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Table of Contents

Editorial Policy ii

FEATURE ARTICLES

An Examination of the Current State of Retirement Savings with a Focus on Individual Exemptions
Cassandra R. Cole, Kathleen A. McCullough, and Stephen P. Paris 107

"There's a Guy in the Center Aisle with a Gun!" —Workplace Homicides and Shareholder Wealth
Michael J. McNamara and Stephen W. Pruitt 132

Curriculum Design in Risk Management and Insurance Education
Mark S. Dorfman, William L. Ferguson, and Tamela D. Ferguson 158

BRIEF ARTICLE

Probability Weighting in Damage Claiming Decisions
Yoram Eden and Doron Sonsino 179

IIS Call for Papers, 2007 193

ARIA Call for Papers, 2007 196

SRIA Call for Papers, 2007 197

WRIA Call for Papers 198

Curriculum Design in Risk Management and Insurance Education

Mark S. Dorfman,[*] William L. Ferguson,[**] and Tamela D. Ferguson[***]

Abstract: This research note presents findings from a survey of faculty regarding curriculum design issues in risk management and insurance (RMI) education. Several course offerings may be viewed as primary foundations of RMI education, including *Principles*, *Risk Management*, *Employee Benefits*, *Property Insurance*, *Liability/Casualty Insurance*, *Life/Health Insurance*, and a *Capstone* experience. With very few exceptions, RMI faculty across various demographic profiles including gender, rank, tenure status, administrative experience, dissertation committee/chair experience, professional education, and institutional degree offerings generally agreed with this view. However, faculty who perceive higher levels of research expectations at their own institutions were more likely to view certain other specialized content as important in an ideal curriculum, including *Actuarial*, *Case Study*, *E-commerce*, *Economics/Econometrics*, *Legal Aspects of Contracts*, and *Marketing/Sales* courses. Identification of courses deemed fundamental to RMI education, and related curriculum assessment issues, should prove useful to strategic decision makers in higher education interested in the development or maintenance of an RMI program, and facilitating better allocation of scarce resources.

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"Individual insurance courses and a sound undergraduate insurance curriculum constitute one path among many helping students become well-educated people."

—Mark S. Dorfman (1990:, p. 47)

INTRODUCTION

This research note discusses and reports findings from a survey of academic experts regarding aspects of two strategic issues likely to affect the future of risk management and insurance (RMI) as an educational discipline: curriculum design of RMI programs and course content. University-level courses in insurance law first were offered in the United States in 1874; general undergraduate survey of insurance courses had appeared by 1910, and popular, diverse insurance course offerings were quite widespread by 1948 (McCahan, 1951). Rapid expansion eventually slowed, and then reversed to the point that one oft-cited study found few "stand-alone" collegiate RMI programs remained, and the number of institutions awarding terminal degrees in RMI had diminished, despite broad offerings and enrollments generally high enough to satisfy demand for faculty (Gardner and Schmit, 1995). A more recent survey into the current state of RMI education found that nearly 50 percent of RMI academicians believed their institution would offer more undergraduate RMI courses over the period 2001–2010, while 43 percent believed more graduate courses would be offered over the same period (Ferguson, Dorfman, Frickel, and Ferguson, 2000).

Potential expansion of RMI programs and course offerings is greatly facilitated to the extent that a common body of coursework is generally identified and/or accepted by RMI educators, and is demonstrable to academic administrators. Similarly, should anticipated expansion in RMI programs fail to occur, such demonstrated greater commonality also may be an important asset to assist faculty in preserving the essential critical mass necessary for RMI to remain viable at a particular institution, as well as remaining a viable and distinct discipline. The likelihood of significantly increased rates of attrition among current terminally qualified RMI faculty has been noted, as approximately 40 percent of respondents to that recent survey indicated they planned to have retired by 2010 (Ferguson et al., 2000). Adelman and Dorfman (2000), focusing solely on limitations imposed in publishing traditional textbook-type resources for advanced RMI classes, also portend the unpleasant possibility that the RMI discipline may already have lost potentially important aspects of basic educational resource availability.

In contrast to such dour concerns, this research note finds that RMI education, though relatively specialized, remains reasonably healthy and

is supported by an esteemed body of academicians who generally demonstrate common beliefs. We thus assume RMI will continue as a distinct discipline, and validate core and elective coursework seen as fundamental to RMI education. We contribute to the maintenance of RMI viability by reporting results from a survey of RMI expert academicians across North America who were asked to appraise certain RMI program curriculum design issues. We begin with an overview of some RMI curriculum design and assessment issues, followed by discussion of our survey methodology and presentation of respondent demographics. We then review and discuss significant findings and study limitations, as well as provide our conclusions.

RMI CURRICULUM DESIGN IN A DYNAMIC ENVIRONMENT

The importance of risk and insurance concepts to the collegiate business curricula, including minimum recommendations for general business administration students, was formally and unanimously recognized at the 1960 annual business meeting of the American Risk and Insurance Association (ARIA Committee, 1962). A regular feature segment devoted to "curricular concepts in risk and insurance" and pedagogy subsequently appeared in the ARIA *Journal of Risk and Insurance* over at least the next fifteen years, edited by well-respected professors such as John D. Long, Ronald C. Horn, and Charles P. Hall, with several articles appearing since on an *ad hoc* basis as well as in educational insight segments of the newer ARIA *Risk Management and Insurance Review*. However, Dorfman (1990) provides arguably one of the most passionate, detailed reviews and argument in support of the role of undergraduate risk and insurance education, as well as practical difficulties facing RMI academicians. Dorfman advocates encouraging the development of sound critical thinking (including moral and ethical reasoning), facilitating effective use of communication and language skills, imparting an understanding of human behavior and societal problems, and integration of knowledge across subjects (including, and beyond, business courses) as fundamental areas key to the success and worth of risk and insurance course offerings.

Curriculum design continues today to require very careful consideration by RMI educators as both the insurance industry and the practice of risk management have undergone, and continue to undergo, rather monumental environmental changes brought about by the interplay of many factors, including globalization, convergence of financial and insurance markets, terrorism, and changes in communications, technology, and

regulation, among others. For example, in the area of regulation alone, several sweeping federal laws, such as the *Financial Services Modernization Act of 1999* [Public Law §106:102; *a.k.a.* the Gramm-Leach-Bliley Act], the *Economic Growth and Tax Relief Reconciliation Act (EGTRRA) of 2001* [Public Law §107:16] and the *Sarbanes-Oxley Act of 2002* [Public Law §107:204], have significantly affected financial services markets generally and insurance in particular. Gramm-Leach-Bliley removed long-standing industry firewalls "to enhance competition in the financial services industry by providing a prudential framework for the affiliation of banks, securities firms, insurance companies, and other financial service providers." Sarbanes-Oxley, motivated originally by extreme accounting, investment, and ethical irregularities revealed in the well-publicized collapses of Enron and Arthur Andersen, requires all firms—including insurers—to comply with significant additional disclosure requirements, in addition to the already heavy burden of regulatory oversight imposed on insurers regarding accounting and investor- and consumer-protection practices. The *EGTRRA* almost totally revamped existing provisions of estate taxation, as well as amending key pension and individual retirement account (IRA) laws, qualified education and tuition programs, and other major areas of income taxation, all of which continue to dramatically influence virtually every segment of the financial and estate planning industries. The depth and breath of such monumental environmental changes to date, as well as those potentially yet to come, may well require a future curriculum quite different from the current content of some RMI courses.

As a result of such significant areas of change, one of the more important questions facing RMI educators therefore remains "what should we be teaching our students?" Should we teach "health insurance company operations" or "professional financial planning," or how might we best incorporate "ethics" (Boose and Dean, 2000)? What are the pros and cons of using real-world case studies (Nyce, 2002) or simulations (Russell, 2000)? How might we effectively communicate esoteric theoretical concepts such as Prospect Theory (Barth, Hatem, and Yang, 2004), or the practical role of "surplus lines" markets (Hamilton, Greene, and Wood, 2003)? Should we continue to teach "estate planning" or should we emphasize "insurance and e-commerce"? For example, if the federal estate tax is in fact repealed before it currently is scheduled to sunset on 31 December 2009 (see, among others, CCH, 2001), a strong argument might be made to reduce scarce class time and resources devoted to that topic; but given the 2006 national election results, federal estate taxation may be retained—or increased. Likewise, if significant growth in volume of insurance transactions continues to be made over the Internet, it may make sense to incorporate greater consideration of that marketing channel in RMI classes.

Some traditionally abundant job opportunities for RMI majors, including jobs in marketing life, health, and property insurance, may no longer be as plentiful in the future (Ferguson et al., 2000). Likewise, the former role of insurance purchasing manager, which evolved into the risk manager of today, is likely to continue to evolve and undergo great change in response to ever more highly publicized problems, whether from terrorism, natural disasters, or myriad other potentially costly loss exposures. Whether holistic enterprise risk management continues to become widely accepted or not, educating the risk managers of tomorrow may require more time spent on financial mathematics, or other topics, than historically has been the case.

Within any curriculum, whether actual or ideally planned, development of broad measures by which to gauge appropriate course content and desired student knowledge levels is a necessary precursor. Although assessment of RMI programs is still a relatively new phenomenon, direction from the Association to Advance Collegiate Schools of Business, International (AACSB, the premier business collegiate accrediting body), as well as greater accountability desired by some state legislatures and other funding agencies, already has resulted in the need for more clearly developed and logical assessment standards appropriate to the RMI discipline (see Feldhaus, 2002, for a discussion of one model program). In this research note, we do not set up and test specific hypotheses, but instead analyze and report systematic differences that exist across a broad array of demographic factors among respondents to a survey on certain issues in RMI curriculum design.

METHODS

Academic members of the three major risk management and insurance organizations—the American Risk & Insurance Association (ARIA), the Southern Risk & Insurance Association (SRIA), and the Western Risk & Insurance Association (WRIA)—were surveyed by mail, assured of complete anonymity in their response. The survey instrument was pre-tested with several RMI professors, though all errors remain the responsibility of the authors. Pre-survey notification to potential recipients was undertaken by e-mail when addresses were available, and the survey was surface-mailed to four hundred twenty-eight academic members constituting the combined North American mailing lists of the three RMI academic associations, eliminating duplicates. Reminder e-mails were sent seven and fourteen days after the postal mailing.

Eighty-seven usable responses were received, for a response rate of approximately 20 percent, which is comparable to other RMI survey-based research (e.g., Ferguson et al., 2000; McNamara and Kolbe, 1996; Outreville and Malouin, 1985). Resulting statistical power allowed us to detect medium and large effects, but not small effects, across most of our statistical tests (Ferguson and Ketchen, 1999). Respondent demographic information is provided in Table 1, and the relevant segments of the survey instrument are reproduced as Appendix A. The decision to utilize complete respondent anonymity in the survey was made in order to facilitate and increase the likelihood of more candid response and reduce potential non-response bias, as well as to minimize sources of survey-introduced bias (e.g., framing). The indicated statistical power of this study was not adversely affected, as indicated, and the informational advantages from anonymity were deemed to satisfactorily outweigh any disadvantages.

RMI is a highly diverse field with boundaries that may be somewhat unclear (see Ferguson et al., 2005, for a broad discussion of boundaries). To get a clearer picture of the scope of RMI-related course offerings, respondents were asked to report the frequency they personally taught specific courses, along with the frequency those courses were taught at the institution of higher education where they were employed. Those RMI academicians, as the recognized experts in the field relative to non-RMI academicians, were then asked to design an "ideal" RMI curriculum based on their individual experience and expectations for the future, given typical graduation requirements and scarce resources. To reduce introduced bias, respondents were simply instructed to consider the content of each potential course to be "generally accepted" and closely related to the stated course description/subject label. Finally, respondents also were asked to indicate whether the given course should be considered to be an essential core course, a desirable elective, a luxury course, or an unnecessary course offering in a robust ideal curriculum.

A final, minor series of questions were designed simply to very broadly query areas that might be used to measure typical course content and delineate necessary knowledge for students who might choose to take a single RMI class versus focusing their degree study in an RMI program. Using a basic seven-point Likert scale ranking (1 = "unimportant" to 7 = "indispensable"), respondents were asked to complete the phrase "Students should be able to demonstrate an understanding of _____," followed by a list of sentence fragment items ranging from RMI vocabulary to product knowledge. Separate ratings were collected with respect to expectations for *any* student enrolled in an initial undergraduate-level RMI *Intro/Principles*-type course, as well as expectations regarding only those students *majoring* or intending to major in RMI at the baccalaureate level.

Table 1. Summary Survey Demographics

	N	Professor	Associate	Assistant	Other
Academic rank:	85	39 (46%)	25 (29%)	17 (20%)	4 (5%)

				% Quartile		
Tenure status:	N		Mean	25	50	75
Tenured: 67 (82%)	82	Terminal earned:	1983	1973	1985	1993
On track: 15 (18%)		Tenure earned:	1989	1979	1990	2000

Teaching experience:							
Range (years):	0–3	4–7	8–11	12–15	16–20	21–25	25+
Years teaching:	5 (6%)	13 (15%)	10 (12%)	12 (14%)	10 (12%)	7 (8%)	29 (34%)
Years until retirement:	12(14%)	10 (12%)	9 (10%)	7 (8%)	13 (15%)	3 (3%)	23 (27%)
Retired: 9 (10%)							

Professional time allocation (100%):				University	Community		
N		Teaching	Research	service	service	Consulting	Other
82	Mean:	.4378	.2693	.1629	.0418	.0695	.0200
	S.D.:	.1872	.1556	.1320	.0605	.1292	.0860
	High:	.90	.60	.65	.30	.90	.70
	Low:	0	0	0	0	0	0

Primary academic orientation:

	Teaching with low/no research	Teaching with moderate research	Teaching with high research	Research with adequate teaching
My institution mission:	4 (5%)	34 (41%)	30 (36%)	16 (19%)
My expected role:	10 (12%)	30 (37%)	26 (32%)	16 (20%)

Administrative experience (non-exclusive):

N	Dissertation committee	Dissertation chair	Department head	Associate dean	Dean	Other senior administrator
85	37 (44%)	23 (27%)	17 (20%)	5 (6%)	2 (2%)	8 (9%)

Other factors:

N		Gender	Held/hold endowed chair or professorship
85	Male:	65 (76%)	20 (24%)
	Female:	20 (24%)	

Major industry professional designations held (non-exclusive):

CPCU:	32 (38%)	CLU:	25 (29%)	ChFC:	5 (6%)
ARM:	7 (8%)	FSA:	3 (4%)	FCAS:	1 (1%)
LUTCF:	1 (1%)	FLMI:	1 (1%)	RHU:	1 (1%)

Table 2. Reported Frequency of Courses Personally Taught and Institutional Offerings Ranked by Institutions Offering Course*

Course content/description	*(a)* % personally taught course	(b) % institutions offering course
Principles	76.9	88.4
Life Insurance	39.7	71.8
Risk Management	47.4	70.5
Liability/Casualty	41.0	69.2
Property	34.6	69.2
Employee Benefits	28.2	62.8
Capstone	23.1	50.0
Company Operations	25.6	50.0
Financial Planning	17.9	46.0
Health Insurance	23.1	44.9
Actuarial	5.1	44.9
Estate Planning	10.3	34.6
Legal/Contracts	9.0	30.8
Social Insurance	15.4	24.4
Case Study	12.8	21.8
Economics/Econometrics	5.1	16.7
Regulation	7.7	14.1
Marketing/Sales	1.3	12.8
Surplus Lines	2.6	8.9
E-commerce	1.3	7.7

*N = 78; Spearman correlation: a/b = 90.60%.

RESULTS AND DISCUSSION

The curriculum design portion of the survey first investigated current RMI curriculum dimensions. Table 2 reveals the RMI courses respondents indicated were most frequently taught during the three academic years prior to the survey (inclusive) at their own institution as well those courses respondents had personally taught during the same period. Next, respondent views regarding an "ideal curriculum" for the future were sought. The "ideal" mean for each course represented the weighted average of respondent views on whether a course should be considered (1) an essen-

Table 3. Respondent Views on RMI Curriculum Ranked by Ideal Curriculum Mean*

Course content/ description	% Essential-core	% Desirable-elective	% Luxury	% Not necessary	*Ideal curriculum* Mean (S.D.)**
Principles	94.6	4.1	1.4	–	1.07 (.300)
Risk Management	89.2	9.5	1.4	–	1.14 (.456)
Liability/Casualty	59.2	34.2	5.3	1.3	1.49 (.611)
Life Insurance	60.0	30.7	6.7	2.7	1.52 (.739)
Employee Benefits	48.0	46.7	5.3	–	1.57 (.595)
Property	52.7	36.5	6.8	4.1	1.62 (.785)
Capstone	60.8	20.3	13.5	5.4	1.64 (.923)
Health Insurance	29.9	47.8	16.4	6.0	1.99 (.837)
Financial Planning	21.3	57.3	18.7	2.7	2.03 (.720)
Company Operations	30.3	42.1	21.1	6.6	2.04 (.887)
Legal/Contracts	21.4	51.4	17.1	10.0	2.16 (.878)
Social Insurance	12.5	50.0	30.6	6.9	2.32 (.780)
Case Study	15.9	37.7	36.2	10.1	2.41 (.857)
Regulation	9.7	45.8	34.7	9.7	2.44 (.800)
Estate Planning	9.5	48.6	29.7	12.2	2.45 (.827)
Actuarial	14.3	30.0	42.9	12.9	2.54 (.906)
Marketing/Sales	2.8	31.9	44.4	20.8	2.83 (.782)
Economics/Econometrics	11.3	22.5	46.5	19.7	2.75 (.900)
E-commerce	1.4	28.6	38.6	31.4	3.00 (.819)
Surplus Lines	–	16.1	43.7	21.8	3.07 (.687)

*N = 78; Mean weighting: 1 = Essential core; 2 = Desirable elective; 3 = Luxury; 4 = Not necessary.
**Spearman correlation with Table 2: Personally taught = 94.14%; Institutions offering = 94.13%.

tial core course, (2) a desirable elective, (3) a luxury, or (4) not necessary. Thus, a lower mean ranking indicates respondents viewed a particular course as more important or relevant for inclusion in an ideal RMI program. Results are reported in Table 3.

RMI Course Offerings

What RMI courses survey respondents themselves were teaching, and what courses actually were being offered at their institutions. generally were highly correlated, with Spearman rank correlation exceeding 90.6

percent (see Table 2). This is consistent with the relatively small size of the RMI faculty base that typically exists across institutions of higher education (Gardner and Schmit, 1995; Ferguson et al., 2000). What RMI courses respondents were teaching as well as those being offered at their institution were both even more correlated with the "ideal" RMI curriculum mean determination, as Spearman correlations exceeded 94 percent (see Table 3). These findings imply that RMI faculty appear to have been fairly successful to date in offering essential courses and subject matter within the resource constraints inherent at institutions of higher education. Respondents believe their current RMI curriculum offerings are roughly ideal, or as nearly ideal as they are able to achieve at their institution. However, there seems to be sufficient flexibility and opportunity in RMI curricular offerings to satisfy the interests and needs of both individual facultymembers and their institutions. For example, both a *Capstone* course and *Health Insurance* appear to be valued reasonably highly, but they may not currently be taught enough relative to their perceived value. In contrast, having an *Actuarial* course offering was typically seen as a relative luxury in an ideal RMI curriculum, yet nearly half of respondents indicated their school had offered it within the prior three academic years.

Curriculum Design

Results from Table 3 indicate that, by far, the two courses considered by respondents to be most essential for an ideal RMI curriculum are a *Principles* (*Introductory*) class and a *Risk Management* class. Other courses identified as highly desirable included *Employee Benefits*, *Liability/Casualty Insurance*, *Life Insurance,* and *Property Insurance*, as well as a *Capstone* course experience. Taken together, respondents almost uniformly believed these courses constituted essential or highly desirable elective offerings in a robust RMI curriculum, and thus those areas reasonably may be viewed as content areas central to the discipline. Near the other end of the spectrum, RMI-oriented *Marketing/Sales*, *Economics/Econometrics*, *E-commerce,* and *Surplus Lines* courses were generally viewed as luxury offerings. Such courses may serve more specialized purposes (e.g., exploiting available faculty expertise or interest) or a particular niche, and thus may not be essential to a robust RMI curriculum.

To further triangulate our results, analysis of variance (ANOVA) was employed to examine whether essential core and desirable elective courses adequately reflect the mean ranking of importance in ideal curriculum design across various demographic subgroups. Owing to space considerations, complete detailed comparative tables are not reported and only significant differences are identified here. Respondent opinion concerning class offerings and content in an ideal curriculum exhibited no statistically

significant differences across gender, rank, tenure track status, dissertation committee/chair experience, administrative experience, or perceived primary teaching versus research institutional orientation (mission). Younger faculty (i.e., with 11 or less years experience) were more apt to value *Company Operations* [F = 8.710, p<0.004], *Economics/Econometrics* [F = 9.251, p<0.003], and *Property Insurance* [F = 4.540, p<0.036] courses higher than more experienced faculty. Interestingly, younger faculty (i.e., those anticipating more than 11 years remaining until retirement) also valued *Social Insurance* [F = 5.223, p<0.026] courses more than their counterparts nearer to active participation in that area. RMI faculty holding at least one industry professional designation were more apt to place higher value on more practical *Capstone* [F = 4.352, p<0.040] and *Surplus Lines* [F = 4.581, p<0.036] courses. Faculty who view their own expected role at their institution as having a high or relatively pure research orientation were more likely to place higher value on more specialized *Actuarial* [F = 9.361, p<0.003], *Economics/Econometrics* [F = 5.323, p<0.024], and *Legal Aspects/Contracts* [F = 5.839, p<0.018] courses.[1] All of the areas of difference noted above generally were non-core elective courses, most widely viewed as luxury offerings, again reflecting specialized niches within the overall relative commonality of opinion as to what constitutes a robust RMI curriculum.

The greatest frequency in observed significant differences reflected opinions of what constituted an ideal curriculum and depended upon whether faculty were teaching at an institution with higher perceived research expectations. Complete results for this comparative dimension are presented in Table 4. In all but one case (*Risk Management*), faculty at schools with higher perceived research expectations were more apt to value courses higher for inclusion in an ideal curriculum. Specifically, faculty at higher-research-expectation institutions were significantly more likely to include *Actuarial* [F = 7.886, p<0.006], *Capstone* [F = 4.421, p<0.039], *Case Study* [F = 3.278, p<0.075], *E-commerce* [F = 5.886, p<0.018], *Economics/Econometrics* [F = 7.010, p<0.010], *Marketing/Sales* [F= 4.991, p<0.029], and *Legal Aspects/Contracts* [F = 6.384, p<0.014] in an "ideal" curriculum, while faculty at low- to moderate-research-expectation institutions placed greater importance on basic *Risk Management* [F = 4.438, p<0.041]. No significant differences were noted between faculty at institutions, regardless of research expectation, across the other courses traditionally considered part of fundamental RMI education—specifically *Principles*, *Employee Benefits*, *Property Insurance*, *Liability/Casualty Insurance,* and *Life/Health Insurance*.

Overall, these findings support the notion that RMI faculty as experts in the field generally view some common class offerings as fundamental to RMI education, regardless of demographic factors such as gender, rank,

Table 4. Mean Difference in Ideal Curriculum*
by Faculty Perceived RMI Institutional Research Expectation

Course content/description (Alphabetic)	Research-oriented and high research iInstitutions	Low to moderate research institutions	F	Sig.
Actuarial	2.06	2.71	7.886	.006
Capstone	1.26	1.76	4.421	.039
Case Study	2.06	2.51	3.278	.075
Company Operations	1.81	2.13	1.980	.164
E-commerce	2.61	3.13	5.886	.018
Economics/Econometrics	2.28	2.91	7.010	.010
Employee Benefits	1.40	1.64	2.343	.130
Estate Planning	2.55	2.41	0.427	.515
Financial Planning	2.10	2.00	0.283	.596
Health Insurance	1.83	2.04	0.794	.376
Legal/Contracts	1.71	2.30	6.384	.014
Liability/Casualty	1.50	1.48	0.011	.918
Life	1.53	1.52	0.002	.966
Marketing/Sales	2.47	2.95	4.991	.029
Principles	1.05	1.07	0.062	.805
Property	1.65	1.61	0.035	.852
Regulation	2.26	2.51	1.322	.254
Risk Management	1.32	1.07	4.438	.041
Social Insurance	2.21	2.36	0.494	.484
Surplus Lines	3.11	3.06	0.084	.772

* 1 = Essential core; 2 = Desirable elective; 3 = Luxury; 4 = Not necessary

tenure status, administrative experience, dissertation committee/chair experience, professional education, and institutional research expectation. These courses include *Principles*, *Risk Management*, *Employee Benefits*, *Property Insurance*, *Liability/Casualty Insurance,* and *Life/Health Insurance*, with the first two considered essential core courses and the rest highly desirable electives. Hence, decision makers at all institutions of higher learning may reasonably consider these course areas as primary foundations for RMI education. Further, those institutions with greater faculty research expectations are likely to be in a much better resource position to be able to offer and support more specialized RMI courses, including *Actuarial*, *Case Study*, *E-commerce*, *Economics/Econometrics*, *Legal Aspects of Contracts*, and *Marketing/Sales*.

Table 5. Assessment of RMI Majors versus Non-Majors in the *Principles* Class*

"Students should be able to demonstrate an understanding of _____."	All students Mean (s.d)	RMI majors Mean (s.d)	*t*	Sig. (2-tail)
RMI vocabulary.	5.91 (1.134)	6.72 (0.576)	–7.385	.000
insurance legal principles.	5.59 (1.306)	6.34 (1.011)	–7.390	.000
insurance contracts and provisions.	4.91 (1.379)	5.95 (1.197)	–9.416	.000
insurance markets and regulation.	4.95 (1.115)	6.13 (0.873)	–10.521	.000
insurance business cycles.	3.82 (1.466)	5.24 (1.452)	–8.637	.000
insurance consumer issues.	5.29 (1.494)	5.65 (1.335)	–2.353	.021
sophisticated risk treatment mechanisms.	3.46 (1.309)	5.84 (1.006)	–13.749	.000
personal insurance product knowledge.	5.29 (1.397)	5.71 (1.262)	–2.599	.011
commercial insurance product knowledge.	4.15 (1.451)	6.06 (0.858)	–10.159	.000

* Likert scale: 1 = "unimportant" to 7 = "indispensable."

Expectations Regarding *Principles* Students

Results thus far support prior investigations finding that a basic *Introduction* or *Principles*-type of course remains the most commonly offered RMI course at institutions of higher learning (Gardner and Schmit, 1995; Ferguson et al., 2000), and serves as the linchpin of any ideal RMI curriculum. A third section of the survey instrument briefly queried respondents concerning their expectation regarding the relative importance for RMI majors and non-majors enrolled in a *Principles*-type course to demonstrate student understanding across very broad topic areas. General results are reported in Table 5.

As might reasonably be expected, respondents generally felt students majoring or potentially majoring in RMI should be exposed to, and be able to demonstrate a broader understanding of, various topics to a significantly higher degree than non-major students enrolled in an RMI *Principles* course. RMI *vocabulary*, *legal principles*, *consumer issues,* and *personal product knowledge* were generally determined to be the most important content assessment areas in *Principles* courses for both non-majors and majors, with *contracts/provisions*, *markets,* and *regulation* also deemed important for both groups. *Sophisticated risk management techniques*, *insurance business cycles,*

and *commercial insurance product knowledge* clearly emerged as the least important content areas for non-RMI majors, with *insurance business cycles* also scoring the lowest for RMI majors. Bonferroni *post-hoc* analyses across respondent subgroups revealed broad-based agreement that RMI majors would be expected to demonstrate greater understanding than non-majors enrolled in *Principles*-type courses across the given broad topic areas, indicating our findings are reasonably robust.

CONCLUSION

This research note has provided a very brief look at some important issues in RMI curriculum design and assessment utilizing results from a comprehensive survey of the combined academic membership of the three primary RMI academic associations in North America. Results indicate that a *Principles (Introductory)* course and a *Risk Management* course are widely considered to be the most important core courses for RMI education. Other courses were identified as highly desirable essential elective areas, including *Employee Benefits*, *Property Insurance*, *Liability/Casualty Insurance*, *Life Insurance,* and a *Capstone* course experience. Potential limitations of this study generally pertain to those typically associated with any survey methodology, and appropriate steps were taken at each juncture to minimize aggregate non-response and survey-induced response bias. Our overall findings are quite robust in that analysis of variance in expert RMI faculty opinion relative to ideal curriculum content generally showed no significant difference across a wide variety of common demographic subgroups, including rank, gender, tenure track professorial status, years of teaching experience, dissertation committee/chair service, administrative experience, and anticipated years remaining in the profession.

A few significant differences in ideal curriculum content were evident for respondents at institutions having higher perceived research expectations, but those generally still were related to courses most commonly viewed as desirable electives. This may be explained in part as a function of the greater resource base inherent to institutions in support of research and/or related doctoral education programs. Another explanation for this may be that the actual content deliverable within the educational umbrella of any particular course description at any given time or institution is sufficiently flexible, and capable of evolution, such that a currently "hot" topic such as advanced financial risk management techniques or holistic enterprise risk management may readily be incorporated or expanded. Our research also is perhaps subject to a few potential limitations that may limit generalization of results. First, the statistical power related to our sample

size was sufficient for us to detect all medium and large effects that may exist, but not small effects. The RMI arena is itself inherently small, and our potential academic respondent pool reasonably modest, though our response rate of approximately 20 percent is respectable and consistent with prior RMI survey-based research. Second, our survey instrument was relatively dense and covered several RMI related topics, not just curriculum design (Ferguson et al., 2005). Despite these potential limitations, the identification of essential and desirable coursework deemed fundamental to RMI education, and related curriculum assessment issues, which are known to be widely agreed upon and generally accepted by expert academicians across a very broad array of common demographic factors, should prove useful to those in higher education interested in either developing or maintaining critical mass in an RMI program, and help them to better allocate scarce resources.

NOTE

[1] The only other relevant differences found were based on AACSB accreditation status, but these findings are not robust because of small sample size [N = 5 non-AACSB schools]. However, even by AACSB status only four significant differences emerged: *Employee Benefits* [F = 11.919, p<.001], *Liability/Casualty* [F = 6.771, p<.011], *Life* [F = 4.793, p<.032], and *Property* [F = 2.988, p<.088]. In each case, AACSB accredited schools valued the given course more (i.e., lower mean score).

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APPENDIX A

Instructions: Many believe Risk Management and Insurance (RMI) education is likely to undergo some potentially significant changes at the local individual educator level. The purpose of this survey is to ascertain the views and opinions of dedicated RMI educators such as yourself regarding important issues facing RMI educators in the areas of curriculum development, program assessment and journal/publication rankings, among others. To allow us to achieve this goal, we ask you to take a few minutes respond to the following questions. We apologize for the length and detail of the survey, but the information you provide will be extremely useful to your colleagues in the coming years. If you are now retired/emeritus, please answer all questions with respect to your most recent institution.

1. Gender: Male_____ Female_____

2. My academic rank is: ____ Lecturer/Instructor/Adjunct/TA
____ Assistant ____ Associate ____ Full (____ Retired)

Calendar year attained each: ____ Assistant ____ Associate
____ Full (____ Retired)

3. Year terminal degree earned/expected: _____ (calendar year) from _____ (institution), ***or*** ____ N/A.

4. Year I earned tenure/expect to go up for tenure: _____ (calendar year), ***or*** _____ N/A, I am not in a tenure track position.

5. How many years have you taught at the university/collegiate level? _____ (please give total number of years).

6. How many more years do you expect to teach at the university/collegiate level before you retire? _____ (give years), ***or*** ____ N/A.

7. What percentage of your total professional time do you spend in each of the following categories of activity? (please total to 100%)

____ Teaching ____ Research ____ University Service
____ Community Service ____ Consulting ____ Other

8. Please check the appropriate RMI degree(s) or coursework currently offered by/at your institution (check all that apply).

____ Bachelors-Major Offered
____ Bachelors-Minor/Concentration
____ Bachelors-Elective Courses Only
____ MBA/Other Master Major
____ MBA/Other Master Concentration
____ MBA Other Master Electives Only
____ PhD
____ DBA
____ Other Terminal Degree (ID: _____)

9. Enrollment at my institution is about: _____(total undergraduate + graduate)**, including about _____ RMI majors** (if applicable).

10. My institution currently _____ *is*/ _____ *is not* AACSB accredited; and I expect them to actively seek re-/accreditation: ___ Yes ___No

11. Which concept best characterizes the primary orientation of your current institution and your understanding of your primary role there?

(Check *one* space per question)	Teaching, with low/no research expectation	Primarily teaching, with moderate research expectation	Primarily teaching, with high research expectation	Primarily research, with adequate teaching expected
A. My institution's mission:	_____	_____	_____	_____
B. My expected role there:	_____	_____	_____	_____

12. During my academic career, I have served my colleagues and my profession as (please check all that apply):
____ Dissertation Committee Member (approx # of times: _____)
____ Dissertation Committee Chair (approx # of times: _____)
____ Department Head ____ Associate Dean ____ Dean ____ Other Senior Administrative Post (ID: _____)

13. Did/do you currently hold an endowed chair and/or professorship?
____ Yes ____ No
If so, approximately what percentage of expendable financial resources are earmarked for each of the following? (please total to 100%)
____ Salary supplement ____ Research support
____ Travel supplement ____ General program support ____ Other

14. I am a member of (check all that apply): ___ ARIA ___SRIA ___WRIA ___IIS ___ AFA ___AEA ____FMA ____ AFS

15. I hold the following professional designations (check all that apply):
___CPCU ___CLU ___ChFC ___CFP ___CEBS ___FSA

See following pages for 17. and 18.

17. Instructions: Assessment and continuous improvement of RMI programs is an increasingly important concern. The need to assess and improve, and to have a demonstrable plan to achieve the desired results may come from both accrediting bodies and state legislatures. The purpose of this question is to identify broad areas that can be used to measure student progress as they proceed through an RMI program, and to identify areas in need of improvement. Please give your opinion of those areas most promising to use for the general purposes of assessment and continuous improvement of RMI programs. For each fragment listed below, complete the given sentence and indicate your opinion using the associated scale.

"Students should be able to demonstrate an understanding of _____."	With respect to *any* student enrolled in an initial Principles/Intro RMI-type course: Importance ranking (1 = unimportant 7 = indispensable)							With respect to those students majoring or intending to major in RMI: Importance ranking (1 = unimportant 7 = indispensable)						
A. RMI vocabulary.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
B. insurance legal principles.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
C. insurance contracts and provisions.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
D. insurance markets and regulation.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
E. insurance business cycles.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
F. insurance consumer issues.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
G. sophisticated risk treatment mechanisms.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
H. personal insurance product knowledge.	1	2	3	4	5	6	7	1	2	3	4	5	6	7
I. commercial insurance product knowledge.	1	2	3	4	5	6	7	1	2	3	4	5	6	7

18. Instructions: This question asks you to design an "ideal" risk management and insurance (RMI) curriculum based upon your experience and your expectation for the future given typical university graduation requirements and scarce resources (i.e., you cannot offer every course). Assume, for purposes of this question, that the content of each course is "generally accepted" and very closely related to the given course description.

My institution uses a: _____semester system (45 contact hours/15 weeks) _____ quarter system (50 hours/10 weeks) (please check one)

Please indicate/circle your answer, and leave blank if "No" or "0". Course Content/Description	Within the three (3) most recent academic years:		In my "ideal" curriculum design, a course based on 100% of this content would be: (*circle only one for each course*):			
	This type of course has been offered at/by my institution (circle)	I personally have taught this type of course (circle)	An essential core course	a desirable elective	A luxury	Not necessary
A. Actuarial Concepts	Yes	Yes	E	D	L	N
B. Capstone Risk/Insurance	Yes	Yes	E	D	L	N
C. Case Study	Yes	Yes	E	D	L	N
D. E-Commerce Insurance Issues	Yes	Yes	E	D	L	N
E. Employee Benefits	Yes	Yes	E	D	L	N
F. Estate Planning	Yes	Yes	E	D	L	N
G. Financial Planning	Yes	Yes	E	D	L	N
H. Health Insurance	Yes	Yes	E	D	L	N
I. Insurance Company Operations	Yes	Yes	E	D	L	N
J. Insurance Economics/Econometrics	Yes	Yes	E	D	L	N
K. Insurance Marketing/Sales	Yes	Yes	E	D	L	N
L. Insurance Regulation	Yes	Yes	E	D	L	N
M. Introduction/Principles of RMI	Yes	Yes	E	D	L	N
N. Legal Aspects of Contracts	Yes	Yes	E	D	L	N
O. Liability/Casualty Insurance	Yes	Yes	E	D	L	N
P. Life Insurance	Yes	Yes	E	D	L	N
Q. Property Insurance	Yes	Yes	E	D	L	N
R. Risk Management	Yes	Yes	E	D	L	N
S. Social Insurance	Yes	Yes	E	D	L	N
T. Surplus Lines	Yes	Yes	E	D	L	N