

EDUCATING FOR THE PUBLIC TRUST

The PricewaterhouseCoopers Position
on Accounting Education

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PREFACE

These are challenging times for the accounting profession. Through recent events, the world has learned an object lesson in the centrality of accounting and accountability to our capital markets. This crisis brings us the opportunity to reflect and to refocus our efforts—to find new answers and make new commitments. At this critical juncture, we choose to focus on accounting education because of the important role it plays in rebuilding the public trust. We also want to respond to the many questions we receive about our views on accounting education and on important curricular decisions.

To show how accounting education can help the profession travel the road back to public trust, we begin this volume with our position on accounting education. It is based on our extensive experience with students and faculty; on our research on success in the firm; on lengthy discussions with a number of professors and administrators; on ongoing dialogue within our firm; and on an intense study of curricula at nine universities. We intend our comments to support the continuing conscientious stewardship of the trust the profession places in the academy, and we hope our views will stimulate productive dialogue on the future of accounting education. It is important to note that the positions we take are our own and should not be attributed to any of the faculty or institutions that have provided input to us.

To help provide context for our position, we have included a summary of our Curriculum Study in this monograph. PricewaterhouseCoopers commissioned Dr. Clifton F. Conrad and Ms. Kim Rapp of the University of Wisconsin to study the curricula at nine universities and at PwC. Completed in late 2002, this research broke new ground in the breadth and depth of its analysis of what is actually happening in the classroom and in understanding the intersection between collegiate education and continuing professional education. It provides important insight into the current state of accounting education.

We would like to express our deep appreciation to the many individuals who have helped us with the formulation of our position paper and with the research for our Curriculum Study. This includes a number of our colleagues at PwC and many administrators, faculty and students at universities. We owe special thanks to our primary researchers and to the nine heads of the accounting programs we studied. All of the people we worked with were exceptionally generous in devoting valuable time with a graciousness for which we are most appreciative.

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EDUCATING FOR THE PUBLIC TRUST

The PricewaterhouseCoopers Position on Accounting Education

As never before, attention is focused on the capital markets. Public trust in the markets and the people who work in them has been shaken. Questions have been raised about the institutions and individuals that share a collective responsibility for producing information for the marketplace. Continuing revelations of questionable conduct by individuals fuel an atmosphere of dissatisfaction that diminishes confidence in the profession and, ultimately, our economy.

Calls for accounting reform are continuous. Professional, regulatory, judicial, and legislative responses have had varied impacts on the crisis in trust. In addition to these efforts, accounting educators must play a clear role in restoring the public trust. Collegiate education has a very significant and lasting effect on the knowledge, skills and attitudes that individuals bring to the marketplace. As we all face the challenge of how to restore the public trust, we must consider what reforms are necessary in the accounting education system that in turn develops practitioners who provide critical support to the U.S. economy.

In this paper we begin by reviewing the essential parts of the corporate reporting supply chain. We then present PricewaterhouseCoopers' position on ten educational issues that are essential to the reform of accounting education.

The Corporate Reporting Supply Chain

To understand how education can help restore trust in the capital markets, we must first consider who impacts the capital allocation process. All the elements of the supply chain—company executives, boards of directors, information distributors, independent auditing firms, third-party analysts, standard setters, and market regulators—must be dependable. Failure to understand what is right and to act accordingly by individuals in the supply chain may seriously damage our ability to create value through capital formation.

To educate for the public trust, accounting programs must be successful in attracting the right students, provide a vigorous and challenging curriculum, and maintain adequate resources to ensure the viability of the educational process. The sections that follow identify and discuss specific recommendations in each of these areas.

Students

1. *The accounting profession cannot function effectively without an adequate and predictable flow of new talent. The quality of the talent, as measured by performance after employment,*

must be consistent over time, and the availability of talent must not be unduly influenced by external factors, including the economic climate.

We choose to start our discussion with students because the renewal provided by succeeding cohorts of new entrants is critical to all elements in the corporate reporting supply chain. Specifically, the public accounting profession has a long tradition as a major force in entry-level hiring. Accounting firms provide lifelong career opportunities for many, as well as a robust professional experience for thousands of new entrants each year.

Enhancing the firms' ability to maintain an adequate and predictable flow of new talent is essential. While the imbalance of low supply and high demand is a significant problem at times, variability over time is also an issue. Short-term spikes in supply may occur, but the focus must be on long-term trends.

Professionals and faculty must continue to work together to ensure that students understand both the benefits of majoring in accounting and the challenging reality of actually practicing in the profession. Enriching courses and classes with materials that reflect the complexity of the practice environment will help reach this goal. At the same time, the quality of the education will increase.

Faculty should ensure that their students make critical choices with sufficient, reliable information. Faculty also should create and maintain connections with students who have not yet chosen a major. All too often

this audience is served by instructors who are not fully connected to the accounting program. Also, these students may not be included in the extracurricular activities of the accounting program. This means that some students make life-changing decisions without the best possible information. Ensuring good communications with students by the most effective and respected members of the faculty will create a significant increase in interest in the accounting program.

The accounting profession needs a consistent flow of quality talent entering the profession over time. To gauge the success towards this goal requires a measure of quality. At PricewaterhouseCoopers, we evaluate our partners and staff each year. Much effort goes into this process, and great care is taken to ensure that it appropriately reflects practice needs. This data also reveals the performance of a school's graduates over time in the firm, and is a key part of evaluating the quality of our entrants.

- 2. To serve our constituencies, we need diverse talent entering the profession. We must reflect the reality and strength of the commercial world. We cannot do this without access to a diverse student population.*

We, and our clients, serve global markets that include a wide variety of participants. Groups often thought of as "minorities" are in fact the majority in some markets. The purchasing power of nontraditional groups is measured in the billions and trillions of dollars. Our clients incorporate diversity as a business strategy to increase sales, market share and earnings growth by increasing

innovation and by reaching out to untapped or underserved markets. They expect us to support these efforts and to be able to connect with them at many levels. To do this, we must mirror the composition of the world in which we work and live. By having a pool of diverse talent, we increase the creativity of our teams and strengthen the quality of our work.

The primary avenue of entry into the practice is through collegiate education. For us to meet our diversity needs, the supply of minority talent must increase. Colleges and universities must ensure that the opportunities implicit in their accounting programs are available to all qualified students and that those students have ample opportunity in the collegiate environment to realize the benefits of working in diverse teams. We encourage programs to make connections with and generate interest among underserved groups.

Curriculum

3. *High-quality corporate reporting requires people of integrity, a spirit of transparency and a culture of accountability. The values of quality, integrity, transparency, and accountability should be integrated throughout the curriculum.*

Samuel A. DiPiazza Jr. and Robert G. Eccles identified three key elements in their book *Building the Public Trust*:

- A **spirit of transparency** is the willingness to provide to shareholders

and other stakeholders the information they need to make decisions;

- A **culture of accountability** requires that every member of the corporate reporting supply chain takes responsibility for the quality of the information, communication and decisions that flow through the system; and
- **People of integrity** are essential because transparency can only occur when individuals try to “do the right thing.”

DiPiazza and Eccles observe that these elements “are easy enough to describe, but not always easy to practice.” Success at maintaining transparency, accountability and integrity is a significant contributor to confidence in the economy. While business failures will always be possible in free capital markets, lasting change that enhances these three elements will reduce their number and consequences.

In the curriculum, we feel that the spirit of transparency, culture of accountability, and need for integrity should be experienced everywhere. This is as much a matter of ethos as it is of content. The power of education by visibly living these values should not be underestimated. They must be pervasive and cannot be apportioned to particular courses or classes. Nor are they solely the responsibility of accounting faculty. Throughout the business curriculum and extra-curriculum, these three elements must be omnipresent, surrounding the learner with an environment that assumes their importance and rewards no deviations.

All business students must understand that personal integrity is not a choice. It is an obligation for those who serve the public interest. The profession is best served by academic experiences that require compliance with reasonable standards of conduct. Faculty members should not tolerate actions that demonstrate a lack of integrity.

4. *While we see some transformation in accounting curricula, three areas need additional focus:*

- *Helping new entrants understand what it means to be a member of the profession;*
- *Emphasizing higher-level interpersonal and communications skills and integrating them throughout the curriculum; and*
- *Fostering students' ability to solve problems in complex business environments where the best answer is difficult to identify.*

The PricewaterhouseCoopers Curriculum Study found that there have been significant changes and innovations across all the programs we examined. A transformation of accounting education is taking place, one that is moving education significantly beyond providing students only with technical training and specialized accounting knowledge. Innovation has taken place in approaches to teaching and learning, as well as in content and the organization of knowledge. These innovations, however, are not consistently adopted either within or across programs.

To enhance these improvements, accounting programs need to focus on three areas.

- New entrants need help understanding what it means to be a member of the profession. When completing their formal education in accounting, many students do not fully understand what it means to be a practicing accountant in a practical, everyday sense. Even after entering practice, most new hires do not have a good understanding of what it means to be a member of the accounting profession. Students in the early stages of study need to understand the roles and responsibilities they will be expected to assume as accountants. Frequent opportunities to meet, listen to and work with professionals (especially those at the senior levels of an organization) and to have conversations about the responsibilities and ethical issues accountants face should be important parts of accounting curricula. Students should experience a professional environment from the very beginning of their experience in accounting education.
- An emphasis on integrating higher level interpersonal and communications skills throughout the curriculum would enhance accounting education. Recent experience with the PricewaterhouseCoopers xTax Competition demonstrated that students are developing essential expertise in presentation skills. This is a significant success; however, interpersonal, oral and written com-

munication skills—“soft skills”—go far beyond the basics of formal presentations. Areas needing further work are interviewing skills, dealing with “difficult people,” participating in multicultural communication, writing in a professional manner, and integrating these “soft skills” with higher-order cognitive skills, as well as technical skills and knowledge.

- Students need an understanding of the complexity of business environments to support their ability to identify and solve problems with significant ambiguity in circumstances that include a significant amount of change. Throughout their education and training, many students are not consistently encouraged to bring healthy doses of skeptical and “big-picture” thinking to their study of accounting. At the university level, too much emphasis on “the right answer,” and the creation of “silos” of accounting and business, often reduce potential opportunities to identify gray areas. Students will benefit from further opportunities to develop the insight and confidence to help them identify effectively and solve complex, real-world problems.

5. *The first course in accounting must ensure that all students understand the importance of accounting to business and the related responsibilities in corporate governance. Also, it should properly portray the practice of accounting in firms, clients and nonprofit entities.*

The first course in accounting is a critical step in the process of educating for the public trust. The course serves two critical purposes:

- It is the only opportunity to ensure that all business students understand the needs and responsibilities of the corporate reporting system. While accounting specialists are critical to the corporate reporting supply chain, many others have significant roles. All the participants must be fully aware of their responsibilities and the need for transparency, accountability and integrity in the development of quality corporate reporting.
- The first course markets the discipline to potential future majors. To some extent the future shape of the profession is outlined by the impact of the students’ first experience in the discipline. We feel the first course must properly portray the practice of accounting in firms, clients and nonprofit entities. Students must understand the importance of accounting and accountability to business. They must also experience the need for transparency and integrity. To be successful, the first course must be among the most highly rated and desirable courses on campus.

6. *We can no longer look at pre-entry and continuing professional education in silos. To be efficient and create credibility with our learners, collegiate and professional educators must work together.*

A greater emphasis on cultivating a commitment to continuous individual and collaborative learning is needed.

Despite the obvious commonality of interests, the practitioners of pre-entry and continuing professional education work in largely separate worlds. Opportunities for interaction and synergy among the members of these largely disparate communities are few. Even at the likeliest point of interface, where undergraduate and graduate students become new entrants in the profession, there is little transfer of information about education as the transition is made. To ensure a consistent appreciation of values, shape much-needed expertise and create seamless transitions, these two educational communities must find common ground. Both practitioners and faculty must actively seek opportunities to promote discussion of gaps and overlaps between their programs.

Developing an individual's commitment to learning is highly dependent on developing not only her or his appetite for learning, but also her or his desire to learn. This desire can be cultivated by helping future accountants understand what it means to be a member of their chosen profession; providing them with opportunities to use their "soft" and "higher-order cognitive" skills; and instilling in them enough confidence that they can evaluate "the big picture" and, if necessary, question what they see. The same commitment to lifelong education must be inherent in the approach that faculty take to their own research and teaching. The profession and the academy must be places where continuous learning is the norm for all participants.

7. *The value proposition for the uniform application of 150-hour rule across all entrants to the profession needs to be re-examined. The 150-hour requirement should remain but be changed to include alternatives to create greater flexibility in how the profession attracts top talent.*

In recent years, much attention has been focused on the amount of time dedicated to pre-entry education. Our view is that the 150-hour requirement should remain but be changed to provide equivalent alternatives for meeting the requirement. These alternatives should include the following:

- Formal college education that is consistent with many current education requirements.
- Requiring additional practice (e.g., one more year than currently required) is a viable alternative and another form of learning.
- Recognition for continuing professional education is another viable alternative and another form of learning.

We feel that the 150-hour requirement should remain but we believe that by providing these alternatives in the requirement, we are providing more flexibility in attracting high-quality talent—which we feel is a critical issue for the future of our profession. Our position should not be viewed as reducing the importance of education in preparing students for our profession but rather providing alternatives for equivalent learning.

Resources

8. *Deans and Program Leaders must take steps to ensure the availability of competent, well-educated, enthusiastic new accounting faculty. The lack of entrants into the professoriate, combined with the large cohort at or near retirement, is a crisis in the making.*

We note with concern that the availability of competent, well-educated, enthusiastic new faculty appears to be in jeopardy. Informal data on the output from accounting doctoral programs indicate that there has been a reduction in graduates over recent years. At the same time the potential for a significant number of retirements is rising. These two forces are exacerbated by the differential in compensation and teaching loads for retiring faculty and their replacements. Independent research indicates that there will continue to be a pervasive global shortage of doctorally qualified business faculty over the next decade.

Business schools must identify the impact these forces will have on their faculty. The size of the shortfall over the next few years will require the development of creative solutions to broaden the pool of qualified teachers. This issue requires immediate attention from academic leadership to ensure an adequate and appropriate supply of faculty.

9. *Deans and Program Leaders should support faculty in their efforts to interact with the profession. A professoriate that is*

disconnected will be less likely to be able to create a culture of accountability or to live the spirit of transparency. Many recent entrants into the academy do not have significant understanding of or ties to the profession.

We are concerned that many of those who have joined the academy recently do not have a significant linkage to the profession. A professoriate that is disconnected from practice is less likely to be able to create a culture of accountability or to live the spirit of transparency. Transmitting the values of the profession and a belief in its importance is much more likely if professors have real and continuing connections to practice.

Beyond the question of values, a practice relationship will help enhance professors' abilities to teach beyond the textbook. This increases the "reality" of accounting courses, thereby enhancing their quality, veracity and attractiveness.

10. *Adequately supporting the public trust requires that Deans ensure that business schools have as strong a commitment to accounting education as they do to other business education. To support this balanced approach, ratings of programs should include the quality of accounting preparation when evaluating business programs and should not focus solely on MBA Programs.*

Deans and central administrators must support education for the public trust. We note with concern that universities may choose to sub-optimize their Accounting Program in favor of providing increased support to their MBA Program. This resource allocation is invited by school rankings that focus only on MBA Programs. To properly support education for the public trust, business schools and those that rank them must recognize that leaders come from both the Accounting Programs and the MBA Programs. No business school should be considered to be top quality if it is not equally supporting all programs that educate for the public trust.

Stand and Be Counted

We have endured the most tumultuous year since the founding of the modern US accounting profession in the 1930s—a nearly perfect storm that has reinforced our confidence and our commitment. We must now reaffirm our belief in the basic values that support our capital markets. To do this, we, as practitioners and professors, must add a sense of urgency to our continuing efforts to improve accounting education. We must ensure that graduates are committed to transparency, accountability and integrity.

Now is the time for everyone—practitioners, faculty, students, deans, administrators and rating agencies—to stand and be counted in the effort to educate for the public trust.

A STUDY OF ACCOUNTING EDUCATION AT NINE UNIVERSITIES AND PRICEWATERHOUSECOOPERS: A SUMMARY

Clifton F. Conrad and Kim Rapp

Overview

The “Study of Accounting Education,” performed for PricewaterhouseCoopers by Dr. Clifton F. Conrad and Ms. Kim Rapp, was anchored in two complementary goals:

- to identify and describe the distinguishing features both of the accounting programs in the sample of universities and those of the continuing professional education provided for entry-level accountants at the Firm; and
- to explore the intersection—specifically, program overlap and program gaps—between the accounting programs in the respective universities and the continuing professional education offered at PwC.

The Study was conducted from Spring to Fall of 2002. This summary document explains the key findings and methodology. Its purpose is to describe the overall results—not to focus on specific programs or institutions—and hence no attribution to individuals or schools is included.

Key Findings

The key findings outlined below are discussed in the following document on the pages indicated.

- A transformation is taking place that is moving accounting education beyond providing students with traditional technical training and specialized accounting knowledge (pages 29-31).
- The pattern of change and innovation is not consistent, either within programs or across institutions (pages 30-31).
- There is significant overlap in the technical content between university and continuing professional education (pages 34-35).
- There are several gaps between university and continuing education, including the following:
 - A greater emphasis is needed on helping new entrants understand what it means to be a member of the profession (pages 35-36).
 - Interpersonal and communications skills are not consistently advanced or integrated into the accounting curricula of either universities or the Firm (page 36).
 - Students’ ability to problem-solve in the “gray” is often hindered by various factors, including a lack of

understanding of the complex business environment (pages 36-37).

– A greater emphasis is needed on cultivating a commitment to continuous individual and collaborative learning (pages 37-38).

- The overall contribution of master’s degrees in accounting is not clear, with the possible exception of tax specialty programs (pages 27-29).

The study also enlightens our understanding of accounting education through the identification of six distinguishing features of the university programs discussed on the pages indicated.

- Intent (pages 16-17)
- Skills and Attitude-of-Mind (pages 18-19)
- Content Focus (pages 19-22)
- Organization of Knowledge (pages 22-24)
- Learning Environment (pages 24-25)
- Approach to Teaching and Learning (pages 25-27).

Methodology

In conducting the study, the researchers used a multi-method approach that was anchored in three complementary techniques: 1) document analysis, 2) interviews and 3) participant observation. During visits with each program the researchers interacted informally with and interviewed many students, faculty and staff, and observed classes identified by program liaisons as “key” in

accounting and related fields—including required courses for accounting majors with both traditional and nontraditional delivery systems and courses that were considered innovative both in terms of content and pedagogy. In addition, three visits were made to PwC to collect extensive documentation and interview key persons involved in continuing professional education at the Firm. The researchers also conducted telephone interviews with graduates of the accounting programs in the sample who are currently employed at PwC.

In the order in which they were visited, the universities in the sample included:

- New York University
- Pennsylvania State University
- Howard University
- University of Florida
- University of Texas-Austin
- University of Illinois at Urbana-Champaign
- Notre Dame University
- University of Southern California
- Brigham Young University

As outsiders to the field, the researchers were also careful to use “member checks” to help ensure validity. To wit, in addition to follow-up conversations with selected faculty and staff, the heads of the accounting programs at the participating universities and two other experts were invited to critique the findings.

Introduction

At the dawn of the twenty-first century, students enrolled in colleges and universities are investing more and more time and resources in preparing for careers in accountancy; accounting faculty are keenly aware of the need to keep their programs responsive to the needs of business—not least in light of recent events that have placed accounting at the forefront of public discourse; and the major public accounting firms are spending millions of dollars annually on professional training and education for their employees. In this context, enlarging and enriching understanding of the landscape of accounting education—both in higher education and at major accounting firms such as PricewaterhouseCoopers—is at once critical to universities, public accounting firms and the profession of accountancy.

The purpose of this study was to conduct research on accounting programs at nine universities that are among the major suppliers of public accountants and on continuing professional education at the Big 4 public accounting firm PricewaterhouseCoopers (hereafter PwC or “the Firm”). More specifically, the project was anchored in two complementary aims: first, to identify and describe the distinguishing features both of the accounting programs in our sample of universities and those of the continuing professional education provided for entry-level accountants at the Firm; second, building on this foundation, to explore the intersection—specifically, program overlap and program gaps—between the accounting programs in the respective universities and

the continuing professional education offered at PwC.

As a point of departure, it is important to note that most of the research on accounting education has been conducted by people closely associated with the field. Indeed, the monograph by W. Steve Albrecht and Robert Sack (*Accounting Education: Charting the Course through a Perilous Future*) that was published in 2000—and sponsored by the American Accounting Association, the American Institute of Certified Public Accountants, the Institute of Management Accountants, and the large firms—is the most recent in a long line of insiders’ views of accounting education. In bringing an outsider’s approach to this study while, at the same time, drawing on the perspectives of key stakeholders within the field of accounting education, it has been our aim throughout to make a meaningful contribution to the existing knowledge base on accounting education as well as to challenge readers to reflect on the current state of the field. We hope that—both in our research and our writing—we have advanced findings and interpretations that encourage the reader to reexamine her or his own assumptions about accounting education. Accordingly, throughout this report we have sought to heed the advice of Edwin Schlossberg, the contemporary designer: “The skill of writing is to create a context in which other people can think.”

In conducting the study, we used a multi-method approach that was anchored in three complementary techniques: 1) document analysis, 2) interviewing, and 3) participant observation. In terms of documents, the

nine participating universities and PwC provided Web site information, catalogs, course syllabi, accrediting reports, and self-studies—as well as myriad documents prepared expressly for our visits. As regards to the interviews, taped on-campus interviews were conducted with four major stakeholder groups at each of the participating universities: program administrators, faculty (in accounting and related fields), staff (such as internship coordinators), and current undergraduate and graduate students. Following our visits, telephone interviews were conducted with 20 graduates of the accounting programs in our sample who are currently employed at PwC, as well as with seven individuals at PwC who are variously involved with continuing and professional education. Along with documents and interviews, participant observation also served as a major data source. The senior researcher in the study, who visited each program for an average of two days (the other researcher visited one program), interacted informally with many students, faculty, and staff and observed classes identified by program liaisons on each campus as “key” in accounting and related fields—including required courses for accounting majors with both traditional and nontraditional delivery systems and courses that were considered innovative both in terms of content and pedagogy. In addition, three visits were made to the PwC National Office, where we collected extensive documentation and interviewed key persons involved in continuing and professional education at the Firm.

Our sample of nine university accounting programs is comprised of a group of nine universities that together produce about one-

fifth of the 2,000 to 2,500 accountants hired annually by PricewaterhouseCoopers. Not only are these programs highly regarded by PwC but most of the nine are consistently ranked among the leading accounting programs in the nation. In turn, these nine programs may be considered as broadly representative of the major producers of public accountants for Big 4 accounting firms in general, and among the leading accounting programs in the nation. In the order in which they were visited, the universities in the sample included:

- New York University
- Pennsylvania State University
- Howard University
- University of Florida
- University of Texas-Austin
- University of Illinois at Urbana-Champaign
- Notre Dame University
- University of Southern California
- Brigham Young University

Individuals to be interviewed and courses to be observed were identified through purposive sampling done by each program’s liaison (the head of the accountancy department). At each site but one, we interviewed an average of 14 stakeholders, observed at least two classes, and collected numerous documents. (Because one institution was not in session at the time of our visit, we were not able to observe any classes or conduct formal interviews with students—though we did meet informally with several

students. We interviewed a total of six faculty at the university and examined myriad documents.) The validity and reliability of the data collected were advanced by our use of multiple and diverse data sources as well as through frequent, in-depth conversations between the two researchers regarding our interpretations of the data. As outsiders to the field, we were also careful to use “member checks” to help ensure validity. To wit, in addition to follow-up conversations with selected faculty and staff we had earlier interviewed at the nine universities, we invited the heads of the accounting programs at the participating universities to critique our findings. Moreover, we also had our findings carefully examined by two accounting specialists: one, a former professor of accounting, is currently a partner at PricewaterhouseCoopers; the other is a nationally prominent professor of accounting employed at a university not included in our sample.

Part One: Accounting Education at Nine Universities

Part One of the study addresses one overarching question: What are the signature features of the accounting programs—especially in regard to aims, content, and pedagogy—at the nine universities in the study? In this section we examine the undergraduate programs at the nine universities in terms of the “curriculum-in-practice” or, to put it another way, the “lived curriculum” that at once informs and defines the experiences of program participants. In so doing, we examine seven curriculum domains: intent, skills and attitudes-of-

mind, content focus, organization of knowledge, learning environment, approaches to teaching and learning, and curriculum innovations. Then we turn to the master’s level—specifically, the combined bachelor’s/master’s programs at four of the universities in our sample—and limit our focus to the contributions of these programs to the education of professional accountants.

Curriculum-in-Practice: Bachelor’s Level

Curriculum requirements can provide a useful window into any program of studies. Moreover, because they are relatively simple to identify and discuss, highly visible, and provide a shared language for discussing programs, many researchers focus only on requirements. Yet, by themselves, program requirements are inadequate: Not only do they suffer from a conspicuous absence of subtlety and nuance, but they fail to recognize the critical role that program participants—faculty, administrators, staff, and students—play in constructing and continually reshaping programs of study. As Haworth and Conrad—in their book *Emblems of Quality in Higher Education* (1997: 27)—advance in their “engagement theory” of high-quality academic programs, program participants play a pivotal role both in constructing and sustaining programs of high quality.

Accordingly, we chose to go significantly beyond requirements and explore the “lived curriculum”—the “curriculum-in-practice” that defines the character of the undergraduate program as experienced by program participants. To that end, we interviewed program participants, analyzed program

documents, and engaged in participant observation aimed at addressing this guiding question: In practice, what are the distinguishing features of the accounting programs in our sample—especially in regard to program aims, content and pedagogy?

Consonant with our driving research question and on the basis of our multi-method approach, we identified six salient features across the nine accounting programs: 1) intent; 2) skills and attitudes-of-mind; 3) content focus; 4) organization of knowledge; 5) learning environment; and 6) approach to teaching and learning. To examine the curriculum-in-practice, for each of the six features we identify the major ways in which the feature finds expression in the “lived curricula” of these programs. Both to support as well as to flesh out our findings, we draw on the voices of the people we interviewed, our classroom and outside-of-class observations, and program documents.

Intent: “Technical Problem-Solvers” to “Disciplined Problem-Solvers” to “Creative Problem-Solvers Preparing for Leadership”

Historically, all nine programs in our sample have, in practice, placed primary emphasis on educating what we label “technical problem-solvers,” namely, graduates who have a firm grounding in the rules and procedures of accounting—including the ability to apply them to the everyday world of accounting—and, not least, are prepared to be successful on the Certified Public Accountant (CPA) exam. Continuing to prepare “technical problem-solvers” remains

important, albeit in varying degrees, to all nine programs. As one representative faculty member from across the programs in our sample told us: “We are pretty heavy on technical content and we produce people who are early achievers in their careers.” Even at programs that do not emphasize the technical preparation of students in their written materials, we found in the courses we observed (and not only at the introductory level), as well as in interviews with students and graduates of the programs, that there was a considerable emphasis on students’ learning the rules of accounting—from required reading to teaching that emphasized rote learning and straightforward application to final exams that did likewise. (To be sure, some programs in our sample have abandoned traditional courses in financial reporting and auditing standards in the undergraduate program.) That said, we would be remiss if we did not note that there was nearly as much variance within programs—in terms of the emphasis on technical training—as there was across the programs we studied. Significantly, the pattern of considerable within-program variance was echoed across all six of the curriculum features we identified at all nine programs.

While preparing “technical problem-solvers” continues to remain an important part of the curricular landscape in accounting education, one of the most striking findings in our study is the extent to which faculty and administrators across the programs we studied are seeking to move beyond traditional rule-based training to embrace what we have labelled “disciplined problem-solvers.” As the label suggests, the

term refers to education aimed at helping students become more disciplined thinkers who not only learn and apply rules but are able to systematically frame—and use critical reasoning and sound judgment in addressing—messy real-world accounting problems.

Through classroom observation, interviews, and document analysis, we found that several of the nine programs in our sample not only were committed to educating “disciplined problem-solvers” but also “creative problem-solvers preparing for leadership.” To be sure, both “naming” and defining this third grouping is no easy task; the language used by many faculty and students often was vague. Still, these programs have more or less embraced a shared commitment to preparing students who are able to creatively—that is, with imagination and vision—define accounting problems in contexts and settings that can at best only be dimly foreseen and who, at the same time, are beginning to acquire the kinds of leadership skills that are expected to serve them well both as accountants and as business leaders.

Especially in regard to this third intent, educating “creative problem-solvers preparing for leadership,” faculty and administrators seemed as comfortable talking in metaphors as in conventional terms and language. For example, one faculty member used the term “architect” to describe this intent and another used the term “astronaut.” In a similar vein, another professor also used the term “astronaut” to emphasize that the program at his university was aiming to prepare accountants who, in the language of an earlier era, would “go where no man had gone before.”

Over the course of our campus visits, as it became increasingly clear that metaphors were useful in illuminating the three broad types of animating “intents” identified above, we in turn developed—in concert with both student and faculty interviewees—three sets of alternative metaphors that seem to capture these three intents:

- **Technical Problem-Solvers**

- Airline Mechanics
- Stage Managers
- Finishers

- **Disciplined Problem-Solvers**

- Airline Pilots
- Directors
- Builders

- **Creative Problem-Solvers**

- Astronauts
- Playwrights
- Architects

As all nine programs in the sample have sought to enlarge their purposes to variously include not only the preparation of “disciplined problem-solvers” but also, in some instances, “creative problem-solvers preparing for leadership,” we conclude by emphasizing that all of the programs openly stress that they are seeking to enlarge the definition of an accountant’s capabilities to go beyond traditional technical skills and specialized accounting knowledge to embrace a broader repertoire of skills—including not only higher-order skills but “soft skills” and “professional attitudes-of-mind”—as well as broadening accounting content to include knowledge of business processes for decision-making.

**Skills and Attitudes-of-Mind:
“Technical Skills” to “Higher-Order
Cognitive Skills” to “Interpersonal/
Communication/Professional Skills” to
“Professional Attitudes-of-Mind”**

Consonant with the emphasis that the nine programs in our sample place on preparing “technical problem-solvers” at the baccalaureate level, it is hardly surprising that they stress the importance of students’ acquiring basic competence in “technical [accounting] skills.” To be sure, some place more emphasis on the acquisition of technical skills near the beginning of students’ programs, while others emphasize their salience at the end of their course of study. Regardless of its placement—and whether it is focused on auditing or tax—this emphasis on technical skills acquisition finds expression in all of the programs in myriad program documents that invariably stress, by way of illustration, such technical skills as “ability to read, interpret, and explain financial statements” and “the ability to apply accounting knowledge to real world problems.” Indeed, the language is strikingly similar across most of the programs—a language that closely resembles that used in mainstream textbooks in the field.

While technical skills have long been a fixture in accounting education, we found that one of the most noteworthy and potentially far-reaching trends across accounting programs—and one that reflects the growing emphasis on preparing “disciplined problem-solvers”—is the movement toward emphasizing higher-order cognitive skills across the curriculum. To be sure, proposals

for greater emphasis on “thinking skills” in basic accounting education can be traced at least as far back as the 1970s. Still, we found—especially in faculty interviews—that this emphasis has not taken root in curricula until the last decade.

Many of the institutions in our sample are strongly committed—not only based on program documents but on interviews and classroom observations as well—to what we have labelled “higher-order cognitive skills.” Perhaps most significantly, several have placed such skills at or at least near the center of their programs, as evidenced in the ways in which they invite faculty to reflect on their courses in light of the higher-order cognitive skills that each program has clearly identified.

While all nine schools, albeit in varying degrees, have placed more emphasis on higher-order cognitive skills—a trend of considerable significance—a no less important trend is the movement toward emphasizing interpersonal, communication and professional skills. Based on interviews with faculty and students, as well as program documents and classroom observations, we found that what many in accounting refer to as “soft skills” have become increasingly important across all nine programs—and that these skills are emphasized through a variety of teaching strategies, from team projects and oral reports to out-of-class learning experiences such as internships. While interpersonal skills refer broadly to working effectively with others, communication and professional skills require more precise definition. In

general, the former refers to clarity and force in both oral and written communication, while the latter—professional skills—refers to a much broader range of abilities that variously includes research skills, skills in using technology and skills associated with ethical reasoning.

While less visible than the above-mentioned skills, there is one final domain, which we have labelled “professional attitudes-of-mind,” that most, if not all, of the programs in our sample have begun to view as a component of their “curriculum-in-practice.” In broad strokes, we define “professional attitudes-of-mind” as those attitudes, values and beliefs that faculty consider to be at the core of the accounting profession. What are those “attitudes-of-mind” that are variously incorporated into the programs we studied? Three stand out: 1) an ethical foundation—which could also be referred to as “integrity”—that is defined as an internalized set of values and moral principles to inform the practice of accounting; 2) a sense of civic and social responsibility; and 3) a sense of professional responsibility to clients.

When we visited one session of a class, the guest was a well-known “whistle-blower.” To suggest that his presentation, and the resulting discussion—in contrast to in-class cases that are not tied to “real situations” and “real people”—was anything less than provocative as well as informative would be to understate severely the possibilities of “real-life” cases for encouraging students to engage in ethically challenging dimensions of professional accounting.

Content Focus: Rules and Procedures to Accounting Concepts and Decision-Making Skills

The “naming” of an academic program is conventionally based on the content of the curriculum, and hence it is hardly surprising that when the content of each of the nine programs in the study is examined, each can usefully be labelled an “accounting program.” Beyond that designation, the focus of the content not only across but within programs as well varies widely, especially in terms of what we consider to be two ends of a content-focused continuum: on the one end is a focus on the rules and procedures of accounting, and on the other is one on accounting concepts and decision-making skills. Not least because each program we studied is made up of a wide variety of courses taught by diverse individual instructors and taken by diverse students, no one program rests absolutely at either extreme of this continuum, much less rests continually at a single point between the extremes. As we learned in our examination of both course syllabi and final exams, programs are constantly moving along this continuum as they respond to forces from major initiatives or events in the field of business writ large, changing local program goals, and student and faculty input.

In order to establish the content foci in each of the nine programs, we decided to narrow the range of courses available to us for examination. Specifically, we focused on the content of the four key undergraduate courses in accounting across the nine institutions:

the first course any undergraduate may have in accounting (premajor), the first accounting course accounting majors take once admitted to the program (usually in their junior year), and the two courses in which accounting majors are introduced to auditing and taxation, respectively. In so doing, we examined whether the content of these four courses reflects a primary focus on rules and procedures or accounting concepts and decision-making skills.

The first accounting course in which undergraduates are formally introduced to the field of accounting is almost always a major opportunity for a program to generate enthusiasm for potential majors by highlighting the purposes, key concepts and uses of the field. In broad strokes, we found that the programs providing syllabi for this course do not vary widely, with only a few exceptions, in the types of content they emphasize to students—most of whom are not, at this juncture, accounting majors. Notwithstanding the stated objective in some of the syllabi to help students understand how accounting information is used in decision-making, the content in most of the introductory courses is, to a considerable extent, rule-based and procedural. More specifically, content focuses on financial statements, the accounting cycle, inventory, equity, cash flows, and cost allocation, and students are tested and graded almost exclusively through multiple-choice exams. To be sure, while several of the final exams we examined place some emphasis on decision-making skills, these were the exception. At best, some exams appeared to be aimed at assessing decision-making skills—though it is often unclear whether faculty are focusing

on the skills and concepts behind decision-making or “the rules.”

While it is difficult to determine conclusively on the basis of the information we have collected—course syllabi and final exams are not without limitation as data sources—the extent to which programs in our sample are emphasizing accounting concepts and decision-making skills in the introductory course, it is clear that all nine of the programs are moving in this direction.

Nearly all of the programs in our study provided syllabi as well as final exams for their versions of the first accounting course (or sequence of courses) accounting majors are most likely to take once admitted to the program in their junior year. While the programs vary in their course content, each seeks to cover accounting principles and their applications, financial reports, accounting standards, and measurement issues. Some of the course objectives listed by most of the programs include an appreciation of the decision-making process, but several have moved much further toward the accounting concepts and decision-making end of the continuum in their course content.

An examination of the textbooks in this first accounting course for the major in each program shows that those with substantial additional course content also use a greater variety of textbooks and supplements than do the programs in our sample less inclined to move toward the decision-making process at this stage of their students’ careers.

Each of the programs providing sample syllabi and exams for its first major auditing course covers roughly the same material (the

CPA profession, demand for audit and assurance services, reports, ethics, liabilities, risk, overall view, and completion of the audit). Moreover, each tests its students on legal issues, rules and procedures. Some instructors do this through multiple choice, but most assess their students' knowledge through short-answer questions. Here again, we see a range of foci, particularly when we consider the examination questions across the programs. (While we use a continuum here to highlight observed content foci, it is important to note that our use of a continuum is not in any way intended to suggest a hierarchy of programs or courses but is solely to help illuminate the multiple content foci.) Placing our programs on an "Introduction to Auditing" continuum, we found that two schools focus mainly on the rules and procedures of auditing, a third contains a roughly equal emphasis on rules and decision-making content, another emphasizes decision-based questions over those of rules and procedures, two schools are especially noteworthy in terms of their concurrent and even-handed focus on rules and procedures, decision-making skills and accounting concepts, and the last—though it sometimes illustrates through rules and procedures—is mostly focused on basic assurance and attestation concepts. Interestingly, though perhaps not surprisingly, the range of reading materials required for each program's sample course—for the most part—corresponds with its place on the continuum.

The final course we examine here, the first course in taxation, follows closely in all cases, perhaps necessarily, to the rules and procedures end of the content focus continuum. Generally, students get brief

introductions to taxation concepts and are then asked to apply rules and procedures during their heavily weighted exams. There is one exception in our sample where student exams are also a major percentage of the final grade, but in addition to proving that they've learned key concepts and can do the necessary computations for a problem or case, students must: "identify all of the relevant tax and business issues; recommend a course of action or, alternatively, list the relevant alternative choices; justify [their] recommendation and/or explain why the pros/cons of alternatives are important." The exam questions' entire text is less than two pages long, and consists of three cases for which students must provide a complete analysis with possible solutions and citations of relevant authoritative tax law information to substantiate their statements. (A "Final Exam Authority" is provided at the exam.) Interestingly, this is the one course in our Introduction to Taxation sample for which the instructor does not require any textbooks.

Although the programs providing syllabi and/or exams for the taxation course do have a primary focus on the rules and procedures surrounding federal taxation, it is also important to mention that one school covers taxation for individuals, partnerships and corporations in this introductory course, with its primary focus mostly on taxation for individuals—while the other programs more evenly distribute their areas of concentration throughout the semester. Again, regardless of which type of taxation these programs focus on, they do so through the rules and regulations surrounding the issue at hand. It is not clear, except in one case, that students are encouraged through their coursework to

engage in serious decision-making for potential clients, though other skills—such as time management—are introduced in this course as the students in at least two programs are expected to keep track, for example, of the hours each member of their group spends on their group projects for imaginary billing purposes and genuine measures of efficiency.

In summary, in terms of content focus in the four introductory courses examined above (based on the material provided to us by the programs), it is clear that the rules and procedures of accounting comprise a major part of the content of the undergraduate programs in our sample—with the exceptions noted above. This emphasis on the content focus continuum is reflected not only in course syllabi but also on students' abilities to answer multiple-choice questions and perform straightforward computations. To be sure, some programs go a considerable distance toward accounting concepts and decision-making skills. Moreover, it is important to keep in mind that the information provided to us by the programs—and the findings generated above—represent a portion of the content across the nine programs' key accounting courses and, further, that it should be placed in the broader context of the curriculum-in-practice.

**Organization of Knowledge:
“Basic Knowledge and Principles
of Accounting” to “Accounting
Knowledge for Business
Decision-Making”**

For the most part, all of the programs we studied have as a primary intent the educating of students who are able to use their accounting knowledge and skills to inform

business decision-making—not simply number-crunching. At the same time, many of the program faculty we interviewed emphasize that students also need to be familiar with the “nuts-and-bolts” of basic accounting knowledge. As one interviewee said to us:

My philosophy is [that] you do need to know some detailed accounting to be an accountant. When we first started the new curriculum, there was a rule—you [couldn't] use the words debit and credit... [but] students have to have a certain minimal level. You need to know the terms, even if they're trivial. If you don't know them, people don't think you're smart.

Many of the faculty members we spoke with expressed the need for students to be strong in the basic knowledge and principles of accounting so that they not only could pass the CPA exam but, even more importantly, land a job with one of the Big 4 accounting firms. Notwithstanding agreement among many faculty that “higher-ups” at the large firms emphasize the need for students to develop better critical thinking, communication and writing skills, one accounting professor's experience with recruiters was echoed by the experience of many at each of the nine programs in our sample. As this professor told us, “I've had fun conversation with recruiters about which they would prefer to have—astronauts or airline pilots... They say they want astronauts but they wind up hiring airline pilots.” A colleague he was interviewed with followed this comment

with the following observation: “Dependable, reliable people serve the firm well at the entry level. They need the astronauts for later, at the upper levels.” Set in this context, it is not surprising that the programs in our sample maintain, as discussed earlier, not only a strong focus on rules and procedures but also, in turn, basic knowledge and principles of accounting as the centering principle in their organization of knowledge within courses.

Moving beyond basic knowledge and principles of accounting and developing students’ accounting knowledge for decision-making is a daunting task, especially considering the obstacles to doing so in most accountancy programs—large class sizes and the predispositions of many students being just two of many. Yet the programs in our sample, albeit in varying degrees, have been able to integrate accounting knowledge for business decision-making into their curricula. How have the programs in our sample organized knowledge and skills to move from the transfer of basic accounting knowledge and principles to the development of students who can use that knowledge for business decision-making? Metaphorically, one way to think of this movement is to consider it in terms of the development of a flower: a central bud, heavy with basic accounting knowledge and principles, will give rise to a variety of different petals depending on its type. Some will grow independent, differently colored petals that, though physically joined to the center, are clearly separate from it and allow it to showcase its own shape and color. Other flowers will grow layers and layers of petals that are barely distinguishable from the original bud, forming through both basic accounting knowledge and many

nuanced layers of information for decision-making, for example, a perfect rose. (Perhaps needless to say, the latter needs continuous nurturing.)

There are three places that accounting knowledge for decision-making is being brought into the curriculum-in-practice of the nine programs in our sample: in the classroom; in activities that emerge from the classroom but are carried on outside of it; and wholly beyond the scope of the classroom. To begin with, the organization of content and knowledge within an individual course and its classroom is largely a result of the preferences of its instructor. (To be sure, faculty across the programs we studied seemed to communicate actively with one another regarding the content of key courses.) In some instances we see this in individual professors’ use of materials supplemental to the text to situate the basic accounting knowledge found in the text into a decision-making context. Other instructors rely on student presentations to help create a less sterile, rule-based environment, and to bring decision-making skills to the forefront. Another interesting way we’ve seen to increase students’ decision-making skills in an individual’s classroom is one professor’s custom of not assigning textbooks or readings but, instead, simply suggesting possible resources with the expectation that accounting students are motivated enough to find the information they need when they need it. Perhaps what has most driven the organization of accounting knowledge in the classroom at the undergraduate level in recent years, though, at least in the nine programs we studied, is the structure of programs. While some programs have maintained fidelity to the

traditional structure of accounting knowledge, for example, by offering courses such as Introduction to Financial Accounting and Introduction to Managerial Accounting, other programs have revamped their curricula.

Most of the programs in our sample attempt to organize their courses (or components of their courses) in ways that may better educate students in accounting concepts and decision-making. Several of the programs we studied consider this educational agenda a shared responsibility, hence they also rely on students to participate in meaningful professional relationships with groups outside the program.

Most of the programs in our sample encourage students to take internships at the Big 4 accounting firms or other venues. Many faculty recognize that, at least in the busy season, an internship can be instrumental in students' learning some basic accounting rules and procedures as well as some accounting concepts and information that will be useful in decision-making while there. Of course, many students also "get a foot in the door" and, rather than coming back to their accounting classes restless and bored, often return with more enthusiasm for their coursework. Yet, surprisingly few of the programs in our sample have decided to harness this opportunity for enhancing student learning and generating enthusiasm: in most programs the student's internship, while a requirement for graduation, is simply affixed to the rest of the curriculum—a daisy's petal to its center. Students do not have a venue in which they can share their experience to explore its relationship with program content.

Learning Environment: "Course-Based" to "Program-Based" to "School/College/University-Based" to "Workplace-Based"

In designing programs of study throughout higher education, many faculty and administrators only infrequently consider the "learning environment" as a major feature of the curriculum. More often than not, the individual course is the assumed laboratory for learning—with content and pedagogy at the forefront. In our sample of accounting programs, however, we found that the learning environment is an important part of the "lived curriculum" as experienced by program participants, and that there are important differences in terms of how that environment is defined across the nine programs.

To begin with, all nine programs in the study—to a considerable, if varying, extent—define individual courses as the centerpiece of the learning environment. Since the individual course has been the veritable heart and soul of higher learning in this country since the founding of Harvard College in 1636, the widespread use of this conventional definition of learning environment is not surprising. What was surprising to us is the extent to which all nine of the programs also embrace—sometimes more unwittingly than wittingly—three non-conventional definitions of the learning environment: program-based, school/college/university-based, and workplace-based.

As to the first, a number of the programs all consider the "program" along with individual "courses" as a key unit of the learning environment. Moreover, many of the programs in our sample embraced "school/

college/university-based” learning environments. Some programs have made major efforts to define their learning environment to include the campus environment external to their program.

Finally, it is important to emphasize that all nine universities—again, in varying degrees—have increasingly become committed to “workplace-based learning” as a key learning environment. More often than not, it was students—not faculty—who told us that it was workplace-related learning that proved critical to their education as accounting majors. As one undergraduate student told us: “Real learning” takes place “out there, seeing what you can apply from the classroom and actually seeing it when you’re working.” Tellingly, many faculty we interviewed told us that workplace-based internships—especially when students took them in the spring when there was “real work” to be done in places like PwC—not only were valuable learning experiences in themselves but also enabled students to be more thoughtful and committed learners once they returned to the classroom. As a professor at one university told us:

We [instituted spring internships] thinking that our purpose was to get them some practical experience so that they would be better capable of assimilating the really important issues in their professional education, and what happened surprised the hell out of us. They came back and they said, ‘we want to do more writing. We want more classes with discussion.’ We just were blown

away by this... We can hammer at these students as professors, telling them that you need to write more and better—you need to articulate and you need to learn from other people who are your peers, not from authorities only. The problem is, we’re surrogate parents... and so we have to recognize that [working] for people who demanded them to write better, demanded them to speak up and say what was on their mind and demanded them to relate to clients and be able to articulate on [sic] technical issues and not just formulaic answers but discussion around issues of application...these are the success factors that don’t come out of the textbook and therefore they come out of the process, the discipline as opposed to the content...And all of a sudden they come back and they’re very process-oriented and we love it. And it’s been extremely important [to our program].

Approaches to Teaching and Learning: “Information Transfer to Individuals” to “Cooperative Learning with Teacher and Peers” to “Collaborative Learning Among Teacher and Peers”

Faculty and administrators in the nine programs we studied—not least because of their respective commitments to prepare students to be more than “technical

problem-solvers”—were highly reflective regarding their approaches to teaching and learning. Their teaching, including both how they taught and what that might mean for student learning, was clearly important to the majority of faculty we interviewed and observed in classroom settings. (This commitment to undergraduate teaching was no less apparent—a genuine surprise to the two researchers—in the programs that housed fifth-year master-level programs and, especially noteworthy, those educating Ph.D. students.)

Faculty members’ pedagogical choices are clearly anchored in a high degree of awareness that “information transfer”—what one faculty member at an unnamed institution called “feed-’em-with-a-firehose”—remains an important part of the landscape of undergraduate accounting education. In this lecture-centered approach, a university teaching approach that can be traced at least as far back as Abelard lecturing at the University of Paris early in the twelfth century—faculty embrace a generally authoritative view of knowledge coupled with a transmission model of communication: the professor qua sender encodes authoritative knowledge into signals (lecture and written materials) and didactically transmits those signals to a receiver (student) who, in turn, decodes and stores the knowledge. Since faculty are considered the “experts” in this one-way, hierarchical approach, students are expected to concentrate on “storing knowledge” rather than contributing their own knowledge, understanding, and insights.

In our research we found that faculty in all nine programs, not least in the mainstream

accounting courses, embraced in varying degrees an “information transfer” approach to teaching. To illustrate, although more than one-half of the faculty we interviewed at one institution told us that they were committed to preparing more than traditionally trained, rule-based accountants, most of the faculty told us that traditional lectures—coupled with the widespread use of textbooks and homework aimed at enhancing “information transfer” along with lots of “group work”—remained the centerpiece of their shared faculty pedagogy.

Across the nine programs, as faculty have come to appreciate that didactic approaches are not highly compatible with preparing students to be “disciplined problem-solvers,” much less “creative problem-solvers,” many accounting faculty have been engaged in reconciling the need for some “information transfer”—after all, one cannot weep with Achilles without knowing whoeth Achilles—with less didactic approaches to teaching. To that end, we found it interesting that a significant number of accounting faculty across at least six of the programs have explicitly embraced the concept of “outside-of-class self-learning.” These faculty are addressing “information transfer” largely through reducing lectures and using other vehicles instead—such as the Web, experiential learning and transcribed lecture notes—to communicate basic accounting knowledge and technical skills. Clearly, self-learning that takes place outside of class can free up significant amounts of in-class time to devote to other pedagogical approaches. Moreover, self-learning can at once build on “information transfer” and then go far beyond it.

To be sure, over the last several decades, clearly all of the accounting programs in our sample have gone significantly beyond “information transfer.” At the least, all nine programs have embraced what we label a “cooperative learning with teachers and peers” approach to teaching and learning. Often referred to as a “facilitative approach” (Conrad, Haworth, and Millar, 1993, p. 50), faculty using this approach view themselves as “expert guides” who facilitate their students’ understanding of the accounting knowledge and skills through two-way, interactive communication. For the most part, this communication involves students and faculty in joint problem-solving activities. Under this approach, students are often grouped into “teams” or “groups” and invited by the instructor to address accounting “problems” or “cases” that involve hands-on problem-solving activities that take place both in and outside of class. The instructor’s role is to be a facilitator or “guide on-the-side,” in the jargon of faculty.

One of the most striking findings in our study was that a fairly large number of faculty—across all nine of the programs we studied—were struggling with ways to go beyond traditional “team” and “group” work in accounting, namely, to practice what we have labeled “collaborative learning among teacher and peers.” In general, this approach brings teaching and learning, and teachers and learners, into closer proximity such that both faculty and students are engaged in two-way interactions that encourage the joint generation of knowledge and understanding. In a nutshell, the collaborative learning approach is animated by the straightforward if somewhat radical assumption that students, as well as faculty, have

something meaningful to contribute to knowledge and understanding—and that faculty can learn from students as well as vice versa. Indeed, this approach can be viewed as a mutually evocative conversation—out-of-class as well as in-class—in which faculty and students jointly examine, interpret and challenge extant knowledge as well as seek to generate new meaning and understanding. As such, faculty serve only minimally as “expert” transmitters of knowledge and interact with students more as co-learners, mutually examining and questioning accounting knowledge and practices. In turn, these faculty often view their courses as “learning communities” that include a broad range of activities consonant with their pedagogical aims—from group problem-solving activities that address unstructured problems to four- or five-person “teams” that function as such both in and outside of class.

Curriculum-in-Practice: Master’s Level (Combined Bachelor’s/Master’s Programs)

Four of the programs in our sample offer their undergraduate students a combined (integrated) bachelor’s/master’s option that allows them to receive both degrees in five years. Although other programs in our sample offer a one-year graduate-level program, we focus here on those universities that specifically tailor their master’s programs to their undergraduate students and, in so doing, introduce graduate-level course work in the students’ fourth year. In turn, the curricula of the fourth, and sometimes the third, years must also be considered when examining these integrated programs, since the fifth year necessarily builds upon the last two.

Accordingly, we consider the last two years of students' programs—the senior year as well as the master's year—as the curriculum-in-practice at the master's level.

In their recent monograph on accounting education, Albrecht and Sack discuss whether “the ‘add-on’ criticism [of master's degree programs] was valid,” and conclude that “very few schools have effectively built their undergraduate degree with a fifth year that focuses on providing a broad business background....These specialized programs,” they state, “are not attractive in an environment where the business world is calling for more broadly trained accountants” (p. 53). What we have found (particularly in the area of tax) is that the four programs in our sample that offer integrated degree programs do, in fact, use the fifth year largely to produce specialists and, for the most part, a quick glance at the course requirements in the fifth year will substantiate that. In short, our findings support Albrecht and Sack's findings regarding the emphasis on training specialists during the final stages of the master's degree. At the same time, our findings run at least somewhat counter to their suggestion that accounting students are not receiving breadth of training—inasmuch as we found that the four programs examined here all provide some additional breadth of training.

Taking both the undergraduate and graduate experiences of students as cornerstones of their five-year programs, we found that in each of the four programs offering the integrated bachelor's/master's option that—in response to recent pressure for change and innovation from the profession and perhaps even from their respective business schools—undergraduate curricula have

been changed such that there is heightened emphasis on educating students more broadly in their first four years of study. If a student chooses to leave her or his institution with “just” the bachelor's degree, as one faculty member stated, “you could get a great generalist”—a generalist who presumably has learned much about the business process and ethics, interpersonal communication skills and, of course, accounting.

In summary, notwithstanding the emphases these programs put on specialization in the fifth year of study, we found that students also receive broad training in accounting and business—albeit mostly during their senior year. Still, the question remains: What are the benefits to students or employers of a fifth year of accounting education? While we are persuaded—especially in the area of finance/audit—that most students are sufficiently well-prepared to enter the job market after a four-year program, we suggest two ways in which a fifth year of education can contribute to the development of accounting students in any of the fifth-year tracks. First, students clearly seem to develop a level of maturity and professionalism in the last two years (the senior year and fifth year) of their programs not only through learning course content but also through engaging in more meaningful relationships with faculty, having more time (and thus opportunity) to participate in appropriate internships, and by claiming the status of a master's-level student. Second, students graduating with a master's degree in accounting seem somewhat more able than those with a bachelor's degree to apply the accounting theories and concepts of their chosen accounting specialization in a wide variety of business contexts.

Notwithstanding these benefits, we remain skeptical—with the possible exception of tax specialty programs—as regards whether master’s degrees in accounting add significant “value” to students’ accounting education. Put simply, we found that the fifth year is, for the most part, an “extension of undergraduate education”—as many interviewees told us, including PwC associates we interviewed who had received master’s degrees in accounting. In short, while there are benefits to the fifth year, we have reservations about the overall contribution, on balance, of the master’s degrees in accounting.

Conclusion:

A Transformation Is Under Way that Is Moving Accounting Education Beyond Traditional Technical Training and Specialized Accounting Knowledge

There have been very significant changes and innovations across all nine of the programs in our sample in terms of the curriculum-in-practice. That is, as all nine programs have enlarged their animating intent by moving beyond simply preparing “technical problem-solvers” to preparing “disciplined” and “creative” problem-solvers, they have implemented significant changes and innovations in terms of six major dimensions of their curriculum-in-practice: 1) intent; 2) skills and attitudes-of-mind; 3) content focus; 4) organization of knowledge; 5) learning environment; and 6) approach to teaching and learning.

The change and innovation taking place across institutions has been differentially distributed across the major dimensions of the curriculum-in-practice. For example,

some programs have been more innovative in terms of their approaches to teaching and learning, whereas others have been more innovative in terms of content and the organization of knowledge. Some institutions in our sample have advanced among the most visible innovations in the field of accounting but, again, all nine institutions in our sample have engaged in meaningful change and innovation in their undergraduate accounting programs. (With a measure of irony, we add in passing that many of these changes and innovations seem to be largely invisible to many faculty and administrators across the programs in our sample.)

In light of our primary finding that there has been significant change and innovation across the nine programs in our sample, our overall conclusion is this: A transformation of accounting education is taking place, one that is moving accounting education significantly beyond providing students only with traditional technical training and specialized accounting knowledge.

To reiterate, the major force for this transformation has been the decision by many faculty and administrators in accounting to move beyond the mere preparation of “technical problem-solvers”—a decision that is clearly linked in no small measure to changes along the other six dimensions of the curriculum-in-practice explored here. Of particular note, programs are no longer focusing as exclusively on knowledge or content but, instead, are placing more emphasis on the development and refinement of students’ “skills” (higher-order cognitive skills as well as “softer skills” and “attitudes-of-mind”) and, in turn, rethinking traditional notions of “learning environ-

ment” as well as traditional didactic and “team” approaches to teaching and learning along with the need for major innovations such as incorporating technology into the curriculum.

In this context, it is informative to mention the recent study by Albrecht and Sack that criticized the “memorization approach” in accounting education and opined that “our [accounting] models focus too much on content at the expense of skill development—skills that our students need to be successful professionals” (2000, p. 43). In our study, a much smaller sample made up of programs considered among the leading accounting programs in the country, we found that “higher-order cognitive skill development”—what the Yale Report of 1828 referred to as the “discipline” as opposed to the “furniture” (content) of the mind—was the cornerstone for much of the change and innovation currently taking place. Indeed, it is our interpretation—the senior researcher on this study having studied undergraduate and graduate change and innovation across many disciplines and fields of study for nearly three decades—that there is considerably more meaningful change and innovation taking place in undergraduate accounting education than in many other fields of study, at least in the nine programs we studied.

While the groundwork for transforming accounting education has been laid, each program faces the continuing challenge of ensuring that systemic change takes place across the curriculum-in-practice. While all nine programs have made significant changes, not one program has gone so far as to make changes and innovations across the

entire curriculum-in-practice. Put simply, partial reconfiguring of program content, no matter how visible and major, is not by itself systemic change if unaccompanied by change that is embraced by the large majority of faculty, administrators and students in such key curriculum domains as the learning environment and approaches to teaching and learning. Often explicitly or tacitly supported by students, some faculty and administrators in all nine programs we studied have tendencies to fall back on the twin pillars of traditional accounting education: specialized knowledge and technical skills. In so doing, they retreat from their own aims—namely, to enhance the educational preparation of accounting students by providing them with the broader knowledge base and more advanced skills that accounting professionals need not only for today’s business environment but for tomorrow’s as well. In short, the highly significant change and innovation taking place across the nine programs still falls somewhat short of cross-program, systemic reform consonant with the broader knowledge and higher-level skills and “soft skills” that students will need to be successful in the constantly changing world of accounting and business.

While accounting education is clearly being transformed at the nine programs in our sample, why hasn’t systemic change been fully realized across the highly regarded and innovative accounting programs that made up our sample? At least four major reasons stand out. For one, the current CPA exam continues to have a not inconsiderable effect on reinforcing traditional rule-based accounting curriculum. Program administrators and faculty—often while insisting that their program is not a

“prisoner” of the CPA exam—told us that such-and-such a percentage of their students pass the exam, and students across all nine of the programs told us that they expected their degree programs to prepare them for the exam. For another, the textbooks in the field continue to have an almost hegemonic grip on accounting programs. While many faculty seek to subvert the most visible, and largely rule-based, textbooks through assigning other reading and the creative use of textbooks, many admitted that there is a tendency to fall back on traditional texts even while recognizing that this undercuts more meaningful change and reform in their programs. For still another, we heard across all nine programs that recruiters from the Big 4 accounting firms are almost universally insistent about hiring people with “billable” technical skills who would benefit the firm from the outset—no matter that partners in the Big 4 firms almost always argue for more broadly educated graduates who are not only prepared for their first job but are also so well-educated that they should advance rapidly in their careers.

Finally, and not least, we came to appreciate that some faculty in accounting—like faculty throughout higher education—are reluctant to change their teaching or their programs. Woodrow Wilson, the former president of Princeton among other posts, once remarked that changing the faculty was like “moving a graveyard.” That metaphor no doubt has some explanatory power as regards the reluctance of faculty and administrators in the programs we studied to make more systemic changes and introduce major reforms. As an administrator at a university in our sample said to us: “We don’t change things, we add a course.”

From our perspective, accounting education stands at a critical juncture. Most significant, all nine of the programs in the sample have instituted substantial changes and innovations and have made the commitment to preparing students who are as much “builders” and “architects” as they are “finishers.” In summary, while the groundwork has been laid for a transformation of accounting education, the ambitious aims—aims that go far beyond traditional views of accounting education—advanced by many of the faculty and administrators we interviewed have not yet been fully realized. If the full transformation of accounting education is to take place, faculty and administrators must maintain fidelity to systemic change and reform that gives shape to the “curriculum-in-practice” on a daily basis.

Part Two: Accounting Education at PwC

In Part Two we examine the continuing and professional education curriculum—specifically, initial training and orientation for new hires—at PricewaterhouseCoopers.

Structure and Content

Each year, PwC hires 2,000 to 2,500 new associates directly from their bachelor’s and master’s degree programs. Approximately two-thirds of those hires join Assurance Business Advisory Services (ABAS) and one-third join Tax (TAX). With up to 4 million client service hours clocked by new entrants in their first year, and nearly 10 million client service hours provided by individuals within their first three years on

the job, ensuring that new hires have the proper training and preparation to enter the field is critical to the Firm. Accordingly, every new college graduate hired as an associate—whether coming to the firm with the bachelor’s or the master’s degree, with a degree in accounting or in another field—begins her or his career at PwC by completing its two-day “cross-firm” orientation, followed by separate ABAS and TAX training sessions. (New interns sometimes attend these sessions as well.)

All of the initial training provided to new hires is coordinated by the Learning and Education (L&E) division of the Firm. L&E staff continually reevaluate and reorganize the structure and content of the curricula. It is important to emphasize that the training of associates does not end with the conclusion of these sessions. To the contrary, it has only begun, as L&E provides ongoing continuing education opportunities for people at all levels of the Firm. All staff at PwC—including partners—are expected to be consistently engaged in continuing and professional education, whether it be through in-house training, on-line self-studies or master’s and executive education.

Beginnings of a Rite of Passage from Student to Practicing Professional

In broad strokes, we came to understand the initial PwC training as the beginning of a rite of passage from university student to professional at one of the most prominent accounting firms in the world today. To facilitate this transition, we found that the training seemed to be advancing a three-fold agenda. First, in their initial training new

associates begin to internalize the culture of PwC, namely, a culture that is deeply committed to several core values: personal integrity, excellence of the highest order and personal responsibility for professional growth and development. Interviewees stressed the importance of such “soft skill” training in areas such as “diversity” and interviewing as a valuable introduction to the culture of PwC. But they stressed to us that it was often through the simulations in TAX and ABAS sessions that, in working through individual cases with instructors who frequently invited them to reflect on the core values of the Firm, that they genuinely began to feel part of a firm with a clear and compelling set of values—including integrity, excellence, and personal responsibility—that is inextricably linked with its position at the “pinnacle of the profession” as one person described it. In other words, as one person summarized this “beginning” on L&E’s training agenda: Above all in your weeks of initial training you learn about “the legacy [PwC] you are joining.”

Second, new associates are invited to become full members in a community that views communication and continued learning with and from one another as no less important than the knowledge and expertise of its individual members. In our interviews, many PwC associates and managers told us that one of the most valuable aspects of the initial training period is the opportunity to “network” with other new employees—as well as managers and partners involved in the training—assigned to different areas of the country and not only from their regional office. In particular, they emphasized that the “element of play” in the training—not

only in the “team-building” activities but no less in simulations that, in the words of one interviewee, “encourage collaboration”—was important in facilitating communication and cultivating a respect for the importance of ongoing learning. As one person told us: “That mix of seriousness and play—that type of interaction was important for us to become a ‘team.’ It was also a ‘thinking outside-of-the-box’ [approach]...in solving real-world problems.” Again and again, interviewees told us that many of the contacts they made in their initial PwC training have been invaluable to them over the years. More importantly, they said, the “networking” they did at the initial training helped them develop a much greater appreciation of the centrality of everyday communication in their new job, as well as the importance of continually being engaged in learning with and from others along with contributing to others’ knowledge and understanding. As more than one interviewee told us, auditing is a “people job,” and interacting effectively with people and ongoing learning are at the epicenter of their work. That latter statement would surely find a receptive audience among those concerned with continuing professional education at the Firm. As one such person told us: “How people learn in the Firm is how we want them to learn here [in initial training].”

Third, through simulations and interactions with professionals, new associates begin to apply their accounting knowledge using PwC’s frameworks and methodologies to address the complex accounting problems that PwC associates face on a regular basis. As one person told us: “At university you do a lot of topical rather than problem-based

learning and [in PwC’s initial training] you do a combination of topical studies and problem-based learning.” Again and again, the associates at PwC that we interviewed indicated that the simulation exercises were the highlight of their training. Most important, it was the application of their accounting knowledge to real-world accounting challenges in tax or auditing through the cornerstone simulation that helped them begin to make the transition from emphasizing academic knowledge, as they did at university, to applying their knowledge and skills to true-to-life problems. Moreover, it was the simulations more than the straightforward presentation of PwC procedures that helped them begin to learn PwC “frameworks” and “methodologies”—including the proper use of relevant computer software at the Firm. To be sure, several associates noted during our interviews that there still remains a “gap” between simulation training and what happens in the field. One senior manager, for example, pointed out that when you go out on an audit engagement, “The clients hand you something.” One is usually alone, she went on to say, whereas the simulation doesn’t generate any paper as all of the mock data is in electronic form and, for time’s sake, not all trainees get to practice “visiting” a client or interviewing her or him.

In summary, we came to understand the initial PwC training as the beginning of a rite of passage from university student to professional. For the most part, interviewees emphasized that, in retrospect, the training eventually proved to be critical in facilitating that transformation.

Part Three: Overlap and Gaps in the Education of New Accounting Professionals

Before new PwC associates become full members of their respective divisions and offices, they are introduced to a wide range of accounting and business knowledge and principles both at their alma maters and at PwC. The aim of this education and training is to prepare new associates to be well versed in basic accounting knowledge as well as the ways the aforementioned knowledge is used for business decision-making in increasingly complex business environments. Although we did not evaluate either the nine programs in our sample or the initial training at PwC, we found both to be highly effective—though neither without limitation. To provide feedback both to the nine universities and PwC, in Part Three we identify four major gaps (omissions) in accounting education as well as two major areas where there is overlap in what is taught at the universities and at the Firm.

Overlap

Somewhat to our surprise, we found only two major areas of overlap in the education and training received at the nine universities and at PwC. The first, overlap in technical knowledge, was consistently mentioned during our interviews with current PwC employees; the second, a heavy reliance on lecture and technology to transmit basic accounting and business information, was mentioned in a good number of interviews—and was likewise supported in L&E training documents.

Repeatedly, whether located in TAX or ABAS (but particularly in TAX), interviewees stressed the redundancy as regards technical knowledge between the universities and PwC. To be sure, two people we interviewed told us that the technicalities of tax law and accounting are complex enough to warrant frequent and overlapping exposure. But another person—mirroring most of the others we interviewed—was “flabbergasted” that he was receiving a “refresher course” on how to complete an 1120 at PwC training. “Actually,” he told us, “what they did is bore me.” In ABAS, too, the majority of interviewees considered the technical information presented in their initial training as “too much brush-up” and, in some instances, “boring.” In proferring that he and others did not find his PwC training challenging enough, one ABAS associate told us that trainees are allowed “half an hour for a ten-minute problem.... You’re not rolling up your sleeves.” While most interviewees suggested technical knowledge as an important area of overlap between the universities and the Firm, only a few were very specific; one person mentioned preparation of corporate tax forms in TAX, and the other, in ABAS, controls.

The other major area of overlap in accounting education today is in the universities’ and PwC’s approaches to teaching and learning, specifically the widespread use of lectures and/or technology such as CD-Rom- and internet-based lessons to present technical and other basic types of accounting knowledge. Over and over, interviewees told us that, in kind, this overlap undervalued the effectiveness and efficiency of using more self-directed group and collaborative approaches to teaching and learning. In par-

ticular, some interviewees told us that basic training at PwC, for example—particularly of material that is a review for a majority of the trainees—should rely more heavily on vigorous debate and discussion of technical material and problems and less on traditional information transfer.

Gaps

Over the course of the study, we identified four major gaps between pre-entry and continuing professional education.

Early Introduction to, and Socialization into, the Accounting Profession and Its Practice. Many of the current accounting students we interviewed at the nine campuses in our sample told us that they felt prepared for a management position at a Big 4 accounting firm, but they had “no idea” what they would be expected to do as new associates. This message was echoed, albeit from a different angle, by current PwC employees. As we came to understand this gap, most individuals completing their formal education in accounting do not fully understand what it means to be a practicing accountant at an entry-level and in a practical, everyday sense. No less, most associate-level accountants—even after completing their basic training—do not understand at a deep level what it means to be a member of the profession of accountancy.

This gap clearly needs to be addressed in both the university- and Firm-based education of future accountants. Students, at the beginning of their studies, need to understand the roles and responsibilities they will be expected to assume as accountants in

order to make informed decisions regarding their career paths, and to better appreciate and grow from their university experience. An emphasis on professors’ and practitioners’ loyalty to the accounting profession—rather than to a particular firm—and an early cultivation of students’ identities as future members of the profession will also enhance their education considerably. Frequent opportunities to meet, listen to and work with professionals (especially those at the senior levels of an organization); conversations—rather than lectures—about the responsibilities and ethical stance accountants must accept if they wish to rise to the pinnacle of the profession; and a sustained expectation that students will regard and conduct themselves as accounting professionals at the beginning of their education can set a standard of excellence that is not yet consistently attained at the university or early professional levels of accounting education of new PwC associates. Significantly, although some of the programs we studied require a course in ethics and many faculty told us that they wove “ethical issues” into their case studies, and though the Firm offers a session that deals with the standards and values of the organization, we came to understand that ethics is not a consistent, integrated part of the education of most accounting students. Both in our classroom observations and through our interviews with students who told us that discussions of ethics are not an integral part of their education, we came to appreciate the importance of increasing opportunities for students and faculty and members of the Firm to openly and unambiguously discuss how and why the behavior and decisions of accountants often have major implications not only on

individual firms but on the lives of many people as well and, in turn, is critical to preparing accountants of the highest professional and moral caliber.

Another aspect of the profession that needs to be conveyed to students early on in their studies is the knowledge that each member of a firm contributes to its risk when harboring misunderstanding, narrow and technical ways of thinking, or even the slightest disregard for the personal and interpersonal dimensions of her or his work life. It is important to remind people at all levels of accounting education that being able to acknowledge their personal areas of professional weakness or lack of understanding or confidence—be it in a technical or “soft” area—is the first step to overcoming that limitation. Second, students must be made aware that these “personal” weak points are not particular to new hires. Accounting regulations and business processes are constantly in flux, requiring professionals at all levels of the Firm to constantly update their business and accounting knowledge and hone their communication and technical skills through both individual research and practice, and not least by “taking cues” and suggestions from colleagues and other members of the Firm.

An Appreciation for the Importance of Soft (Efficiency and Effectiveness) Skills and Their Integration with Higher-Order Cognitive Skills and Technical Expertise. As we came to understand, interpersonal and oral and written communication skills—“soft skills”—are not consistently advanced or integrated into the accounting curricula of either the universities or the Firm, even though both domains

require students to “team,” write and give presentations. As the associates we interviewed reflected on their first weeks at PwC, many noted that, at the time, they were not adequately prepared to begin interviewing, dealing with “difficult people,” participating in multicultural communication, writing in a professional manner, and integrating their so-called “soft skills” with higher-order cognitive skills as well as technical skills and knowledge. Drawing new accounting professionals’ attention to the dynamics and culture of firm-client relationships, and helping them appreciate that so-called “soft skills” may be more accurately viewed as a combination of “effectiveness and efficiency skills” (skills that help accountants do their jobs better and faster), are two ways this second gap in accounting education can begin to be bridged. Providing students with ample time and relevant opportunities to practice their effectiveness and efficiency skills and carry out comprehensive analyses of the larger business environment and its relationship with accounting practices and procedures may go a long way toward students’ developing and refining these skills and ensuring that they are an essential part of their professional repertoire.

The Ability to Recognize and Solve Problems in the “Gray.” Students’ ability to problem-solve in the “gray” is often hindered by various factors, including a lack of understanding of the complex business environment. Throughout their education and training, many students are not consistently encouraged to bring healthy doses of skeptical and “big-picture” thinking to their study of accounting. At the university level, too much emphasis on “the right answer” and the creation of “silos” of accounting and

business knowledge and practices often silence potential opportunities for students to identify gray areas—let alone enhance their capacity as fledgling accountants to work within ambiguous situations and make responsible, appropriate choices for the Firm. Especially when reflecting on their university education but also to some extent on their PwC training, many associates we interviewed expressed a frustration with the “ideal” cases and simulations they worked through in both venues. It should come as no surprise, then, that new associates often lack the insight and appropriate levels of confidence, as one partner suggested to us, to effectively identify and problem-solve within the “gray.”

Cultivation of a Commitment to Continuous Individual and Collaborative Learning. The fourth omission we identified in the overall education of beginning accounting professionals at PwC is connected in no small measure to the other three gaps and two areas of overlap discussed above. This gap, “the cultivation of a commitment to continuous individual and collaborative learning,” is present to some extent in both the programs and the Firm, yet does not appear to be a widespread, deep-seated priority. Developing an individual’s commitment to learning is highly dependent on developing her or his appetite for learning (particularly if rote methods are the primary vehicle for teaching). This appetite can be cultivated by helping future accountants understand what it means to be a member of their chosen profession; providing them with opportunities to use their “soft” and “higher-order cognitive” skills; and instilling enough confidence in them that they can look at “the big picture” to evaluate and, if

necessary, question what they see. As one PwC interviewee told us, this is an “organization that runs on brain power” that requires a “culture of continuing learning.”

The men and women who attend the nine accounting programs in our sample and are then recruited to PwC are, in many ways, extremely motivated and committed to being successful. A commitment to continuous individual and collaborative learning should be a natural next step. As the majority of interviewees told us, PwC’s training is—at times—not challenging enough. “If you ‘dumb people down’ when they walk in the door,” one partner told us, “you do a great disservice to the entire Firm.” One reason why people may be “dumbed down” at initial training is because, as one person in the Firm told us: “We treat new recruits as if they’ve all been trained the same way.” There is no assessment of the knowledge and skills of new ABAS hires, and the “experience inventory” given to TAX hires prior to the training is not used to tailor the training of individuals.

Another important factor contributing to this gap on PwC’s side is the selection and quality of instructors moderating the initial training sessions. In order to influence new hires’ views of the importance of continuous individual and collaborative learning at the Firm, people from all levels of both the Firm and the universities clearly need to be involved in this accounting education. Failure to draw on the perspective and voices of participants at all levels—including students—detracts from the cultivation and spirit of ongoing, collaborative learning. At the university level, too, an invitation to contribute to accounting knowledge and

decision-making can be offered to a wider array of people—peers and colleagues nationwide, practicing accountants, employees of the major accounting firms, and students. New voices are often silenced in the professional and academic communities, notwithstanding the often arresting differences in educational and “life experiences” of the newcomers and a proclaimed commitment to learning communities.

Although we have identified four gaps and two areas of overlap in the accounting education that spans the education provided at the nine universities in our sample and the initial professional training of new hires at PwC, we would be the first to admit that major steps have been taken by both partners—the universities and PwC—to address them.

Perhaps most significantly, the nine universities and PwC are building a working relationship in which accounting education is viewed as a seamless web in which both partners are engaged in developing and nourishing opportunities for individual and collaborative learning. The commission, generation and thoughtful consideration of this report only serves to support our strong conviction that those committed to accounting education—including the more than 150 faculty, staff, students, and professionals who so generously contributed to this study—will be more than willing to consider and, if deemed appropriate, address the challenges raised in this report. We look forward to comments and reactions to this report as part of a continuing dialogue on the present and future of accounting education.

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