

**Rochester Institute of Technology
Center for Multidisciplinary Studies**

**Program Review Consultants' Report
October, 2014**

Role and Mission

The Center for Multidisciplinary Studies at the Rochester Institute of Technology provides the institution with a flexible manner of responding to both student and faculty interests. Originally created as a response to the needs of adult and nontraditional learners in the extended campus program, the Center and its program have outgrown their original mission and design.

The Center for Multidisciplinary Studies currently offers a variety of programs, including associates, bachelors and masters degrees, as well as an overseas program located in Kosovo. The Center also has a history of working with industry to provide professional programs for employees of corporations such as Kodak as well as serving as a regional training institute for the Occupational Safety and Health Administration. This diverse set of programs makes the Center a valuable asset to the institution but also creates a risk of being pulled in many directions and diluting the focus of its core mission: to better support students, to enhance cross-college collaboration, and to participate with other units in extending RIT's global reach.

The current juncture, with a new strategic plan being developed for the Institute and a new Executive Director leading the Center, provides an ideal opportunity for the Center to reinvent itself and refine, or redefine, its mission and vision. While the three core elements of mission expressed above are critical, the meaning and context of each should be carefully considered as the Center develops its own strategic plan: what defines the students served and what unique support do they receive? How does the Center enhance cross-college collaboration and what is its role in RIT's global reach? In essence, how does the Center continue to provide unique programs that serve students and promote RIT's reputation as the "people's institute" where life-long and experiential learning meet innovative and agile thinking in order to produce exceptional candidates for an ever-evolving job market?

The Center for Multidisciplinary Studies is currently located within the Provost's Office and this position offers it the opportunity to operate somewhat independently of the existing Schools and Colleges. The new Executive Director sits on the Council of Deans and this is a critically important fact in maintaining the Center's status and presence within the institution. Nonetheless, in the context of the Center's programs and curriculum, it would be best served by defining it as an academic unit (department or school) with the capacity to grant tenure to a core faculty appointed within CMS (see further discussion below).

As described further below, RIT's emphasis on critical thinking and on undergraduate research in RIT's vision of its future argues for an important role for CMS in creating a space for high quality students to shape intentional degrees that link differing arenas of study. Finding ways to enhance the multidisciplinary quality and options for faculty and students, and innovating in that sphere should be a part of the mission of CMS. For RIT to make some movement away from its highly siloed structure, CMS will need to be enabled to push the envelope. Its mission should evolve to include an expansion of the support CMS offers to RIT: the CMS should work to enable innovative multidisciplinary study that allows selected students to combine work in different RIT majors and colleges so as to produce a valuable professional flexibility.

Current Status of the Center and its programs:

Degree Offerings:

At the undergraduate level, the bimodal student population at CMS, which we believe should continue to be a part of its identity, creates the need for separation of a completion path from a more intentional individualized path that can attract incoming students seeking a unique degree. The Center currently offers a single bachelor's degree (BS in Applied Arts and Science) as well as an associate's degree. Students choosing this program, whether early or late in their academic career, currently embark on a planning process that may not support the needs of both populations.

At the Master's level, a Master's of Science in Professional Studies, and an advanced certificate in Project Management serve students – many of whom are employed at the Institute--with a flexible program allowing for the combination of multiple focus areas. There is concern about the variability of student quality and possibly a similar bimodal population: some students seek this Master's degree in order to fit a specific career path that requires multiple disciplinary focuses. Others may arrive to complete an alternative degree after having started elsewhere. In considering the direction of the programs at the Master's level, and the mission of the Center more broadly, it is worth considering whether a "completion" program at the master's level is valuable for the Institute.

Curriculum:

The Center offers a number of courses in a variety of disciplines, but the reviewers noted that many of these are not by nature multidisciplinary and may belong instead in disciplinary departments and colleges. The reasoning behind these course offerings is that insufficient sections or seats are available in the courses taught by departments, particularly but not only to nontraditional adult students with limited schedules. Although this reasoning is solid, it may better serve the Center to negotiate course offerings (or sections) with the relevant departments, creating opportunities for new courses and sections in those

departments, rather than duplicating and risking a perception of lower standards in the Center-sponsored courses. It is our opinion that some resources should be made available to allow the CMS director to negotiate with other departments and colleges. This would allow CMS to offer courses of a different kind that provide multidisciplinary study of high quality, raising the profile of the Center, its faculty, and its curriculum, which are currently viewed in some quarters as sub-par.

Given its stake in promoting multidisciplinary collaboration, the Center should better invest its faculty and resources in creating courses that cross disciplinary lines and bring together interested faculty from other departments to collaborate on new ideas. RIT's status as an institute offering top-notch faculty with expertise in industry and technology suggests that faculty would be interested in exploring new fields not currently contemplated in the standard curriculum. The Center's flexibility and position within the Institute, particularly if enhanced with resources to promote collaboration, could offer a sort of "just in time" capacity to respond to emerging interests and markets, further building the Institute's reputation as a pioneer at the intersection of academia and industry.

At the Master's level, there is particular concern about the curriculum designed to serve as "bookends" to the graduate program. Faculty and students both expressed concern that these courses provided insufficient academic grounding for the individualized or interdisciplinary work expected. Faculty also noted that students had insufficient contact or touch points during the middle portion of the degree. Gallatin recently went through a revision of the Masters degree precisely to create just such a touch point for students along the way, and this revision has greatly strengthened student experience of the MA and also its academic quality. Equally important, the capstone experience in the Master's degree should entail close work with a faculty advisor(s) in the field of study. It was not clear to the reviewers whether or not this occurs consistently.

We wish to stress the importance of not having one professor teach the two required masters courses in the current MA structure, or for that matter controlling large parts of the graduate or undergraduate curriculum. Such a model, often the result of a unit having too few faculty, can allow individuals who are not necessarily ideal for a given role to develop a kind of fiefdom, and students can be trapped by this kind of structure, unable to articulate their discontent out of fear of reprisals from the faculty member who controls the program. Circumstances where a "graduate Director" or "MA Program director" appoints him or herself to teach the majority of graduate courses should be avoided. Graduate courses and the graduate curriculum needs widespread ownership by a cohort of faculty, and the teaching of final or capstone courses could well be an ideal setting in which to utilize the kind of "buy out" teaching opportunity that might attract faculty from other units. But for graduate students in particular it is crucial that they not be required to study with only one person for all the required courses of the degree. Such a structure restricts dramatically their multidisciplinary training and experience.

Students and Student Satisfaction:

The reviewers met with both students and alumni/ae during the site visit. Those interviewed expressed general satisfaction with their program of study, particularly because in many cases it provided them an option to complete a degree when other programs at the Institute would not have served them well. Student observations and satisfaction were consistent with those expressed in the student surveys shared in the Program Review report. Concerns were expressed primarily about access to and availability of courses (i.e. students experience difficulty in enrolling in courses hosted by departments that give preference to their own majors). Students and alumni/ae expressed a sense that in some instances the curriculum and degree might be somewhat lower quality than programs offered in other departments.

Of particular concern at the Master's level were the courses designed to assist students in developing their program and the capstone course (see further discussion below).

Faculty:

The Center currently has very few permanent faculty, being served primarily by adjuncts. According to the Program Description provided (p 29) 83% of undergraduate credit hours (though only 22% at the graduate level) are taught by adjunct instructors.

Academic programs should be run by tenured faculty. While many adjunct instructors are excellent, the current lack of balance at CMS creates doubt about academic quality and the Center is perceived as somewhat illegitimate in part, we think, because there is not a tenured faculty to make academic decisions about programs of study and to guide the academic direction of the Center. In several interviews, the reviewers heard concern about the lack of academic oversight, perhaps heightened by what was referred to as a "Wild West" attitude towards rules and integrity. This concern, combined with a funding model that sets the Center up as a competitor, undermines the unit and its capacity to serve the Institute well as a center of collaboration, innovation and flexible options.

We believe that CMS should develop a core faculty, appointed in CMS (with associations in academic departments in other colleges) that is widely respected and collaborates across the institution. The number of appointments should be sufficient to offer a significant multidisciplinary curriculum, to provide advising to students and to provide academic leadership enabling serious collaboration with other units. The current advising model, though supported by excellent professional advisors, deprives CMS students of the critical faculty advising they should receive. A tenured faculty will also be best able to provide greater service to the Institute more broadly, creating stronger connections to other departments and schools.

This core faculty can be supplemented by faculty “bought out” temporarily from other colleges and departments and it also may be possible that using the mechanism of some joint appointments would enable the building of more collaboration across units.

Experience with efforts to tenure interdisciplinary faculty through the tenure processes of other departments suggests that tenuring CMS faculty from outside CMS will be very difficult and create increasing roadblocks. For this reason, creating a mechanism for tenure within CMS is a strong consideration.

Another consideration is to create a model that provides greater opportunity for active involvement of adjunct faculty beyond course instruction. This would be another way of strengthening both the center and the faculty, and it coincides with national emphasis on contingent faculty that suggests that a role in governance and engagement with service and other aspects of faculty life, where appropriate, is one of the best ways to give respect and improve contingent faculty job engagement and experience.

Resources/Institutional Support:

The Center for Multidisciplinary Studies is located directly under the Provost and appears to have solid institutional support at that level. Given the number of students served, including the program in Kosovo, the staff charged with advising and working with students is likely strained to provide the level of attention needed by students who are creating unique degrees and/or completing a degree late in their career.

The funding model, as it was described to the reviewers in several interviews, appears to create a competitive attitude that may not serve students well. In the case of the Center, this funding model, which we understand to reward departments for the number of majors rather than credit hour production, creates an unhealthy tension for students in the Multidisciplinary program seeking to take courses elsewhere. Given that the very concept of interdisciplinary or multidisciplinary learning rests on collaboration among discipline-based fields of study, the Center can only encourage such teaching and learning if structures exist to support it. If the Center were granted resources to share with departments where CMS students study (a model of purchasing seats, for example) it would enhance such collaboration and provide students better access to the excellent academic resources of the Institute. Further, experimenting with a different funding model at the Center, with funding following the student to each department where s/he studies, would perhaps allow the institution to vet a new model to be implemented more broadly.

Recommendations:

The two greatest concerns to emerge from the review, captured above, are the issue of faculty and the existence of a bimodal student population with different needs. Serious consideration should be given to developing a new structure for CMS faculty, including the ability to grant tenure, and to addressing the need for two distinct programs: a multidisciplinary studies program to support students seeking to complete a degree, and a more intentional, individualized or integrative learning program that serves students earlier in their academic career (freshman and sophomores) as they build a unique degree that integrates learning in distinct disciplines. Although the size of the program may not change (i.e. it does not need to be expanded per se), the attention required to implement a dual program well will require additional (and different) resources. More specifically, the following are key elements to be considered:

Creation of two distinct tracks or programs within the Center for Multidisciplinary Studies:

In some ways, multidisciplinary and interdisciplinary are similar terms, but as it is practiced in an individualized academic setting, interdisciplinary suggests a higher degree of integration where the strengths of different disciplines can be brought to bear on an issue and a problem rather than simply the parallel lines of a double or triple major. This is a growing concept nationally and is very marketable in terms of attracting creative and energized students.

A more intentional and individualized degree program will respond to (and attract) students who enter RIT with a unique interest or focus and will be an exciting alternative for sophomores looking to combine areas of interest. This program should be geared towards Honors level freshmen and sophomore students and would attract exceptional students who do not quite “fit the mold” but are drawn to a science and technology focused program, providing them an attractive option at RIT. This program would include a supporting course sequence that requires exploration of interdisciplinary ways of problem solving. Programs at Drexel University and Duke may provide examples.

At the same time, the Center should continue to serve the population it currently serves well: students who need the flexibility and support of a multidisciplinary program in order to complete a degree. Despite their “accidental” arrival at the Center, these students often bring unique needs and interests. A well-designed program that supports such students will transform them from potential dropouts into strong graduates who will be loyal alumni/ae of RIT. We recommend that CMS work with chairs and deans to agree on the value of both the “completion” path and the individualized or intentional path. Stakeholders across the institution should be clear about the role and mission of the Center and how it serves a positive purpose for the institution.

Finally, all students at CMS should be encouraged to make their courses of study more intentional or reflective. Requiring at least a year or a semester of study in CMS may be one way to achieve this. Another option may be developing one or more capstone courses in certain fields of study that would support students as they reflect on and synthesize their learning. Even for the “accidental” student, being required to articulate how a seemingly disparate set of courses supports essential learning outcomes will enhance their ability to translate their learning into the skills and knowledge sought by employers.

Creation of a core faculty for the Center:

As described above, the Center should be provided the resources and structure to develop a faculty that is widely respected and collaborates across the institution. We don’t propose to comment on the number of appointments needed, and they certainly may be supplemented by buy outs from other departments, but we note that the number of faculty should be sufficient to offer a significant multidisciplinary curriculum, to provide the needed advising, and to provide academic leadership. We believe then that we are not talking about as small a group as 2-3 faculty members. Such a group would not be sufficient to support and enable the changes we see as valuable for RIT and CMS.

The concentrations at CMS tend to reproduce disciplinary categories and are not interdisciplinary (i.e. integrated multidisciplinary studies) or always even multidisciplinary. With an interdisciplinary faculty, CMS can energize all its students to be more adventurous and take greater advantage in terms of the opportunity for innovation and entrepreneurship implicit in the multidisciplinary model.

Master’s Degree Program:

At the master’s level, we recommend that CMS develop stronger curriculum and a process to support incoming students as they develop their plan of study. The Graduate program can be a doorway to combining 2-3 subjects at RIT but two things need to happen to make this a more rigorous and therefore MA-worthy degree: (1) the graduate program should be more flexible (i.e. more individualized) and allow students to continue to develop skills in the areas in which they are concentrating rather than fulfilling requirements that do not connect to their areas of study; (2) Graduate students need to be able to work with advisers in the fields they are studying in, especially for a capstone project. The Center should also consider whether it is desirable to limit entry to students just starting a program, or whether the “completion” path is needed at RIT.

International Programs: The international programs appear to be important to both the Center and RIT, but how they fit with the rest of the Center needs to be clarified. Currently they

appear to be an entrepreneurial endeavor with no strong ties to the rest of the home institution.

We had several interviews which addressed the Kosovo degrees, and while this has not been a major focus of our review (CMS at Rochester has been), we would recommend that other degrees also be offered at Kosovo, as well as continuing the CMS option with more clarity about how valuable preparation in several fields can be.

We would recommend that RIT and CMS make more use of the program in Kosovo by developing a more active sense that CMS intentional students might benefit from choosing a semester abroad. We encountered little sense on most people's part that study in Kosovo could provide unique opportunities for RIT undergrads. This runs counter to the growing trend at US universities of encouraging students to participate in global programs that go far beyond the once-traditional semester in Paris or London: students benefit by being exposed to a dramatically different culture and environment where they can participate in learning that immerses them in the multiple meanings of globalization. Particularly for students in STEM or STEAM fields, this can be a transformative experience that makes the difference between a good education and a great one.

In AUK, creating ranks like Lecturer/Senior Lecturer would allow faculty to be promoted. Faculty need to feel that their engagement with the institution is recognized and rewarded and opportunities for promotion provide such recognition.

Kosovo students have done very well after graduation and perhaps more tracking of where students go would allow the RIT Rochester faculty to appreciate the quality and appropriateness of the RIT branding in Kosovo.

Creation of a cross-institutional advisory committee and enhanced internal marketing: We recommend the creation of a cross-institutional advisory committee to foster greater understanding across units of what CMS does, to create a body of faculty who can provide academic advice for the Center Director, and to help identify appropriate faculty members from across RIT in advising students in capstone courses, especially graduate students. Such a structure would provide a greater sense of academic oversight outside of the Center, and would help CMS tell its story, providing an opportunity for "inreach". We heard from several participants that CMS is the "best kept secret on campus." Students commented that "Many professors at RIT don't know what CMS is." We believe that this is probably true and think that with a re-defined and strengthened role of CMS, this should change—some real work including publicity and collaborative opportunities will be necessary to increase knowledge of CMS and what it can offer both students and faculty.

One area in which CMS can fruitfully develop stronger collaborations is with the arts—especially with the centrality of STEAM as a national development of a different model and way of rethinking STEM. Getting artists and designers to get credit for interdisciplinary work will benefit them and CMS students, and create more innovative spaces for RIT.

We heard that there is not a good relationship now between CMS and CMS advisers on the one hand and faculty and administrators in the College of Liberal Arts on the other. If this is true, the College of Liberal Arts represents a very fruitful arena for better collaboration. In addition, CMS should include more options for individualized study and there could be more engagement with College faculty to help oversee individualized courses of study.

Funding model: We recommend a funding model that will provide resources to CMS to enable it in turn to provide resources to departments that allow CMS students to study in their classes and to take advantage of advising made available by their faculty. As we stated above, we believe that a funding system whereby a student brings funding related to the credit hours taken in a given course will give CMS the leverage needed to make sure that when the CMS students graduate, they have in fact been able to take advantage of the high quality instruction across the Institute.

Admissions:

We believe that RIT and CMS will be best served if CMS is able to be engaged in admitting a small cohort of strong freshmen who would be “majors” as RIT budgets them. We believe that it will be important for the leadership of RIT and CMS to bring Admissions in line with this vision, since in our interview we found them strongly opposed.

Development of a strategic plan: With all of the above considerations in mind, and based on the fact that RIT is currently completing a new strategic plan, the development of a CMS strategic plan is highly recommended. Such a plan will ensure that CMS programs and initiatives fit firmly within the broader plans of the Institute, focus energy on a few key elements, and avoid mission creep. Further, by engaging participants from across the institution, the development of this plan provides an additional opportunity to engage others in better understanding of CMS and its value for students and faculty.

This review is jointly submitted by Elizabeth Parmalee and Susanne Wofford.