William A. Orme

WORKING PAPER SERIES

encouraging creative research

Results of the AAA/KPMG Survey on Implementation of IFRS and Data Analytics Into U.S. Accounting Curricula

Judy K. Beckman, Mary Michel, Paul Munter and Elizabeth Venuti

2015/2016 No. 4
RESULTS OF THE AAA/KPMG SURVEY ON IMPLEMENTATION OF IFRS AND DATA ANALYTICS INTO U.S. ACCOUNTING CURRICULA

Judy K. Beckman, Ph.D.; Mary Michel, Ph.D.;
Paul Munter, Ph.D., CPA; and Elizabeth Venuti, Ph.D.

a Professor of Accounting, University of Rhode Island, College of Business Administration, 7 Lippitt Road, Kingston, RI 02881 Contact Author: Beckman@uri.edu on leave as Academic Fellow, Office of the Chief Accountant, United States Securities and Exchange Commission, 100 F Street NE MS#6218, Washington, DC 20549

b Assistant Professor of Accounting, Manhattan College

c Senior Partner, Audit Quality and Professional Practice, KPMG; Professor of Practice, University of Colorado, Boulder

d Senior Associate Dean and Associate Professor of Accounting, Taation, and Legal Studies in Business, Hofstra University


SEC DISCLAIMER

Judy K. Beckman is on leave from the University of Rhode Island to serve as Academic Fellow in the Office of the Chief Accountant at the U.S. Securities and Exchange Commission from August 1, 2014 to July 31, 2016. The Securities and Exchange Commission, as a matter of policy, disclaims responsibility for any private publication or statement by any of its employees. Therefore, the views expressed in this paper are Dr. Beckman’s, and do not necessarily reflect the views of the Commission or the other members of the staff of the Commission.
RESULTS OF THE AAA/KPMG SURVEY ON IMPLEMENTATION OF IFRS AND DATA ANALYTICS INTO U.S. ACCOUNTING CURRICULA

ABSTRACT

During July and August 2014, the Teaching and Curriculum Committee of the AAA International Accounting Section conducted a survey, co-sponsored by KPMG LLP, on the status of integration of IFRS into the accounting curriculum. The survey was administered to all AAA members with a call for respondents from U.S. institutions; 349 members from a wide variety of AAA sections responded by the August 22 closing date. The first purpose of the survey is to refresh one that had been conducted annually from 2008 to 2011 during a time when the U.S. SEC was more strongly considering allowing U.S. issuers to report under IFRS as foreign registrants are allowed to do. The second purpose is to investigate the status of integrating data analytics into accounting curricula. Key findings are that most faculty now are not confident that the U.S will adopt IFRS at some point. Despite this belief, 83% of respondents continue to say it is important for faculty to teach IFRS in U.S. universities, similar to the 85% reporting this opinion in 2011. In contrast, fully 21% of respondents do not believe IFRS should be integrated into the curriculum. The approach used is to integrate IFRS into existing courses, primarily the intermediate sequence, to the extent of one or two credit hours of coverage. Respondents report similar challenges to integrating IFRS into the curriculum as in earlier years: making room in the curriculum, training faculty, and developing materials. Interestingly, nearly the same percentage of respondents report integrating data analytics (38%) as they do forensics (39%) into the accounting curriculum.

The authors would like to express thanks to KPMG LLP for support in developing and administering this survey. Thank you also to Deb Sledgianowski for her comments, particularly on the issues related to AACSB and data analytics.
RESULTS OF THE AAA/KPMG SURVEY ON IMPLEMENTATION OF IFRS AND DATA ANALYTICS INTO U.S. ACCOUNTING CURRICULA

INTRODUCTION AND BACKGROUND

International Financial Reporting Standards (IFRS) have been now been implemented by most of the worldwide financial markets including, in 2005, those in the European Union and in Australia. In 2007, the U.S. Securities and Exchange Commission (SEC) began allowing foreign issuers to use IFRS in their filings without reconciling net income and total stockholders’ equity to U.S. generally accepted accounting principles (U.S. GAAP). That development of course begged the question of when the same option would be available for U.S. domestic issuers. This question has languished over the time since.

Expectations that the SEC would eventually allow U.S. issuers to file IFRS financial statements have waned since November 2008 when the SEC issued a proposed "roadmap" for this potential transition (SEC 2008). Under the timeline then contemplated, the SEC had expected to consider in 2011 whether to require all U.S. public companies to adopt IFRS on a staggered, phased-in basis starting in 2014 with full implementation by 2016. Though the SEC has not proceeded with that implementation plan, the Commission periodically has issued statements reiterating its commitment to a single set of high quality global standards and for the convergence of IFRS and U.S. GAAP. A timeline of these SEC developments is included as Figure 1.

During their consideration process, the SEC staff issued a Roadmap that explored several possible approaches for potentially incorporating IFRS into the financial reporting system for U.S. issuers. One approach would have included the FASB’s ongoing involvement and draw upon the convergence and endorsement approaches (referred to as
“endorsement approach”) that have been used in other jurisdictions such as Europe and Australia. In addition, the SEC and the staff previously have described and sought input on other possible approaches including:

1. Full adoption of IFRS at a specific date without any endorsement mechanism;
2. Full adoption of IFRS following a several year transition period; and
3. An option for U.S. issuers to apply IFRS.

Despite these initial explorations, the SEC staff in July 2013 issued a final report on its workplan that made no recommendation about U.S. adoption of IFRS. The staff provided a summary of its findings and noted that this information would inform any Commission decision-making. The document also was intended to provide transparency to interested parties about the issues considered by the SEC staff. These issues included concerns about the development of IFRS; the IASB interpretive process through the IFRS Interpretations Committee (IFRIC); the IASB’s use of national standard setters; global application and enforcement of IFRS; the IASB governance structure; status of funding for the IAS Foundation; and U.S. investor understanding of IFRS. Resolving this last category of issues ultimately also involves considering the state of technical readiness with IFRS by preparers and users.

The most recent development in this process occurred on December 8, 2014 in a speech at the American Institute of CPAs (AICPA) annual conference. SEC Chief Accountant James Schnurr acknowledged that the current situation in the U.S. with respect to IFRS cannot continue. He noted that in beginning his position on October 1, 2014, he agreed to focus on finalizing the U.S. decision on IFRS, though did not enter his role with a preset mindset on the matter. He added a fourth possible approach to the three options listed above: allow U.S. domestic filers to provide supplemental IFRS
information and the thereby allow the market to determine its demand for these disclosures. Details of the possible proposal have not been drafted for consideration but certainly will at least involve the level of audit or review service that might be required for these disclosures included in SEC filings.

Another factor potentially influencing these developments is a question of whether the market demand for this information will develop in the U.S. In 2008, multinational companies expressed strong desire for accepting IFRS financial statements in U.S. filings. Anecdotal evidence indicates that such interest may be waning as convergence between U.S. GAAP and IFRS has been achieved, or substantially achieved, in significant areas of accounting. Some reactions to Schnurr’s comments have been positive but others note that cost considerations may make it unlikely for any other than those companies already preparing both sets of financial statements to employ this option (E&Y 2014, 3).

Certainly, any option that would add IFRS reporting in the U.S. has implications for U.S. accounting education. The primary purpose of this paper is to describe the current state of faculty perceptions about integrating IFRS into U.S. accounting curricula and its practices and needs in teaching IFRS. We report on the results of a survey conducted during July and August 2014 by the Teaching and Curriculum Committee of the AAA International Accounting Section and co-sponsored by KPMG LLP. The survey was administered to all AAA members with a call for respondents from U.S. institutions; 349 members from a wide variety of AAA sections responded by the August 22 closing date. The first purpose of the survey is to refresh one that had been conducted annually by KPMG and the AAA from 2008 to 2011, during a time when the U.S. SEC
was more strongly considering allowing U.S. issuers to report under IFRS as foreign registrants are allowed to do. Trends throughout the entire time period covered by these surveys are discussed; they were facilitated by KPMG LLP providing those data files, including accreditation status of the survey respondents’ business schools and accounting programs. KPMG LLP has maintained anonymity of survey respondents in providing these data.

Key findings are that most faculty now are not confident that the U.S will adopt IFRS at some point. Despite this belief, 83% of respondents continue to say it is important for faculty to teach IFRS in U.S. universities, quite similar to the 85% responding this way in 2011. In contrast, fully 21% of respondents do not believe IFRS should be integrated into the curriculum. The approach used is to integrate IFRS into existing courses, primarily the intermediate sequence, to the extent of one or two credit hours of coverage. Respondents report similar challenges to integrating IFRS into the curriculum as in earlier years: making room in the curriculum, training faculty, and developing materials.

A second purpose of the survey is to investigate the status of integrating data analytics into accounting curricula. Interestingly, nearly the same percentage of respondents report integrating data analytics (38%) as they do forensics (39%) into the accounting curriculum. This contrasts with the large percentage of respondents who report integrating technology applications for accounting (77%). The lower integration of data analytics compared to technology applications in accounting is consistent with the smaller average percentage of faculty teaching or preparing to teach each subject at respondents' schools (22% v. 42%). On the specific question regarding the incorporation
of data analytics into the curriculum, 58% indicated that they had taken steps. However, responses clearly indicate a wide understanding of data analytics that may be of interest to the Association to Advance Collegiate Schools of Business (AACSB) as it develops criteria for accredited accounting programs in their integration of information technology and data analytics.

Following sections of the paper provide a literature review of the issues in implementing IFRS in the U.S. with a focus on the educational aspects of the implementation; develop exploratory questions investigated with the survey; and describe the results of, and conclusions drawn from, the survey responses.

**LITERATURE REVIEW**

**Economic Costs and Benefits of Potential IFRS Implementation: Implications for Educators**

In describing an economic analysis for policy setters considering the implications of adopting IFRS, Hail et al (2010) identify three components: recurring, albeit modest, comparability benefits for investors; recurring future cost savings that will largely accrue to multinational companies; and one-time transition costs borne by all firms and the U.S. economy as a whole. Those transition costs include costs borne by both preparers and users of the information. These authors as well consider the education system impacts of potential IFRS adoption in the U.S.

A major issue surrounding the adoption of IFRS is whether it is possible to bring the accounting profession, analysts, educators, and other parties up to speed in a sufficiently timely manner so as to have a smooth transition to IFRS...as many other countries have experienced a relatively smooth transition of the education system to IFRS, the same should be possible in the United States, although the relatively large size of the U.S economy and the diversity of its markets present particular challenges...Finally, the IFRS educational and training concerns apply mainly to preparers and the accounting profession and less to capital market participants. The latter
group is already exposed to IFRS through foreign companies and will become increasingly familiar with IFRS financial statements as time passes. For example, academic studies on 20-F reconciliations and studies of mandatory IFRS adoption...suggest that investors can and already do cope with differences in the accounting standards (Hail et al. 2010a, 385).

The SEC finds a greater diversity in preparedness, or willingness to prepare, to use IFRS financial statements among investors than is implied from the above discussion. In its report on its workplan for the possible U.S. implementation of IFRS for U.S. domestic issuers (SEC 2012), the SEC staff noted that one of the most significant issues is investors and others’ preparedness to use IFRS-based financial statements and thereby achieve the comparability benefits noted by Hail et al (2010). In general, the SEC staff reports finding investor support for using a single set of high-quality, globally accepted accounting standards from its outreach. Nonetheless,

the Staff found there appears to be a wide spectrum of investor knowledge of IFRS; however, the majority of investors that the Staff has contacted or that have commented directly to the Staff do not have much familiarity with IFRS....Investors learn about changes in accounting methods through various methods, including through company disclosures and printed materials and through webcasts from the largest accounting firms (SEC 2012, 73).

The staff notes in this report that institutional and other professional investors generally were aware at the time that the SEC was considering IFRS implementation and were aware of ways to take advantage of IFRS training. Other investors focus primarily on domestic U.S. firms for investment and have been reluctant to dedicate effort and resources to develop IFRS expertise.

All of these points imply that, regardless of U.S. policy choice in implementing IFRS, developing a thorough working knowledge of IFRS among U.S. accounting graduates could impact the ultimate assessment of these costs and benefits, the ability of accountants to work across international borders in a non-converged scenario, and
accountants’ role in continued improvement in investors’ ability to use IFRS. It also is useful to understand faculty perception of some of the issues identified by Hail et al (2010). For example, these authors note

Based on evidence from the cross-listing literature, it is not clear that U.S. capital markets were hurt in the past by strict U.S. regulation or U.S. GAAP reporting requirements....To the contrary, the valuation and cost of capital benefits from U.S. cross-listings seem large enough to outweigh the costs of reporting under U.S. GAAP or preparing 20-F reconciliations, particularly for firms from countries with weak institutions and underdeveloped capital markets. Based on this evidence, U.S. GAAP reporting requirements do not appear to be a competitive disadvantage (Hail et al. 2010a, 382).

**Pedagogical Research and Prior Surveys**

*Prior Distribution of the KPMG/AAA IFRS Survey.* Initial distribution of this KPMG/AAA survey in 2008 was reported in a paper published in *Issues in Accounting Education* (Munter and Reckers 2009). The initial reasoning for the survey was to assess a fundamental question, given the SEC publications at the time, of when accounting regulators and employers could expect colleges and universities to significantly incorporate IFRS instruction into the curriculum. This 2014 update is being done amidst significant delay in the SEC implementing a system for IFRS—or even considering doing so—beyond the time frame initially contemplated in the 2008 Roadmap and 2011 Workplan. Uncertainty about the ultimate outcome of an SEC decision on the matter adds to complexity for university implementation of curriculum changes.

Munter and Reckers (2009) essentially found a low preparedness for implementing IFRS in the curriculum and that “faculty did not consensually sense a need for immediate action”—essentially half of the respondents’ schools were continuing to explore options or had no clear plans for implementation. The authors conjecture that faculty respondents’ “mental timeline was likely influenced significantly by the perceived
CPA examination timeline” which was expected to have comprehensive coverage on IFRS by 2011 or before by only about half of the faculty survey respondents. These authors also offer conjectures on several other points from their results:

1. A high prevalence of integration into existing courses may reflect faculties’ assessments about optimal instruction methods, but it may also be a function of time because of the need submit courses to university approval processes;

2. A high percentage of schools expecting faculty to bear responsibility to re-educate themselves and develop course materials either may stem from little thought having been given to the issue or that this approach is the commonly perceived requirement for faculty job fulfillment; and

3. A high percentage of faculty planning a teaching method of comparing and contrasting IFRS and U.S. GAAP technical standards and conceptual frameworks may result from expectations of a transition period even if IFRS reporting were to become acceptable for U.S. publicly traded companies.

Finally, Munter and Reckers (2009) report that

The transitional approach of adding selected IFRS modules to Intermediate and Advanced Accounting is itself perceived to be problematic, as there is arguably no room in existing…courses to add more, and no room in undergraduate curriculum to add another course. For many schools it may prove easier to add a course to their masters programs…but doing so raises the question of appropriately serving the needs of accounting students who exit…with a bachelor’s degree and enter careers other than public accounting.

Based on the follow-up survey in 2009, Munter and Reckers (2010) report that uncertainties and budget shortfalls continue to hamper the progress of introducing IFRS into the curriculum. Uncertainties involved both IF and WHEN the U.S. will adopt IFRS. In the 2009 survey, a higher percentage of department chairs report that their schools fund faculty training for teaching IFRS than do faculty (56% v. 33%). Similarly, a higher percentage of department chairs report that their schools provide funding and release time to develop IFRS course materials teaching IFRS than do faculty (27% v. 15%).

The initial findings in the 2008 and 2009 surveys were reinforced in 2010 and 2011 with
annual surveys showing increasing acknowledgement of the importance of implementing IFRS and continuing challenges to implementing this topic in the curriculum. The final point that adding a masters level course as the most expedient way to cope with integrating IFRS into the curriculum could also affect any impact that undergraduate accounting programs ultimately may have on professionals using IFRS as well as preparing and auditing financial statements on that basis.

*Other pedagogical research studies.* Following these prior survey results, several researchers examine more detailed issues in educational implementation of IFRS and principles-based standards in general. Yoon et al. (2012) survey CPAs in the southern California region on these employers’ expectations of IFRS knowledge by accounting graduates. In general they find employers expect a rudimentary knowledge such as understanding IFRS financial statements well enough to reconcile to USGAAP but not to handle details such as recording transactions using IFRS. Public accounting respondents were mostly senior management of local practice firms; these respondents give significantly lower importance ratings for IFRS skills than do respondents from other types of employers. Not surprisingly, audit specialists, those in large accounting firms, and those employed in international companies all rank IFRS skills with greater importance than do their counterpart respondents.

An emergent theme among several researchers is a call for faculty instruction on pedagogical methods to teach principles-based standards (Tan et al. 2014; Santos and Quilliam 2013). Use of case study methods is proposed to address this need (Larson and Brady 2009; Larson and Street 2011) but Tan et al. further caution that “traditional case study-based teaching may not develop the deep learning that students require to develop
their capacity to make judgements when applying IFRS. …  [To resolve this issue, ]
accounting educators could continue to utilize the rich resources they are familiar with in
the form of case studies but adopt a [problem-based learning (PBL)] approach, … to create
knowledge through the use of case studies rather than [just apply] knowledge to cases”
(Tan et al, 2014, 63-64).

Finally, Zhu et al. (2011, 726) describe their research as building on prior KPMG-
AAA Faculty Surveys by “documenting how the current introductory accounting
curriculum addresses calls from the SEC for the education of investors and other
financial statement users about the basics of IFRS.” Their results show that educators
currently provide limited coverage of IFRS-related material in introductory accounting
courses and that many instructors of courses at this level are waiting to make extensive
inclusion of this material until the SEC provides greater certainty about U.S. adoption of
IFRS.

**CPA Exam Coverage of IFRS and its Impact on the Accounting Curriculum**
As conjectured by Munter and Reckers (2009, 2010) and noted above, CPA
examination content may drive a lot of interest among topics to be addressed in U.S.
accounting curricula. Content related to IFRS is identified in only one place in the
Financial Accounting and Reporting (FAR) section of the current Content and Skill
Specifications. This section states that candidates are expected to

identify and understand the differences between financial statements prepared on
the basis of accounting principles generally accepted in the United States of
America (U.S. GAAP) and International Financial Reporting Standards (IFRS)
(AICPA Examinations Team 2012, 13).

In developing the next version of the CPA exam, the AICPA has undertaken a process of
exploration, including issuing an Invitation to Comment (ITC) (AICPA Board of
Examiners 2014) that focuses on questions of greater testing of higher order skills necessary in newly licensed professionals. The approach contemplated in the ITC does not focus on added specific technical content and so increasing the coverage of IFRS on the CPA exam seems unlikely. This fact must be considered as we interpret the results of this survey.

**Data Analytics in the Accounting Curriculum**

The AACSB 2013 revision of the Accounting Accreditation Standards introduced Standard A7, Information Technology Skills and Knowledge for Accounting Graduates:

> Consistent with mission, expected outcomes, and supporting strategies, accounting degree programs include learning experiences that develop skills and knowledge related to the integration of information technology in accounting and business. Included in these learning experiences is the development of skills and knowledge related to data creation, data sharing, data analytics, data mining, data reporting, and storage within and across organizations (AACSB 2013).

Several of the questions asked in this survey inquire what steps schools have taken to incorporate data analytics into the curriculum. At the time of the survey’s administration, the AACSB had not yet issued their white paper offering interpretation and guidance on implementing Standard A7 (AACSB 2014).

Standard A7 is a requirement only for separately accredited accounting programs. The initial context that motivated the inclusion of Standard A7 in the 2013 AACSB Accounting Accreditation Standards was the observation of the AACSB Accounting Standards Working Group about the changing dynamics related to data analytics and related information technology expectations for accounting graduates. According to the AACSB, the underlying learning experiences for accounting graduates demands an interdisciplinary approach that draws input from professionals and academic scholars with expertise in information systems, statistics, computer science and engineering,
ethical issues related to IT and “big data,” etc. The focus should not be on “accounting information systems” only, but on information storage, management, and analysis for accounting graduates. The AACSB emphasizes that

the Standards Writing Group in proposing Standard A7 felt that the learning expectations in areas addressed in Standard A7 should exceed what is typically found in the “business core” of most AACSB accredited business schools. Though AACSB’s revised business Standard 9 has some similar language regarding IT and data analytics, AACSB separately accredited accounting academic units are expected to address the spirit and intent of A7 at a higher level (AACSB 2014, 6).

In its white paper, the AACSB states that while it does not provide detailed, specific curricula content, it has heard significant discussion and questions from schools already implementing the new standards. Responses to the questions in this survey on data analytics shed light on issues in accounting faculty’s efforts to integrate this learning in the fashion contemplated by the AACSB—and find significant variability in the methods being employed as well as confusion about doing so.

OBJECTIVE OF THE STUDY
AND RESEARCH QUESTIONS

The objective of conducting the 2014 KPMG/AAA IFRS survey is to update the prior survey administered in 2011 in order to understand the current state of IFRS-related education in collegiate accounting curricula. Given the state of indecision on this potential implementation, respondents still may be unable to address some of the speculation that was described by Munter and Reckers (2009).

Primary topics queried that relate to IFRS integration in the curriculum include

1. Faculty attitudes towards U.S. conversion to IFRS and integration of IFRS into the curriculum;
2. Timing and manner of incorporating IFRS into the curriculum (e.g. undergraduate versus graduate courses and specifics of courses), challenges in accomplishing
this integration, and timing for students entering the workforce with a comprehensive knowledge of IFRS;
3. Assignments used to integrate IFRS and those that faculty would like to have access to, such as published cases and/or projects;
4. Methods faculty have used to prepare to teach IFRS, funding and resources such as course release time to support this preparation, certification desired by faculty, and hiring practices to fulfill this area of teaching expertise;

The survey also includes questions about various competencies addressed in accounting programs today such as technology, critical thinking, writing, ethics, and others. As noted above, data analytics is added to the list in 2014. Survey questions on fair value reporting and accounting for derivatives and hedging activities have been removed from in order to allow room to add questions about data analytics integration while maintaining a reasonable length of the survey. Just as information about teaching fair value reporting was critical during the time of administering previous surveys, so is data analytics critical today given recent accreditation requirement changes and increasing interest among practitioners.

Demographics included in the survey ask respondents to indicate the size of their college/university and business school; whether their business program is accredited and, if so, whether their accounting program is separately accredited; and to indicate AAA memberships in sections and regions. Past surveys instead asked geographic location of the respondent and faculty rank.

RESULTS
The survey was administered electronically by email to all U.S. AAA members at the end of July 2014, just prior to the annual meetings of the AAA. A reminder email was sent approximately one week after the AAA meetings and another was sent just prior to closing the survey on August 22, 2014. This process for data collection was similar to the process in earlier surveys. However, there were fewer responses than were received
in past years: in total, 349, responses were received, down from 638 in 2011, 808 in 2010, 500 in 2009, and 535 in 2008. Perhaps the lower response rate is due to SEC inactivity on this issue, lack of interest in the IFRS implementation issue given the number of previous surveys on the matter, or some other difference from previous years.

**Respondent Demographics**

Demographic questions included in the 2014 survey differ from those asked in 2008 through 2011; while that change hurts comparability, it was implemented to improve understanding of the factors likely driving the reported results. Survey respondents were asked to identify the size of their college or university and the size of the business college or school in terms of total student numbers, graduate and undergraduate; which AAA sections to which they belong; In order to maintain anonymity, respondents were not asked geographic location of the school nor faculty rank, the demographic variables obtained from prior survey respondents. Survey respondents were asked in 2014 whether they are employed at a business college or school holding accreditation from the Association to Advance Collegiate Schools of Business (AACSB) and, if so, whether their school holds separate AACSB accounting accreditation as well. While maintaining anonymity of responses to prior surveys, KPMG LLP provided these data points for the 2008-2011 survey data. Thus, the analysis of results by school and program status across all survey years are the first reports of these data despite previous publication of papers from the prior surveys.

Respondents hold memberships in a variety of AAA sections as shown in Table 1. As shown in Table 2, the median respondent’s university or college has a total student body of 14,850 and business school student body of 2,000. As shown in Table 3, eighty-one percent (230 out of 256, or 81%) of 2014 respondents are located at AACSB
accredited business schools; of those, fifty-four percent (124 out of 230, or 54%) are from programs with individual accounting accreditation. This sample thus represents a much higher than average percentage of schools with the accounting accreditation: overall, AACSB accredits 716 business schools worldwide and 181 (25%) also hold the separate accounting accreditation. These percentage of respondents from business schools holding AACSB accreditation are higher than the average of previous years’ studies: over the 2009 to 2011 survey years, an average of 71% (1,191 responses out of 1,679 total) come from faculty at AACSB accredited institutions with an average of 55% of the accredited business school respondents from programs with separate accounting accreditation, the latter result being similar to the 2014 ratio. Thus, overall results presented in this paper are strongly influenced by the views of faculty at schools and colleges with business accreditation and separate accounting program accreditation.

Faculty Attitudes Towards IFRS Adoption and Integrating IFRS into U.S. Curricula

Most faculty are no longer confident that the U.S. will adopt IFRS at some point (Figure 2) and very few have practical experience applying IFRS (Figure 3). As shown in Table 3, the declining confidence of U.S. adoption is statistically significant: by 2011, previously significant positive responses about confidence in U.S. adoption of IFRS became insignificant for respondents from programs holding business and separate accounting accreditation which drives an overall insignificant result in that year; respondents from non-AACSB accredited programs continued to express significantly positive expectation that the U.S. would eventually adopt IFRS. All respondents consistently report significantly negative expectations by 2014. Despite these developments, respondents from all groups consistently show significantly positive views
of the importance of teaching IFRS in U.S. accounting programs. Fewer than 3 in 10 respondents now say the U.S. should converge U.S. GAAP and IFRS with substantial equivalence in the short term, though more than 7 in 10 still favor convergence at some point (Figure 4). The majority of respondents believe that the U.S. will neither be advantaged nor disadvantaged if IFRS is not fully adopted in the U.S. (Figure 5), up from 48% and 46% holding that view in 2011 and 2010, respectively. Despite these beliefs, 83% of respondents continue to say it is important for faculty to teach IFRS in U.S. universities, a very similar percentage to the 85% expressing this belief in the 2011 survey (Figure 6). Despite this similarity, 16% do not believe it is important to teach IFRS in U.S. accounting programs, double the 8% of respondents who expressed that view in 2009.

More than half the respondents say that IFRS is now incorporated significantly into the curriculum (Figure 7). Nonetheless, the trend shows a growing majority delaying expectations that graduating students will enter workforce with a comprehensive knowledge of IFRS (Figure 8).

**Methods of Implementing IFRS into the Curriculum**

Explaining respondents’ lack of expectations for accounting students to graduate with a full working knowledge of IFRS is the fact that the main approach is still to integrate IFRS into existing undergraduate courses as it was in 2011 (Figure 8). Most integration is done in Intermediate or Advanced accounting although other courses also are used (Figure 9). Identifying faculty responsible for IFRS, primarily existing faculty but also hiring IFRS-ready faculty, is the method used to implement the chosen teaching strategy (Figure 10). These faculty members are expected to develop their own expertise to teach this material, even given the situation in which the vast majority have not applied
IFRS in practice themselves. With the approaches described and the resources devoted to IFRS curriculum implementation, it is not surprising to find that many significant challenges still exist. Chief among them is finding room in the curriculum to integrate IFRS, as it was in 2011 (Figure 11).

Assignments used to integrate IFRS. Developing materials and training faculty persist as challenges but are not the top of the concerns as they were in 2011, evidence that more materials are now available from publishers and accounting firms (see Figure 13). One in three faculty have comprehensively examined the case materials prepared by the large public accounting firms, though 45% of 2014 respondents still report that they have not done so. Most valuable to faculty are case studies and technical problems that compare and contrast IFRS and US GAAP prepared by external parties as well as test banks with solutions. The lowest percentage of respondents reporting these two levels is 48% for stand-alone webcasts or podcasts for classroom use, so clearly faculty perceive all of these resources as quite valuable.

Methods of funding and allocating resources to prepare to teach IFRS. There is evidence in survey responses that what resources are available to address new curriculum challenges have been spread across many topics covered in survey questions. Figure 16 shows many responses indicating no faculty have been granted release time or financial support at their schools for curriculum development on the list of topics addressed in this survey. However, on average between 9% and 22% of faculty report that their schools have granted these resources for a wide range of curriculum initiatives. Technology applications and writing skills received the two highest mean percentage of reported dedicated resource at 22% and 20%. The percentage of schools’ faculty receiving
support/release time for IFRS increased to 15% in 2014 from 10% in 2011 (2011 comparisons are not shown in figures). The lowest average percentage of faculty receiving support/release time was 9% for forensics, up from 5% in 2011. These results should be interpreted with caution: they may be heavily influenced by the fact that accredited accounting programs are highly represented in these responses and so may not be representative of activities at a broader ranges of higher education institutions.

**Data Analytics and Other Topics Included in Accounting Curricula**

A second purpose of this survey is to assess integration of data analytics into accounting curricula and to update questions from prior surveys on the integration of several other topics as well: forensics, technology applications, corporate governance, sustainability and corporate social responsibility, fraud, professional skepticism, writing skills, and ethics. Two topics included in the 2011 survey were dropped from 2014 questioning: fair value accounting and derivatives and financial instruments. As shown in Figure 12, almost 6 in 10 (58%) respondents indicate their schools have taken steps to incorporate data analytics into the curriculum, with approximately one-third indicating that they had integrated significant components of data analytics into an existing course (21% indicated that this integration was equivalent to approximately one student credit hour and 11% indicated that it was equivalent to two or more student credit hours). Respondents also indicated creating separate graduate (10%) and undergraduate courses (9%), and having students take courses in other business departments (13%) or in courses outside the business curriculum (6%). Still others are still actively accessing the appropriate course of action (14%).

---

1. Since multiple responses were allowed, the cumulative percentages exceed 100%.
Two of the choices allowed respondents to provide additional information, and the wide variety of responses may indicate that there is uncertainty on how to incorporate data analytics, such as “please define how [data analytics] might be integrated into accounting education” and “I do not know.” The AACSB’s white paper (2014) may address these questions. The AACSB’s interpretation offers a progressive position towards educating accounting students in data analytics, placing particular emphasis on ”big data” or unstructured data. Prior to the issuance of the interpretive guidance, AACSB Standard A7 may have lead some educators to believe that the AACSB was emphasizing IT knowledge integrated throughout the curriculum, but the Interpretation seems to be emphasizing the “big data” aspect of Standard A7.

Based on observations of discussions and feedback across the academic and professional communities, some areas of focus for accounting student learning experiences to address the spirit and intent of Standard A7 may include:

- Understanding of computational analytics related to data mining including data modeling, predictive analytics, enterprise risk assessment, text mining, social mining, natural language processing, and some understanding of machine learning;
- Comprehension of basic information management related to relational and non-relational databases; and
- Knowledge of data visualization including self-organizing maps (SOMS) and interpretation coupled with the ability to effectively convey data, results, and insights.

The survey responses, coupled with the new guidance provided by the AACSB, indicate that there is need for further study on incorporation of data analytics into the curriculum.

**SUMMARY AND CONCLUSIONS**

The survey results reported in this paper have updated information from past surveys administered in 2008 through 2011. Those initial surveys were conducted during
a time when the SEC had published a clear strategy for implementing IFRS in the U.S. financial reporting system. Despite the fact that most faculty now are not confident that the U.S. will adopt IFRS, especially in the near future, faculty continue to believe that it is important to integrate IFRS knowledge development in accounting curricula. Faculty have made significant progress at integrating IFRS despite challenges of limited room in undergraduate accounting programs for new courses and topics as well as limited resources devoted to helping faculty develop these curriculum strategies and materials. Most integration of this topic is done in Intermediate and Advanced Accounting yet most survey respondents acknowledge difficulty in fitting this additional coverage into their programs; this situation begs the question of what is being left out in order to make this accommodation. A decline in those “actively assessing appropriate course of action” to integrate IFRS means that more programs have taken action. Hence, there is a greater divide between those that do and those that don’t integrate IFRS—fewer schools are on the margin.

The findings show great challenges even among these responses highly skewed toward those holding AACSB accreditation at the business school and individual accounting program level. In the limited cases in which resources such as release time for curriculum development are employed, they are directed towards many new topics in the curriculum, not just integration of IFRS. All of these initiatives are important for AACSB accredited business schools and accounting programs—data analytics is just the latest big challenge to be added.

LIMITATIONS AND FUTURE RESEARCH

The results reported in this paper utilize data collected by KPMG LLP which maintains anonymity of the responses and control over data files from previous years’
surveys in 2008-2011. At the date of this writing, data for previous years with accreditation status of respondents’ schools and accounting programs have just been received. The authors will revise the data analysis to examine differences across these categories of respondents with yearly comparisons and will also, at that time, consider responses by AAA memberships held by respondents. One factor which unfortunately cannot be controlled in these data comparisons are changes in accreditation status of programs between the dates of survey administration.
References


Association to Advance Collegiate Schools of Business. 2013. Eligibility Procedures and Accreditation Standards for Accounting Accreditation. April 8. Tampa, FL: AACSB.


Figure 1: Timeline of SEC Developments in Considering IFRS Reporting by Issuers without Reconciliation to U.S. GAAP

U.S. SEC Timeline of Workplan on Establishing IFRS in the U.S.

- 2007: Financial Statement
SEC allows IFRS from FPBs without reconciliation

- February 2010: Progress Report on Work Plan

- July 7, 2011: SEC IFRS Roundtable

- December 31, 2011: Decision Originally Intended

- May 26, 2011: Workplan describing “condorse -ment” approach

- July 31, 2011: Comments Due to SEC on May 2011 Workplan

- July 2013: Workplan Final Staff Report Issued

November 2008: Roadmap
Table 1: AAA Memberships held by Respondents

<table>
<thead>
<tr>
<th></th>
<th>Membership Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accounting, Behavior and Organizations</td>
<td>61</td>
<td>21%</td>
</tr>
<tr>
<td>2</td>
<td>Accounting Information Systems</td>
<td>25</td>
<td>9%</td>
</tr>
<tr>
<td>3</td>
<td>Accounting Programs Leadership Group</td>
<td>37</td>
<td>13%</td>
</tr>
<tr>
<td>4</td>
<td>American Taxation Association</td>
<td>33</td>
<td>11%</td>
</tr>
<tr>
<td>5</td>
<td>Auditing</td>
<td>81</td>
<td>28%</td>
</tr>
<tr>
<td>6</td>
<td>Diversity</td>
<td>21</td>
<td>7%</td>
</tr>
<tr>
<td>7</td>
<td>Financial Accounting and Reporting</td>
<td>120</td>
<td>41%</td>
</tr>
<tr>
<td>8</td>
<td>Forensic and Investigative Accounting</td>
<td>36</td>
<td>12%</td>
</tr>
<tr>
<td>9</td>
<td>Gender Issues and Worklife Balance</td>
<td>14</td>
<td>5%</td>
</tr>
<tr>
<td>10</td>
<td>Government and Nonprofit</td>
<td>38</td>
<td>13%</td>
</tr>
<tr>
<td>11</td>
<td>International Accounting</td>
<td>68</td>
<td>23%</td>
</tr>
<tr>
<td>12</td>
<td>Management Accounting</td>
<td>45</td>
<td>15%</td>
</tr>
<tr>
<td>13</td>
<td>Public Interest</td>
<td>32</td>
<td>11%</td>
</tr>
<tr>
<td>14</td>
<td>Strategic and Emerging Technologies</td>
<td>8</td>
<td>3%</td>
</tr>
<tr>
<td>15</td>
<td>Teaching, Learning and Curriculum</td>
<td>90</td>
<td>31%</td>
</tr>
<tr>
<td>16</td>
<td>Two-Year College</td>
<td>9</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>Size of College or University</td>
<td>Size of School of Business</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------</td>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>300</td>
<td>278</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>400</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>25th Percentile</td>
<td>6,650</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>14,600</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>75th Percentile</td>
<td>27,000</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Max</td>
<td>77,000</td>
<td>25,000</td>
<td></td>
</tr>
</tbody>
</table>
Figure 2
Vast Majority Not Confident the U.S. Will Adopt IFRS

Means
2014: 1.95
2011: 2.5
2010: 2.8
2009: 2.8
Table 3: Survey Question 1 and 2: Mean Differences from a 2.5 Neutral Response

The table below presents the mean differences from 2.5, a neutral response to these survey questions, by business accreditation groups from the four time periods of survey administration.

Survey Question 1: Given events to date, how confident are you that the U.S. will adopt IFRS at some point?
Survey Question 2: How Important is it for faculty today to teach students IFRS in U.S. universities?

Responses: 1—Not at all confident/Not at all important; 2—Not confident/Not important; 3—Confident/Important; 4—Very confident/Very important

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Sample</th>
<th>Business Accreditation Only</th>
<th>Separate Accounting Accreditation</th>
<th>Non-AACSB Accredited</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Difference from 2.5</td>
<td>Mean Difference from 2.5</td>
<td>Mean Difference from 2.5</td>
<td>Mean Difference from 2.5</td>
</tr>
<tr>
<td></td>
<td>N=</td>
<td>T-Statistic</td>
<td>N=</td>
<td>T-Statistic</td>
</tr>
<tr>
<td></td>
<td>N=106</td>
<td>T-Statistic</td>
<td>N=124</td>
<td>T-Statistic</td>
</tr>
<tr>
<td></td>
<td>N=56</td>
<td>T-Statistic</td>
<td>N=92</td>
<td>T-Statistic</td>
</tr>
<tr>
<td>2014</td>
<td>SQ 1: Confidence in U.S Adoption</td>
<td>-0.552</td>
<td>-13.578</td>
<td>-1.497</td>
</tr>
<tr>
<td></td>
<td>SQ 2: Importance of Teaching IFRS</td>
<td>0.526</td>
<td>14.610***</td>
<td>0.481</td>
</tr>
<tr>
<td>2011</td>
<td>N=165</td>
<td>N=197</td>
<td>N=189</td>
<td>2.340***</td>
</tr>
<tr>
<td></td>
<td>SQ 1: Confidence in U.S Adoption</td>
<td>0.045</td>
<td>1.497</td>
<td>0.106</td>
</tr>
<tr>
<td></td>
<td>SQ 2: Importance of Teaching IFRS</td>
<td>0.615</td>
<td>23.369***</td>
<td>0.683</td>
</tr>
<tr>
<td>2010</td>
<td>N=224</td>
<td>N=270</td>
<td>N=207</td>
<td>5.767***</td>
</tr>
<tr>
<td></td>
<td>SQ 1: Confidence in U.S Adoption</td>
<td>0.267</td>
<td>10.045***</td>
<td>0.326</td>
</tr>
<tr>
<td></td>
<td>SQ 2: Importance of Teaching IFRS</td>
<td>0.737</td>
<td>31.102***</td>
<td>0.661</td>
</tr>
<tr>
<td>2009</td>
<td>N=151</td>
<td>N=184</td>
<td>N=92</td>
<td>4.005***</td>
</tr>
<tr>
<td></td>
<td>SQ 1: Confidence in U.S Adoption</td>
<td>0.284</td>
<td>8.723***</td>
<td>0.295</td>
</tr>
<tr>
<td></td>
<td>SQ 2: Importance of Teaching IFRS</td>
<td>0.769</td>
<td>26.531***</td>
<td>0.831</td>
</tr>
</tbody>
</table>

***, **Significant in a two-tailed test at less than .001, .01
Figure 3

Do you have any practical experience applying IFRS?
Figure 4
Fewer than 3 In 10 Now Say The U.S. Should Converge U.S. GAAP And IFRS With Substantial Equivalence By 2016; More than 7 in 10 Still Favor Convergence at Some Point

Regarding IFRS, what course of action do you believe the U.S. should follow?

- Adoption of IFRS in place of U.S. GAAP for publicly-traded companies on or before 2016
  - 2014 (n = 289): 6% adoption of IFRS, 17% convergence by 2016, 23% indefinite continuation of U.S. GAAP
  - 2011 (n = 636): 2% adoption of IFRS, 22% convergence by 2016, 23% indefinite continuation of U.S. GAAP
  - 2010 (n = 786): 2% adoption of IFRS, 22% convergence by 2016, 21% indefinite continuation of U.S. GAAP

- Convergence of U.S. GAAP and IFRS, with substantial equivalence achieved only after 2016
  - 2014 (n = 289): 22% convergence by 2016, 42% indefinite continuation of U.S. GAAP
  - 2011 (n = 636): 22% convergence by 2016, 42% indefinite continuation of U.S. GAAP
  - 2010 (n = 786): 22% convergence by 2016, 42% indefinite continuation of U.S. GAAP

- Convergence of U.S. GAAP and IFRS, with substantial equivalence by 2016
  - 2014 (n = 289): 46% convergence by 2016, 23% indefinite continuation of U.S. GAAP
  - 2011 (n = 636): 46% convergence by 2016, 23% indefinite continuation of U.S. GAAP
  - 2010 (n = 786): 45% convergence by 2016, 21% indefinite continuation of U.S. GAAP

- Indefinite continuation of U.S. GAAP
  - 2014 (n = 289): 29% indefinite continuation of U.S. GAAP
  - 2011 (n = 636): 29% indefinite continuation of U.S. GAAP
  - 2010 (n = 786): 29% indefinite continuation of U.S. GAAP
To what extent will the U.S. economy and capital markets be advantaged or disadvantaged if the U.S. chooses anything less than a complete conversion to IFRS? 1 = Very Disadvantaged, 5 = Very Advantaged
Figure 6
Respondents’ Ratings of Importance of Teaching IFRS in U.S. Universities

<table>
<thead>
<tr>
<th>Total Rating</th>
<th>Overall Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important/Important</td>
<td></td>
</tr>
<tr>
<td>2014: 83%</td>
<td>2014: 3.0</td>
</tr>
<tr>
<td>2011: 85%</td>
<td>2011: 3.1</td>
</tr>
<tr>
<td>2010: 89%</td>
<td>2010: 3.2</td>
</tr>
<tr>
<td>2009: 91%</td>
<td>2009: 3.3</td>
</tr>
</tbody>
</table>

![Bar chart showing respondents' ratings of importance of teaching IFRS in U.S. universities.](chart.png)

- 2014 (n=307) - 2011 (n=533) - 2010 (n=505) - 2009 (n=495)
Figure 7
Trend Shows Growing Majority Delaying Expectations that Graduating Students will Enter Workforce with Comprehensive Knowledge of IFRS

Which graduating class of students at your school do you expect will enter the workforce with a truly comprehensive knowledge of IFRS?
More than Half Say IFRS Is Now Incorporated Significantly into the Curriculum and 24% Say IFRS will be incorporated Significantly in 2014-2015. Past years had shown increasing percentages expecting incorporation in those survey time periods.

Figure 8

Beginning in the 2010-2011 academic year
Figure 9
Significance of IFRS Integration into Accounting Curricula:
One or Two Credit Hours of Existing Courses or Separate Graduate and Undergraduate Courses

Integrated IFRS into an existing course for one or two credit hours:

- Integrated significant components of IFRS into an existing course (equivalent to approximately 1 student credit hour)

- Integrated significant components of IFRS into an existing course (equivalent to 2 or more student credit hours)

- Created a separate graduate course
  - 2014: 12%, 2011: 12%
  - 2010: 17%, 2009: 15%

- Created a separate undergraduate course
  - 2014: 31%, 2011: 27%
  - 2010: 17%, 2009: 15%

- Actively assessing appropriate course of action
  - 2014: 27%, 2011: 17%
  - 2010: 17%, 2009: 19%

- No significant steps yet taken
  - 2014: 20%, 2011: 17%
  - 2010: 22%, 2009: 40%

Significant steps taken:
Other courses include:
- Accounting theory and research
- Advanced theory
- Audit and systems
- Environment of accounting
- Financial statement analysis
- Grad financial accounting
- Graduate/ senior capstone course
- IFRS course
- Integrative accounting
- Seminar in financial analysis
- Topics course
Figure 11
Faculty resource allocation to develop IFRS teaching expertise

- Individual faculty have been identified who will be responsible to teach
- Will provide funding to existing faculty to attend training
- Will provide funding or release time to existing faculty to develop course materials
- Will hire new IFRS-ready faculty
- A combination of hiring new IFRS-ready faculty and developing existing faculty
- Other
- Undecided, no plans

<table>
<thead>
<tr>
<th>Plan Description</th>
<th>2014 (n = 269)</th>
<th>2011 (n = 623)</th>
<th>2010 (n = 779)</th>
<th>2009 (n = 491)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual faculty have been identified</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will provide funding to existing faculty to attend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will provide funding or release time to existing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will hire new IFRS-ready faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A combination of hiring new IFRS-ready faculty and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undecided, no plans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How challenging are the following aspects of IFRS curriculum integration for the academic community? Use a 1-5 scale where 1 means “Not at all challenging” and 5 means “Very challenging.”

**Summary of Other Factors**
- Faculty motivation or resistance to change
- Training of part time faculty
- Uncertainty of adoption or importance of IFRS
- Confusion to students from teaching two sets of standards
Figure 13
Use of Case Materials

Consistent with Prior Surveys, 1 in 3 have Comprehensively Examined Case Studies/Materials Developed by the Large Public Accounting Firms

Q19. To what extent have you examined teaching materials and case studies developed by the large public accounting firms?

1 = Have not examined any materials/ case studies developed by the large public accounting firms; and
5 = Have comprehensively examined materials/ case studies developed by the large public accounting firms
Figure 14
Use of External Parties’ Materials to Teach IFRS

Faculty Still Say External Parties’ Value Is In Providing Problems & Case Studies That Compare/ Contrast U.S. GAAP And IFRS

Q24. How might external parties (AAA, CPA firms, Industry) best facilitate faculty efforts to teach IFRS?

1-5 scale where 1 means “Not valuable at all” and 5 means “Very valuable”.

<table>
<thead>
<tr>
<th>Option</th>
<th>% 1</th>
<th>% 3</th>
<th>% 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Case studies comparing and contrasting IFRS and U.S. GAAP conceptual commonalities and differences</td>
<td>6</td>
<td>12</td>
<td>82</td>
</tr>
<tr>
<td>b) Problems comparing and contrasting IFRS and U.S. GAAP technical commonalities and differences</td>
<td>6</td>
<td>16</td>
<td>79</td>
</tr>
<tr>
<td>c) Stand-alone webcasts or podcasts for classroom use</td>
<td>22</td>
<td>30</td>
<td>48</td>
</tr>
<tr>
<td>d) IFRS Test-Banks with Solutions</td>
<td>13</td>
<td>26</td>
<td>61</td>
</tr>
<tr>
<td>e) Repurposed internal training courses for classroom use</td>
<td>21</td>
<td>28</td>
<td>51</td>
</tr>
<tr>
<td>f) Subsidized/free access to IFRS certification</td>
<td>20</td>
<td>25</td>
<td>55</td>
</tr>
<tr>
<td>g) Other</td>
<td>33</td>
<td>15</td>
<td>52</td>
</tr>
</tbody>
</table>

May not equal 100% due to rounding
Which of the following steps has your school taken to incorporate Data Analytics into the accounting curriculum? (Select all that apply.)

Significant steps taken
2014: 58%

Summary of “Other”
- Offer major, minor, graduate and undergraduate degrees and certificate programs
- Incorporated in courses offered by other departments, such as finance, information systems, management science and math
- Still trying to define how Data Analytics may be integrated into accounting education
Figure 16
Percentage Of Faculty Who Received Financial Support
Or Course Release Time For Various Subjects

Q21c. What percentage of your school’s faculty have received financial support or course release time to train for, develop, and/or incorporate specific materials on this subject into the curriculum?
Founded in 1892, the University of Rhode Island is one of eight land, urban, and sea grant universities in the United States. The 1,200-acre rural campus is less than ten miles from Narragansett Bay and highlights its traditions of natural resource, marine and urban related research. There are over 14,000 undergraduate and graduate students enrolled in seven degree-granting colleges representing 48 states and the District of Columbia. More than 500 international students represent 59 different countries. Eighteen percent of the freshman class graduated in the top ten percent of their high school classes. The teaching and research faculty numbers over 600 and the University offers 101 undergraduate programs and 86 advanced degree programs. URI students have received Rhodes, Fulbright, Truman, Goldwater, and Udall scholarships. There are over 80,000 active alumnae.

The University of Rhode Island started to offer undergraduate business administration courses in 1923. In 1962, the MBA program was introduced and the PhD program began in the mid 1980s. The College of Business Administration is accredited by The AACSB International - The Association to Advance Collegiate Schools of Business in 1969. The College of Business enrolls over 1400 undergraduate students and more than 300 graduate students.

**Mission**

Our responsibility is to provide strong academic programs that instill excellence, confidence and strong leadership skills in our graduates. Our aim is to (1) promote critical and independent thinking, (2) foster personal responsibility and (3) develop students whose performance and commitment mark them as leaders contributing to the business community and society. The College will serve as a center for business scholarship, creative research and outreach activities to the citizens and institutions of the State of Rhode Island as well as the regional, national and international communities.

The creation of this working paper series has been funded by an endowment established by William A. Orme, URI College of Business Administration, Class of 1949 and former head of the General Electric Foundation. This working paper series is intended to permit faculty members to obtain feedback on research activities before the research is submitted to academic and professional journals and professional associations for presentations.

An award is presented annually for the most outstanding paper submitted.