (enrollment)	-.09	-.06
Number of faculty per student	.10	.03
Percent of all students that are graduate students	.18	-.05
Location of unit within university (0 = not independent, 1 = independent)	.13	.11

* *Coefficients in table are beta weights.*

Table 2: Bivariate correlations between Degree of Converged Curriculum, Faculty Interest in Converged Curriculum and internal and external predictors.

	Degree of converged curriculum	Degree of faculty interest in converged curriculum
ASJMC membership	-.22*	.00
Estimate of industry interest in hiring students trained across media types	.13	.54
Percent change in enrollment drop from 1996 to 2002	-.04	.01
Accreditation (0 = not accredited, 1 = accredited)	-.30	-.04
Size of program (enrollment)	-.22	-.05
Number of faculty per student	.20	.02
Percent of all students that are graduate students	.04	.00
Location of unit within university (0 = not independent, 1 = independent)	-.05	.10
Degree of faculty interest in converged curriculum	.24	

**Pearson Product Moment Correlation Coefficients*

Table 3: Crosstab analysis of predictors and Degree of Converged Curriculum. Continuous predictors are split at median to create dichotomous variables.

	Programs that emphasize training across media types more than specialized media tracks
ASJMC affiliated	19.3%
Not ASJMC affiliated	41.9%
Perception that industry will be more likely to hire graduates from converged programs	37.0%
Perception that industry will be less likely to hire graduates from converged curriculum	29.0%
Less enrollment drop	42.2%
Greater enrollment drop	32.2%
ACEJMC accredited	10.3%
Not ACEJMC accredited	39.3%
Larger program (by enrollment)	21.3%
Smaller program	41.9%
Fewer students per faculty member	26.1%
More students per faculty member	36.6%
Higher percent of grad students	23.5%
Lower percent of grad students	37.3%
Independent unit	33.1%
Not an independent unit	26.0%

References

- Artwick, C. G. (2002). Dismantling the silos: Moving toward converged journalism curriculum at Washington and Lee University. *Feedback*, 43(4), 28-31.
- Bulla, D. (2002). *Media convergence: Industry practices and implications for education*. Paper presented at the Association for Education in Journalism and Mass Communication Annual Convention, Miami Beach, FL.
- Chan-Olmsted, S. M., & Park, J. S. (2000). From on-air to online world: Examining the content and structures of broadcast TV stations' web sites. *Journalism & Mass Communication Quarterly*, 77(2), 321-339.
- Cole, R. (1985). Much better than yesterday, and still brighter tomorrow. *Journalism Educator*, 40(3), 4-8.
- Criado, C.A. & Kraeplin, C. (2003). The state of convergence journalism: United States media and university study. Paper presented at the Association for Education in Journalism and Mass Communication Annual Convention, Kansas City, Mo.
- DeFleur, M. H., & Davenport, L. D. (1993). Innovation lag: Computer-assisted classrooms vs. newsrooms. *Journalism Educator*, 48(2), 26-36.
- DiMaggio, P. & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields, *American Sociological Review*, 48, 147-160.
- Ducey, R., & Yadon, R. E. (1981). Computers in the media: A new course in the curriculum. *Feedback*, 23(1), 5-7.
- Eastman, S. T. (1984). Computers in the university's curriculum: The theoretical arguments for including computers in telecommunications. *Feedback*, 26(3), 3-7.
- Flanagan, M. C., & Hardenbergh, M. (2003). Central Florida's convergence triangle: A qualitative analysis of two major converged local television news operations. *Feedback*, 44(1), 23-44.
- Foote, J. (2002). Convergence challenge. *Feedback*, 43(1), 7-13.
- Gabetas, C. (2000, June). Three's Company: An ambitious convergence effort takes off in Tampa. *RTNDA Communicator*, 2, 24-28.
- Hammond, S. C., Peterson, D., & Thomsen, S. (2000). Print, broadcast and online convergence in the newsroom. *Journalism & Mass Communication Educator*, 55(2), 16-26.

- Henderson, B. (2000, Fall). Media-specific JMC curriculum needs to be redesigned. *Communication Technology and Policy News*, 4.
- Huang, E., Davison, K., Shreve, S., Davis, T., Bettendorf, E. & Nair, A. (2003). Facing the challenges of convergence: Media professionals' concerns of working across media platforms. Paper presented at the Association for Education in Journalism and Mass Communication Annual Convention, Kansas City, Mo.
- Killebrew, K. C. (2001). *Managing in a converged environment: Threading camels through newly minted needles*. Paper presented at the Association for Education in Journalism and Mass Communication Annual Convention, Washington, DC.
- Niven, H. (1960). The development of broadcasting education in institutions of higher education. *Journal of Broadcasting*, 5, 241-250.
- Outing, S. (1999, January 2). Preparing j-school students for new media convergence. *Editor & Publisher*, 132, 49.
- Pavlik, J. (1997, July/August). The future of online journalism. *Columbia Journalism Review*, 36.
- Pavlik, J., Morgan, G., & Henderson, B. (2001). Information technology: Implications for the future of journalism and mass communication education. In L. L. Kopenhaver (Ed.), *Journalism and mass communication education: 2001 and beyond*. Columbia, SC: Association for Education in Journalism and Mass Communication.
- Pavlik, J., & Powell, A. C. (2000). New media and journalism and mass communication education. In L. L. Kopenhaver (Ed.), *AEJMC and ASJMC: Remembering our past...anticipating our future*. Columbia, SC: Association for Education in Journalism and Mass Communication.
- Riley, D. W. (1938). The place of radio in the speech curriculum today. *The Quarterly Journal of Speech*, 24(4), 622-627.
- Roberts, C. L., & Dickson, S. (1985). Print, broadcast students share VDTs at West Fla. *Journalism Educator*, 39(4), 9-10.
- Rogers, E. M. (1983). *Diffusion of innovations* (Third ed.). New York: The Free Press.
- Rogers, E. M., & Singhal, A. (1996). Diffusion of innovations. In D. W. Stacks (Ed.), *An integrated approach to communication theory and research* (pp. 409-420). Mahway, NJ: Lawrence Erlbaum Associates.
- Rosenbaum, J. (1992). The what and how of broadcasting curricula. *Feedback*, 33(2), 14-15.
- Scott, S. D. (1995). The technological challenge for curriculum and instruction. *Journalism & Mass Communication Educator*, 50(2), 30-40.
- Scott, W. R. (1992). *Organizations: Rational, Natural and Open Systems* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Singer, J. B. (1998). Online journalists: Foundations for research into their changing roles. *Journal of Computer-Mediated Communication*, 4(1), 1-18.
- Stevens, J. (2002, April 3, 2002). *TBO.com: faces of convergence*. Online Journalism Review. Retrieved March 18, 2003, 2003, from the World Wide Web:

- Stone, M. (2002, January 21, 2002). *Convergence: Fact or fiction*. <http://www.indianprinterpublisher.com/aug/archive-ipp/archive2002/publishing/convergence.htm>. Retrieved March 15, 2003, 2003, from the World Wide Web:
- Sutherland, P. J. (2001). *Diffusion of courses with World Wide Web features: Perceptions of journalism and mass communication program administrators*. Paper presented at the Association for Education in Journalism and Mass Communication Annual Meeting, Washington, DC.
- Teaching a new art: Colleges offer courses in broadcast speech and microphone technique. (1933, April 2). *The New York Times*, pp. 8.
- Tremayne, M. (1999). *Media convergence on the Internet*. Paper presented at the Association for Education in Journalism and Mass Communication, Baltimore, MD.
- Trombly, M. (2002). Looking for online dollars: News providers are finding ways to make their web sites profitable. *Quill*, 90, 18-21.
- Utsler, M. (2001). The convergence curriculum: we got it. Now what are we gonna do with it? *Feedback*, 42(3), 1-5.
- Utsler, M. (2002). The convergence curriculum: Lessons from year one. *Feedback*, 43(2), 22-27.
- Van de ven, A. H., & Rogers, E. M. (1988). Innovations and organizations: critical perspectives. *Communication Research*, 15(5), 632-651.
- Yovovich, B. G. (1996, February 17). J-schools in transition: Media convergence is prodding j-schools to retool for an increasingly multimedia production. *Editor & Publisher*, 129, 20.
- Zavoina, S., & Reichert, T. (2000). Media convergence/management change: the evolving workflow for visual journalists. *Journal of Media Economics*, 13(2), 143-151.