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Metrics & Processes for Promotion and Tenure in Interactive Games & Media: A Whitepaper

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A Brief Note on Process:

This whitepaper represents the thinking of the author and reviewers. This document was originally prepared by the Chair of the IGM Department, and has been substantially reviewed and edited by the faculty. This paper is the attempt of the group to further discussion pertaining to the need for new models of faculty evaluation, and to situate that discussion within the context of the current reconstitution of such processes within the B. Thomas Golisano College of Computing & Information Sciences. The Department of Interactive Games & Media (IGM) has a history of reaching consensus on issues such as these by following a process wherein documents such as this are created for discussion, and continually revised, reworked, and reconstituted until such time that consensus can be achieved. It is the fervent hope of the group that this process is affective here, and can ultimately result in both (a) a clearer process for junior faculty with respect to promotion and tenure, and (b) a recognition that the processes of promotion and tenure speak clearly to, and are cognizant of, the type of work that is critical to the long term viability of the IGM Department. *This whitepaper is not policy*, and should not be construed as such in any context: this paper is intended only as a discussion of issues involved prior to and in support of the formation of policy, which is an ongoing effort at the College and Institute level.

I. Introduction

The current debate surrounding promotion and tenure at RIT is not "new" to the larger academic world, nor is it particularly surprising that it has engendered perceived contention with portions of the faculty and administration. Indeed, given the growth and progress of RIT towards what President Destler is now terming an "Innovation University", it is almost a foregone conclusion that it is necessary to re-examine issues such as the role of the faculty with respect to scholarship and creative work, and the reflection of these roles in policies for promotion, tenure, and faculty evaluation. In this context, it is important to understand the unique nature of the academic units that make up our campus, and the way in which they contribute individually toward the success of the Institute as a whole. The Department of Interactive Games & Media, within the B. Thomas Golisano College of Computing & Information Sciences (GCCIS), is one such unit in that it has different operational needs when compared to some of the other organizational units within the college, as a result of its radically different academic mission. IGM, because of its focus on content production and dual nature as both a home for traditional academic research and production in the digital arts, is somewhat unique in the College. Methods of evaluation, in order to meet the needs of the IGM faculty, must be reflective of the traditions of both the sciences and

the arts, and must further embrace the rapid technological and societal advances that continue to impact the field. It is important to contextualize these differences within the larger academic community: what appears to be unique within the College is in fact only *partially* unique in the larger world of collaborative academics. As other institutions of higher learning move forward, the needs of IGM in this respect may in fact become the norm for several like-minded programs and institutions.

Recently the process, metrics, and forms for the evaluation of faculty for promotion and tenure have undergone great scrutiny, based in large part upon the changes to the existing policies by the RIT Academic Senate. A few years ago the Institute, like several other universities, incorporated Boyer's notations and models of scholarship directly into its own policy on tenure and promotion. [ref] More recently, policies have been revised to encourage a greater degree of scholarly activity and production amongst the faculty. This, coupled with directions initiated by the prior administration, and recent administrative change in the office of the President, the Provost, as well as several other organizational changes, have resulted in a need to revise the current GCCIS policies on tenure and promotion to align with Institute goals and expectations. It is the purpose of this paper, after a meeting between the Provost and the faculty of the Department of Interactive Games & Media, to offer opinions and begin discussion of frameworks, models, and metrics that are appropriate for work produced within the IGM department.
At the time of this writing, there are five different elements that are related to this document. This document endeavors to be as consistent with these sources as possible while still putting forward the opinions of the author with respect to establishing a model of best practice regarding these issues. The five elements of related policy and/or guidelines are:

Five Relevant Policies, Guidelines, and Statements regarding RIT/GCCIS Tenure and Promotion
1. The RIT Policies on Tenure and Promotion (i.e. the "green book") [1][2]
2. The GCCIS Statement of Expectations [3]
3. The GCCIS Portfolio Guideline (recently revised, [4])
4. The GCCIS Policy on Tenure "Guidance for Academic Units" [5]
5. The Provost's Expectations on Hiring, Promotion, and Tenure [6]

This paper will attempt to ground its comments within the larger context of these materials, and to offer concrete recommendations on metrics and processes that could be used to meet the Provost's stated goal of "assessing quality of scholarship in these areas" while still preserving the necessary freedom of faculty in non-traditional areas to produce work directly relevant to their field. This paper argues first for the need for new forms of evaluation, examines the way in which IGM faculty typically operate with respect to the production of scholarly work, and finally proposes a series of classifications and metrics that aspire to meet the needs of the Department, College, and Institute with respect to these issues.

II. Background and the Need for New Models of Evaluation

Relative to the fundamental mission of promotion and tenure, is the mission of the department. The formation of the IGM department was a result of the recognition of computing as an interactive and expressive medium, and this view forms the core nature of the academic mission of the department, and the programs therein. IGM was founded on the exploration of computing as a medium, and on a multi-disciplinary approach to the examination, production, and dissemination of media and creative works in several contexts. Scholarly work in the department comprises efforts in interactive games and entertainment experiences, in what has been termed "New Media", work related to the so-called "Social Software" paradigm, and exploration of emerging areas such as physical computing, installation, and so on. The defining characteristic of work such as this is that it spans boundaries, draws from many traditional disciplines, and requires faculty to maintain several distinct skills. In evaluating faculty for promotion and tenure, it is imperative that faculty feel that they can adequately contribute to the work of the department, and to this new, emerging, multi-disciplinary field, without damaging their chances of success within the academic system.

The issue of properly supporting, evaluating, and rewarding multi-disciplinary work is, in fact, one of the largest challenges currently facing the academy (and our peer-class academic programs). In a recent report entitled "Reinvigorating the Humanities: Enhancing Research and Education on Campus and Beyond" Mathae and Birzer write that "universities need to support faculty in exploring these new fields. Faculty members are more reluctant to enter into novel forms of publication and creation if they have concerns that such work will carry less weight in the tenure and promotion process than work published in a more traditional venue. While administrators should, of course, hold digital and online works to the same high standards as traditional works, they should also recognize that in many cases the creation of such work reflects a great deal of effort and scholarship." [7]

Indeed, this quote resonates with the new mission of RIT with respect to innovation and creativity, but it also speaks to the true (but sometimes unspoken) tension between traditional and non-traditional methods of dissemination. This tension is played out in several different venues, but often amongst faculty with respect to tenure and promotion, as members of various disciplines and areas sit on these panels are then expected to review candidates whose work may have little to do with their own. Given the academic breadth of the collaborative disciplines that are touched upon in department work, and the practical nature of the scholarly activity that requires faculty to act as both researchers, authors, artists, and creators, IGM represents a unique and broad challenge within this domain. Once again, this is not a situation unique to RIT, but rather one in which we find ourselves on the forefront with several other institutions of higher education. As noted by the 2003 National Academies report: "Because the field of [Information Technology and Creative Practice] is young and dynamic, ITCP production is hard to evaluate. Traditional review panels...may be hampered by their members' ties to single disciplines and the absence of a time-tested consensus about what constitutes good work in ITCP and why." [8] These concerns over relative weights of various activities and the growing trend involving the difficulty of evaluating multi-disciplinary faculty are further noted in the 2009 Computing Research Association report on tenure and promotion, and in specific the difficulty faced by faculty that operate in an interdisciplinary context within a single department. [22]

This, in turn, can lead to a 'bait and switch' mentality with respect to hiring faculty within a department such as IGM: faculty who are recruited on the notion of an innovative, young department that prides itself on multi-disciplinary work and creative production will find themselves at odds with the review criteria of a traditional discipline. This is happening with increasing frequency within the academy at large, with the following recently appearing in the Chronicle of Higher Education, noting that while academic institutions are increasingly attempting to hire faculty to work in multi-disciplinary fields, "few have a comprehensive approach to dealing with the entire pre-tenure experience. Often, the original hire is interdisciplinary, but as the scholar moves toward tenure the judgment is increasingly on individual contributions, creating a disjuncture: lured into interdisciplinary research touted as necessary for progress in the field, scholars are later held up to inappropriate standards." [9] The National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine jointly commissioned a report on

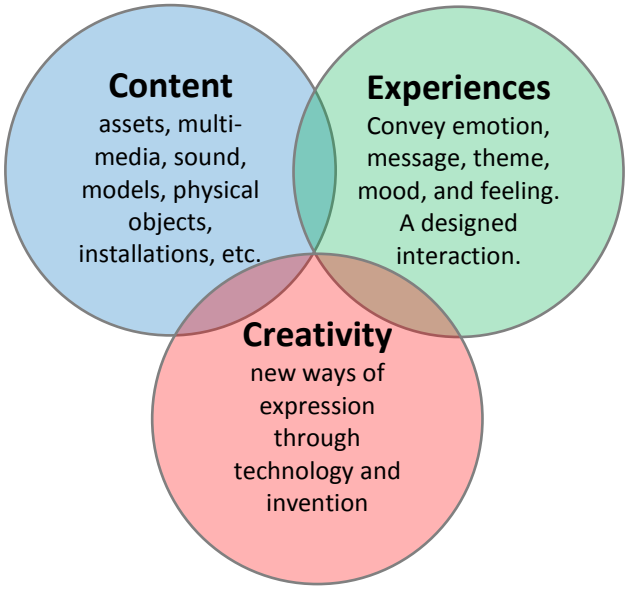


Fig 1: A Model of Synergistic Approach in IGM

IGM realizes this synergy through both an internal multi-disciplinary process, and by collaboration with other programs at RIT

Facilitating Interdisciplinary Research (FIDR) [10] that called for "new modes of organization and modified reward structures" with respect to supporting multi-disciplinary faculty.

The IGM department was founded as a nexus for multi-disciplinary work to thrive and flourish within the context of computing as a medium. The vision statement and charter for the department specifically noted a two-tiered system towards multi-disciplinary study, noting first and foremost that the department itself was comprised of faculty from a wide variety of backgrounds, with degrees in Computer Science, Fine Arts, Psychology, Engineering, Library Science, Media Theory, Mathematics, and other disciplines. [11] The vision statement then went on to articulate the way in which IGM works collaboratively and in a multi-disciplinary fashion with other units on campus, and this has been recently exemplified by our collaborations with Liberal Arts, Fine Arts, the Laboratory for Social Computing, the Innovation Center, Imaging Science and other such units, in addition to several collaborations that extend beyond campus. Grant proposals from the department span a range of funded activity from private industry, work with the National Science Foundation, work with the Institute of Museum and Library Sciences, funding from the Preserving Creative America Act and the Library of Congress. **Thus the department operates both as a multi-disciplinary unit in its own right, and in a multi-disciplinary context with the RIT campus at large.** The context of many of these collaborations, in contrast to other elements within the College, speak to the connections and alignment of departmental work with the Liberal and Fine Arts as opposed to more traditional computing collaborations with Science and Engineering. This is one reason, amongst many, that the culture and operations of the IGM department sometimes seem at odds with other elements of the college. It also speaks directly to the need for different metrics with respect to evaluating the work of faculty in this exciting new field.

Specifically noted in the vision of the new department were two salient points that directly impact this discussion. The first is that the IGM department, in and of itself, is concerned with the creation of content and experience, not merely the underlying systems to do so. Specifically, the faculty noted in their vision of the department that "we are not simply focused on 'building things from or for the user's perspective' – nor are we focused entirely on the systems we employ and their construction: **Our goal is to create highly technical applications and installations to create meaningful, memorable, and entertaining experience.** This represents a focus not just on technology, but on systems that drive message and deliver content, and which in some instances may be utilizing commercially available systems and in other instances relies on the creation of entire technologies from scratch." [11] The second point that is critical to note is that the faculty were anticipating, as a direct output of the formation of the department, that "The Department will allow the faculty to define appropriate standards for their curriculum, scholarship, and research as it relates specifically to their vision of computing as a medium of expression." [12] This is in keeping with several institutions world-wide that have established similar departments, programs, and academic centers - invariably one of the outcomes of such work is the establishment of metrics that can more adequately guide faculty and administration relative to the operation of such units. Several examples of such activity at peer-class institutions are cited throughout this document.

III. Typical Challenges involving Non-Traditional Work

There are several arguments that proponents of more traditional review systems generally put forward as a means to promote the status quo with respect to processes for evaluation and review, and it is important that these are discussed openly and without prejudice such that faculty and administrators can ultimately decide what is appropriate for RIT. The GCCIS Governance committee has made, in the authors opinion, a commendable effort to attempt to allow departments to define appropriate methods for faculty to contribute to their disparate fields within the college, within the context of a college-wide tenure policy. Discussion of that proposal is ongoing at the time of this writing, and it is hoped that the proposal will be adopted in large part by the faculty. In discussion with both the faculty, and the administration, several issues continue to be brought forward as issues of substance that are representative of differing views relative to scholarly activity. A few of the major issues that have

repeatedly been discussed within the recent debates within the College are noted below, with notations as to how these are perceived by the author, relative to the overall mission of the IGM department

III.A Teamwork

Multi-disciplinary work in general, and the work of the IGM department in particular, as well as commercial work in the fields related to IGM academic programs, is more likely to be conducted in teams than by single individuals. As such, research is more likely to be productive when conducted in teams, particularly when such teams comprise faculty, staff, and students with unique backgrounds and skill-sets that allow for operational practices that draw on the strengths of all involved. However, as a result of such practices it is more likely that both traditional and non-traditional work will be created and disseminated by more than one author, and this directly challenges the notion of romantic authorship that is embedded in some traditional review metrics. Current debates in the College run the gamut from "multi-author papers should count for a fraction each" to "faculty from the same department cannot be counted as multi-disciplinary authors" or "faculty are just listing multiple authors to get credit for work each year". Obviously, given the backgrounds of IGM faculty and the mission of the department, the notion that faculty from a given department cannot comprise complementary roles on a multi-disciplinary team is unlikely to find traction with the faculty, but the first argument (i.e. credit for multiple authors or collaborators) is particularly damaging both to IGM and to the academy at large. There appears, at first glance, to be a lack of trust in authors and collaborators to properly describe their own roles in collaborative work, and while it may be the case that some individuals are attempting to "game the system," that should be dealt with on a case-by-case basis. Creating policy or metrics that discourage collaboration and cooperation would be systematically destructive to scholarly work in the department in the largest possible sense.

In a recent report entitled "The Increasing Dominance of Teams in Production of Knowledge" a team of authors from Northwestern University noted that teams "typically produce more highly cited research than individuals do, and this advantage is increasing over time." Indeed, the report goes on to illustrate that this shift has been represented in fields ranging from the sciences and engineering, through the humanities, and it suggests that the fundamental processes of human knowledge production have changed radically from the 18th and 19th centuries in which the notion of the single-author was traditionalized. [13] The MLA Task Force on Evaluating Scholarship for Tenure and Promotion has noted that "Departments and institutions should recognize the legitimacy of scholarship produced in new media, whether by individuals *or in collaboration* [emphasis author], and create procedures for evaluating these forms of scholarship." [14] It should be left to authors, or in the case of collaborative works, the team of authors, to correctly detail the role of an individual with respect to a published work. Such information should be contained directly in the narrative that candidates supply for promotion and/or tenure review. But it is critical that we as an institution provide incentive for faculty to work in productive teams towards the creation of new knowledge: failure to do so, and reliance on models of authorship that have already demonstrated an inability to adapt to modern creative culture, will only decrease the ability of the Institute to compete with its peer institutions, and will ultimately result in less work of national and international impact being produced at RIT.

III.B Publication Format

Tied to the notion of romantic authorship and traditional dissemination is the notion of the paper, and in particular the journal paper. First and foremost, the absurdity of relying solely on the paper as a means of dissemination of new media should be noted: the paper is an appropriate and well-crafted tool towards the dissemination of statistical results, as well as the introduction, discussion, and description of written theories. As a description of interactive works, it is, in the words of Rosemary Feal, executive director of the MLA, "like evaluating an Academy Award entry based on 20 film stills". [23] By reducing the judgment of the work directly to papers about the work, papers describing the work, or papers that explore the

effectiveness of the work, the work itself is relegated to the irrelevant. Indeed, if the sole metric of review is fixated on the post-mortem paper, then the quality of the work itself is meaningless, as it is the quality of the paper that holds primacy. [15] Furthermore, a recent study by the National Academies found that "the highest benchmark for success in traditional academic departments, publication in peer-reviewed journals, is less relevant to success in new media-and empirically less an accurate measure of stature in the field-than more supple or timely forms of intellectual exposition." [16]

Indeed, with respect to the presentation of digital media, and the work of the IGM department in particular, it is often the conferences and/or showings that have more direct impact and relevance on the field, both in physical and virtual gatherings of peers, artists, and collaborators. The National Research Council report cited previously notes that "a flourishing array of conferences and other forums, in both real and virtual space, that provide a sense of community and an outlet as well as feedback [8]...The prestige associated with presentations at major conferences actually makes some of them more selective than journals." [16]

As any casual observer of digital media can relate, the various forms and outlets of creative work have exploded since the birth of the Internet some decades ago, and the scale at which collaborative, rapid-revision works are produced and assimilated into the larger body of knowledge is growing exponentially. It is incumbent upon us, as an Institution, to encourage and promote participation in these new venues alongside traditional methods, and to make clear to junior faculty that involvement and participation in such work does not disadvantage their careers. If we fail to do so, our Institutional mission as a place of innovation will be directly impeded: it is no accident that RIT enjoys a reputation as one of the premier programs in Game Design & Development - it could not have happened elsewhere. Furthermore, the GD&D program was constructed largely by untenured faculty members, pursuing a path that they believed was of benefit not only to their own academic careers and scholarly pursuits, but that would be recognized by the Institute. At other institutions, games studies are still regarded as the "play-place of the tenured" [17] as processes, review metrics, and traditions require that faculty make contributions to their own, traditional, fields prior to engaging in work in a multi-disciplinary field such as game design. It is not beyond the attention of the author that four of the recent hires into the IGM faculty are faculty from more traditional institutions, where their prior institution was not able to appropriately recognize and reward their academic contributions to this emerging field.

Faculty in IGM are likely to publish and present in a wide variety of formats and venues for dissemination, from traditional publications of studies and theories to the presentation and performance of interactive works, to the creation and production of software systems and entertainment products. In their important (and highly cited) call for "New Criteria for New Media", the New Media Department at the University of Maine put forward a list of ten (10) different types of venues/metrics they deemed appropriate relative to the overall landscape of content production, ranging from traditional citation in books and online materials to net-native recognition metrics, visitor counts, online discussion, impact on emerging curriculum elsewhere, etc. [18] Ironically, this work was published in a non-traditional electronic journal. The publication gave rise to significant discussion and citation amongst the new media academic community (including references at prestigious venues such as the Berkeley Center for New Media), which could only be critically assessed using metrics defined in the very publication being discussed. The work on the part of the University of Maine New Media Faculty was later incorporated directly into an alternative tenure and promotion policy by their Office of the Provost, which is available online [19]. Given the rapid advances of the field even since the publication of that work in 2007, it is clear that even their work is now somewhat dated relative to the functional dissemination of knowledge on the Internet, but this should be seen as a call for more flexible and dynamic systems rather than a refutation of new methodologies of production.

III.C Knowledge of the Reviewer

Often in the review of faculty in a multi-disciplinary context, there will inevitably arise the situation wherein a member of a promotion or tenure committee, or an administrator at some level in the chain of review, will not have direct knowledge of the field in which the faculty member is working. This can happen even within a single department when the department operates within a widely multi-disciplinary field. One of the typical, and somewhat appropriate, responses to this issue is to use outside evaluators that are more closely tied to the work of the individual. Pfirman, et al, note that "When people don't know much about a field, they look for validation and external endorsements of research value, in the form of publications, letters, and grants." [20] This is a necessary and appropriate practice, and has been instituted both in the mid-tenure and tenure processes of the Institute by recent directive of the Provost and the Academic Senate.

The Institute should not, however, rely entirely on outside review, or else we would in essence be abdicating our own review processes within the Institute. Thus, it is incumbent upon administrators, faculty members, and peers, to educate themselves, as much as possible, about the field of those individuals for whom they are acting as reviewers. This is particularly critical in the case of administrators and members of review panels: it is decidedly insufficient to, by policy, be in a position to render judgment as to the merit of an individual's dossier, and to simultaneously claim a lack of knowledge of the field in which said individual is working. Rather, there is a shared responsibility, between both the candidate and the reviewer, to exchange information and knowledge such that reviewers can situate a candidate's materials in the context of their field, while not disadvantaging candidates from any particular area relative to the background of the reviewer(s).

III.D Pre-Identification of the Top-Tier Venues and Established Approaches to Interactive Works, Presentations, and Dissemination Practices

There has been considerable pressure during discussions of metrics and faculty evaluation to somehow "pre-define" or generate "the list" of acceptable venues and journals that would be appropriate for the dissemination of work in interactive new media. This notion illustrates the broad misunderstanding of the state of the academic field: attempting to define such a list at this stage would be categorically destructive to the promotion of new and innovative work that sits outside whatever the state-of-the-art practice was at the time of the internalization of "the list".

Consider, as an example, the recent activity of Professor Elizabeth Lawley and Professor Elouise Oyzon from the IGM department and their work in designing, creating, and deploying the recent *Picture the Impossible* title. If one were to have created a "list of appropriate venues and representative examples of work", even a few years ago, it is unlikely that community-based games would have been on that list. Today, the work of the individuals above represents a major scholarly achievement, and carries with it all of the hallmarks of such activity: it is peer-reviewed, disseminated, publicized, it reached a large and public audience, involved several students both at the undergraduate and graduate levels, informed and extended the curriculum of the department, contributed to new understanding of the field, was a platform for intellectual growth for the faculty, and is now leading to other work in the area. Community-based games have become a useful part of our culture, spanning tools such as Facebook and Twitter, augmented localized events such as Pac-Manhattan, and acting as communication and education channels for large audiences - all of which have emerged in the very recent past. This activity, were it undertaken by a junior faculty member, should be appropriately appreciated as excellent work by a promotion and tenure committee, as it meets the goals and objectives of scholarly activity as defined both by Boyer and the relevant RIT Institute policies. Any classification or guideline that overlooks the emergence of such new mediums would ultimately stifle faculty innovation in the pursuit of new frontiers of creative practice. It is unlikely that any document could hope to predict the emerging paradigms of future technology and media system, and it is critical that IGM faculty pursue the cutting-edge.

Likewise, as noted in almost all of the references cited in this document, not only are the forms of dissemination changing, but so are the venues. Several traditional conferences, such as SIGGRAPH, are incorporating games-related content into their purview as well as other interactive media exhibitions, while other, more industry-centric conferences (GDC, Adobe MAX, etc.) are representative of the cutting-edge of New Media in different contexts. Blogs, wikis, and waves are being used both as tools for personal authorship, and as tools for scholarly dissemination and review. The entire academic community is constantly and casually connected, more so than ever before, and the impact of this shift on traditional work is still unfolding. It is unclear the standards and metrics that will emerge from such changes, and attempting to define them, at the very birth of a field, is counter-productive.

As illustrated later in this document, an alternative approach is to construct a model that does not speak directly to the forum of dissemination, but rather contains within the model the requirement that the dissemination of the work, and the venue of publication, is justified by the author and contextualized by the reviewer. Chairs, administrators, and senior faculty should act as mentors for junior faculty considering publication of innovative work in alternative venues, and can act as counsel for drafts of such documentation of dissemination and purpose.

IV. A Model of Faculty Operations with IGM

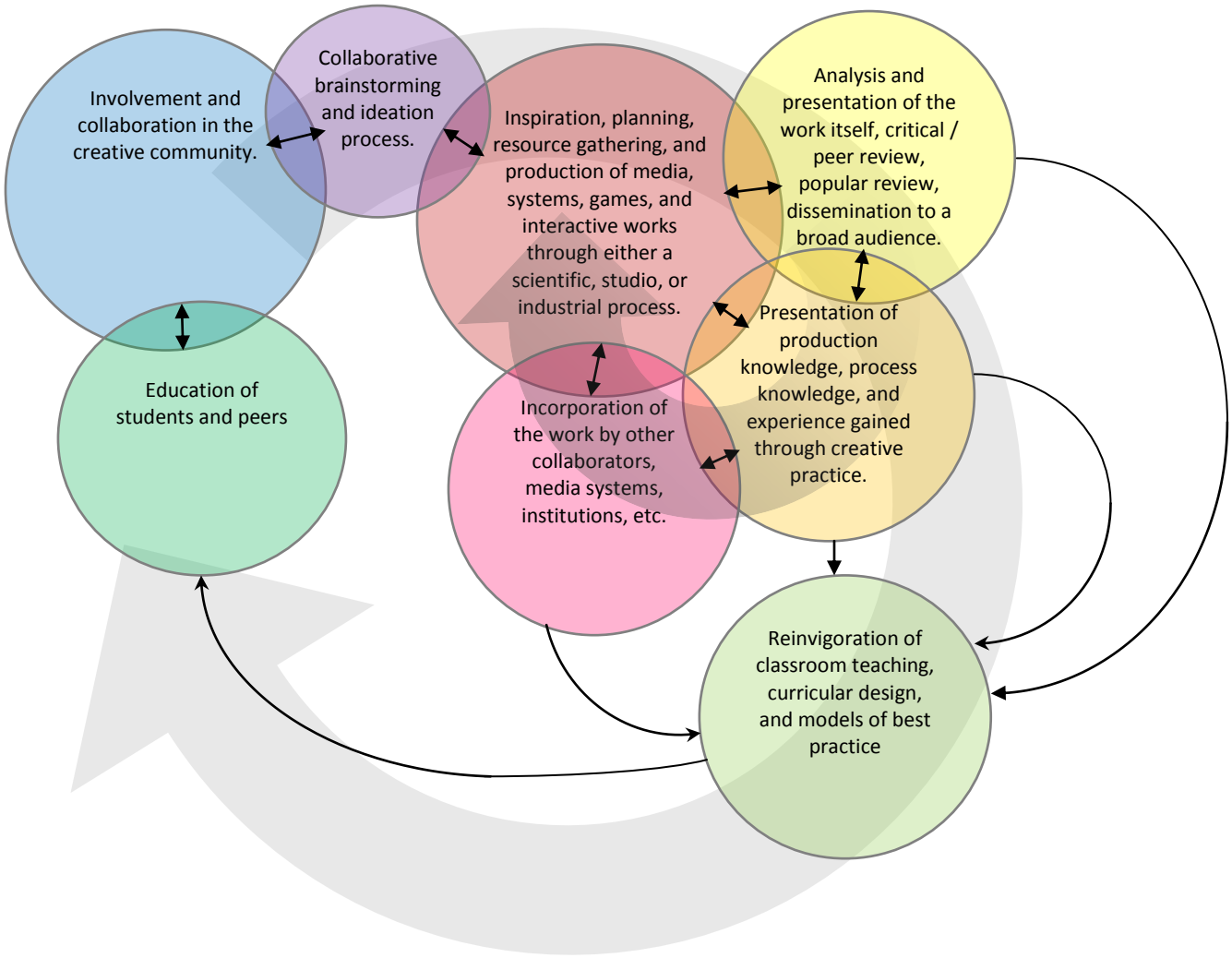
In seeking to create an evaluation scheme to describe and contextualize work within the IGM department for review, it is first necessary to understand the way in which IGM faculty aspire to work in terms of production. Most faculty within the department, within the scope of their scholarly work, operate on some number of distinctly separate projects. While it is often the case that these projects share intellectual understanding and concepts of production, it is usually the project, as opposed to the individual presentation, that in the author's opinion defines the logical unit for evaluation. Projects are variable in their timeframe, sometimes comprising a few months, and sometimes extending several years. Over the course of a faculty member's tenure, several projects in a given space often give rise to a large-scale contribution to an area of research, while at other times a single project can act as a catalyst to radically change the perceptions of the field in a very finite timeframe.

When the view of the project is taken, an almost cyclical model emerges of faculty involvement in scholarly activity. This model begins and ends with the involvement of the faculty in the creative community, through a variety of forms and interactions. This community involves not only peers at other institutions but also our students, other academics in related fields, industry professionals of various flavors, the community of the arts as related to interactive media, relevant institutions of the public such as museums and the K-12 educational community, and the general public at large with which our work must find relevance. It is no accident that the academic programs in IGM are publicly popular, as they speak directly to the public fascination and perception of computing as a tool of expression. But as such a tool, the constituency affected and involved in our work is much broader than purely the academic and/or scientific community. In much the same way as programs in the Fine Arts, the notion of audience and relevance must hold primacy to the work of the faculty in IGM.

Given that a faculty member is an associate of the larger creative community, the next step in project formation is the gathering of thoughts, ideas, and materials such that a plan for a given work is put in place. This is often a collaborative effort involving many individuals of disparate backgrounds. A project is proposed, initiated, and at some point work is produced, whether it is a formalized study of a concept, a new interactive work, or a piece of technology, etc. This can happen through both funded and unfunded mechanisms, and is reflected both in a framework of scientific inquiry or through a studio process similar to those found throughout the Arts and the interactive industry. Regardless of methodology, work is produced that explores concepts and encourages intellectual growth of the faculty. This work in turn leads to presentation, publication through a myriad of different forms of peer-review depending on venue, format, and appropriateness.

Also at this stage, however, a number of other important contributions of the work also come into play. In addition to the work itself, faculty gain knowledge through the production process, and this knowledge is as valuable as the work itself, but often disseminated separately, through a post-mortem, a subsequent publication, etc. As different aspects or findings are discovered through the analysis and review of the work, several different types of presentations and publications are possible outcomes of this process. As noted previously, this is not a replacement of the work itself, but rather an additional outcome of the intellectual exploration undertaken within the scope of the work. Furthermore, this knowledge is likely to be disseminated back to the RIT classroom, and directly influence the curriculum of the department. The degree to which students (a) have an opportunity to learn from the production of the work itself by being involved and (b) the degree to which knowledge gained through experimentation and creative activities inform the curriculum are further metrics of success for any given project. The project eventually concludes after some number of iterations of this cycle, at which point it has hopefully given back in large measure to the very creative community from whence the faculty member was associated at the outset. A crude representation of this process is presented in Fig 2.

Fig 2: A Model of Faculty Productivity and Engagement in Interactive Media



With respect to the overall production of scholarly work within the Department of Interactive Games and Media, it is the author's opinion that members of the faculty are directly responsible for:

1. Advancing the knowledge of the field through the dissemination of their work via publication of papers, presentations, and work in appropriate journals, conference proceedings, and academic, industrial, or public venues. All four forms of scholarly activity as defined by Boyer should be recognized for faculty pursuing contributions in this fashion.

2. Contributing to the advancement of interactive media through the presentation of work at public and private showings, exhibits, contests, and installations, or through the dissemination of work through digital means including (but not limited to) downloadable content, hosted projects, mobile content, and mixed-venue digital/physical installations. Once again, all four forms of inquiry as defined by Boyer are appropriate for work in this vein.

3. Ensuring that their scholarly work involves students at the undergraduate and graduate levels, to the betterment of their education and the work itself. In addition, scholarly activity within IGM should advance not only the understanding of the faculty and project personnel, but the curriculum of the department.

4. Establishing for themselves a cohesive plan for their work and scholarly contributions (i.e. a 'research area') both as individuals or, as is increasingly likely within the context of interactive media, in collaborative teams that span departments, colleges, institutions, and the academic and professional community.

5. Ensuring that their work is timely and relevant to the greater academic community and the generalized public. Due to the public nature of departmental work and the notion of media consumption in general, contextualizing work with the public is essential.

6. Contribute directly to the department and the goal of the Institute to act as an 'Innovation University', through contributions in areas 1-5, and through sustained involvement in the creative and academic community. Scholarly activity should be seen as a dialog in and amongst the faculty both at the department level, and throughout the professional field.

Ultimately, it is the goal of the author that the department is seen, with respect to its scholarly activities, as a leader in the field. The collective scholarly works of the faculty should not only represent individual contributions, but should together continue to re-contextualize and define the field of Interactive Games and Media. Currently the IGM Department, and its academic programs, enjoy world-class reputations within the field: the scholarly activities of the faculty are critical to maintaining and extending this position within the larger academic landscape. **Our work should continue to be the model of practice for others.**

NOTE: (Section V, Comprehensive Evaluation Metrics for Creative and Interactive Works, is excluded from public dissemination as it discusses internal policy and documentation).

VI. Conclusion and Further Discussion

In conclusion, it is the opinion of the author that the Game Design and Development Program and the New Media Interactive Development Program, within the Department of Interactive Games and Media represent a unique vision of the study of interactive media, and that this vision places our scholarly work outside several traditional boundaries typically thought of as connected to computing and information sciences. This is not a situation entirely unique to RIT, as several institutions have dealt or are dealing with these issues, some through the formation of multi-disciplinary units such as the Entertainment Technology Center at Carnegie-Mellon University or the Digital Games Research Center at North Carolina State University, and others through the formation of multi-disciplinary departments such as the

Department of Interactive Media at USC. Regardless of approach, it is critical that we preserve the notion that junior faculty members can contribute to this exciting new field in forms and formats that are yet to come, to the betterment of both their own academic careers and the Institute as a whole. With this goal in mind, the author puts forward this paper, not as a fully constructed set of arguments and metrics, but rather as a tool to begin discussion and discourse between and amongst the faculty and the administration on their opinions and needs relative to the review process. This is in keeping with the view of a chairperson as the liaison, in both directions, between the departmental faculty and the administration. It is the hope of the author that, through constructive dialogue, the revisions to the promotion and tenure policies result in a system in which faculty are encouraged and excited by the potential of their continued contributions to the Institute.

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