Adopted a Technology-Enabled Engaged Pedagogy for teaching 6200:201 Accounting Principles I	The Technology-Enabled Engaged Pedagogy for teaching 6200:201 uses technology and focused incentives that motivate active student engagement prior to a class, during a class session, and after a class session. The SoA initiated this approach to teaching 6200:201 after observing WDF rates that sometimes exceeded 40% and Pre-Internship Assessment Test (PAT) scores, which suggested that some of our students experienced difficulty in recalling basic accounting concepts when they started the intermediate accounting sequence. The PAT is administered during the first three weeks of the first intermediate accounting class (Financial Reporting I).
Modified 6200:440 Assurance Services & Professional Responsibilities	The content of this course was modified to include (a) continuous assessment of knowledge and understanding of content covered on CPA exams and (b) an audit simulation project that walks students through planning the audit, fieldwork and substantive testing, and reporting. These changes were based on CPA exam performance and feedback from our Advisory Board.
Modified 6200:637 Contemporary Accounting Issues	The content of this course was modified to emphasize valuation and fair value based on feedback from Advisory Board members.
Adopting a reflective statement on the internship presentation as an integral part of 6200:405	After reviewing our AOL data and observing that many students who made presentations used poor body language, we continued to emphasize videotaping of student presentation in one course and required them to view and write a reflective statement about their presentation skills.
Modified 6200:320 Accounting Systems & Internal Control	Consistent with the PwC white paper and Pathways, we modified 6200:320 to expose students to emerging technologies in AI (Artificial Intelligence) and advances in business process automation (BPA) as a replacement for legacy business processes and traditional internal controls.
Offered the <i>MTax Direct</i> as a replacement for the MTax at Brecksville (see <a href="http://mtaxdirect.uakron.edu">http://mtaxdirect.uakron.edu</a> ).	During the previous review period, the SoA offered the MTax in Brecksville (12 miles from downtown Cleveland) via two-way interactive distance learning technology. While the technology utilized the Internet, it was available at only one fixed location. With the advent of lower cost, user-friendly reliable technology, the school extended the market for the MTax by converting the MTax at Brecksville to a flexible, synchronous online program that students in any location may pursue. Initial registration totaled 19 in 2015 and we expect to start our second cohort in Fall 2017.

# Assessment – General Background and Learning Goals

Assessment in the School of Accountancy has two major foci—(1) learning in the core undergraduate business curriculum and (2) learning in the undergraduate accounting major and in graduate programs. The College has responsibility for assessment in the Core. The Chair and faculty of the SoA have responsibility for assessment in the undergraduate major and in graduate programs.

#### Assurance of Learning in the Undergraduate Business Core

The College has a long history of AOL activities that dates back to 1996. Most aspects of the College's AOL plan are mature and the College has made many curriculum changes as a result of evidence obtained through assurance of learning. The College's learning goals for the undergraduate core are as follows:

Each student who graduates from the College of Business Administration will:

- Demonstrate integrated business knowledge
- Analyze data using quantitative techniques
- Be informed decision makers
- Develop leadership and collaboration competencies
- Use writing and oral communication skills to persuade and to mobilize action
- Demonstrate a global perspective and cross-cultural awareness
- Recognize and understand how to address ethical concerns

Further details are available in the College's Maintenance of Accreditation report.

# Assurance of Learning in the Accounting Program

Clearly articulated learning goals that are embedded in the School's mission statement are the foundation of the School's assessment plan in the undergraduate major, the Master of Science in Accountancy, and the Master of Taxation. Learning goals for each program are listed below. Detailed assessment plans for each of our programs appear in Appendix C.

## Program Learning Goals – BS Accounting Degree

The BS Accounting degree provides students with a comprehensive undergraduate education that serves as a foundation for future careers in accounting. Graduates from the BS Accounting program will:

- 1. Demonstrate knowledge, understanding, and ability to apply core accounting principles, standards, and methods in such areas as financial reporting, cost management, auditing, tax, and systems.
- 2. Have effective written and oral communication skills as applied to business and accounting.
- 3. Demonstrate ability to contribute to problem solving and decision-making through professional research, analysis of complex data, integration of information from multiple sources, use of information technology, and creative thinking.
- 4. Understand professional responsibilities and methods for identifying and addressing ethical dilemmas in business and accounting.
- 5. Work effectively in teams and in diverse settings that include individuals with varying educational background, experience, gender, age, race, or national origin.

#### Program Learning Goals – MS Accounting Degree

The Master of Science in Accountancy (MSA) is designed to meet the needs of a wide variety of students from different backgrounds. It offers students the opportunity to develop substantive knowledge, skills, and abilities in accounting. Graduates from the MS Accounting program will:

- 1. Develop advanced knowledge and understanding of accounting concepts, the regulatory environment, and professional practice issues and challenges.
- 2. Enhance their critical thinking skills and develop the ability to apply advanced knowledge of accounting concepts, principles and practices in innovative ways.
- 3. Demonstrate effective written and oral communication skills.
- 4. Develop the ability to research accounting issues and write research reports that incorporate qualitative and quantitative data analysis and integrate information from multiple sources.
- 5. Understand and appreciate the role of information technology in contemporary accounting, research, and decision-making.
- 6. Understand and appreciate the significance of ethics, professionalism and social responsibility in accounting.

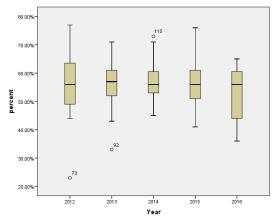
### Program Learning Goals – MTax Degree

The MTax program offers substantive technical and professional knowledge, skills and abilities needed to function as a taxation specialist in the United States. Students in the program will:

- 1. Develop substantive and comprehensive knowledge of federal taxation.
- 2. Understand the state and local taxation regimes of selected states, including the State of Ohio.
- 3. Develop abilities to research taxation issues, identify and solve taxation problems, and plan taxation strategies.
- 4. Develop the ability to contribute, as a taxation specialist, to strategic planning and decision-making in organizations.
- 5. Demonstrate effective written and oral presentation skills.

6. Demonstrate ability to use information technology for researching and solving taxation problems.

Figure 6.1: Box Plots of MFTA Scores 2012-2016



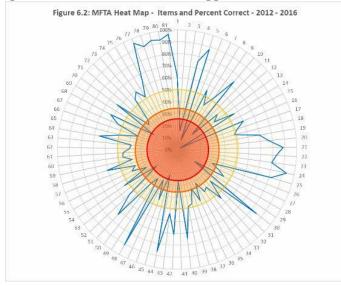
#### **Assessment Tools and Procedures**

An overview of the School's assessment plans, methods and activities appears in Appendix C. The School's plans are reviewed annually by the faculty, and assessment evidence and results are focal agenda items in the School's first faculty meeting each new academic year. Additionally, the School includes on the agenda of every faculty meeting a discussion of assessment activities and evidence. The School's Advisory Board includes a Curriculum Committee, which makes assurance of learning a key priority. The MTax Program Governance Board (senior tax professionals, employers, and faculty) serves as a focus group for addressing MTax curriculum issues.

Among the tools and processes used by the School are a Major Field Test in Accounting (developed inhouse), a Pre-Internship Assessment Test (developed inhouse), various course-embedded activities, and focus groups and surveys. A discussion of each, along with what we have learned from it, appears below.

### Major Field Test in Accounting (MFTA)

The MFTA is an in-house test that the faculty created about 20 years ago. It has been revised multiple times. It consists of 75 selected-response items from a bank of 81 questions. The test covers financial reporting, systems and controls, cost management, auditing, taxation, and ethical awareness. Six questions on ethical awareness appear on all versions of the test. This test is used in the BSA and MSA

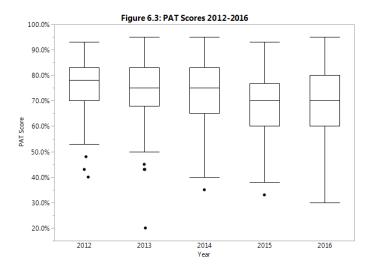


programs. Different sections of the MFTA are administered in the BSA program in the classes where the relevant content is taught. Students in the MSA take the MFTA as a single test in the capstone course (6200:660). Initially, the MFTA was administered as a single test prior to graduation in the BSA program.

Performance averaged around 50%, which was below expectations. After reviewing the data and examining possible reasons for poor performance, the faculty agreed to administer the test in the courses where the relevant content is taught. Parts of the test are now embedded in exams and quizzes in individual courses, which help with assuring a higher

level of motivation to excel on the test. It has also become easier for faculty to reflect on student performance and make changes to their teaching to respond to areas where students have difficulty. We have seen higher scores, greater levels of faculty reflection on student performance, and more action by the faculty in closing the loop. Two examples from our tax sequence are illustrative.

Capital Gains and Losses & AGI Computations – We observed that only 28% of students in the BSA answered a capital gains question on the tax section of the MFTA correctly. We normally tested the topic early in the course, after covering Chapter 3 in the textbook. We need students to understand the

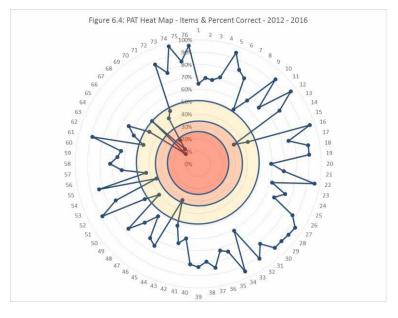


concept early so that they can complete a mandatory tax return project. Based on a review of and reflection on our MFTA assessment data, we determined that the topic is covered insufficiently in Chapter 3 of the textbook and that it is covered in greater detail in Chapter 14. Accordingly, the faculty decided to give students a homework problem on the topic so that they take it more seriously and learn more about it at an early stage in the class prior to completing the mandatory tax return. Additionally, the faculty created a video series that students access as needed to view illustrations of the application of AGI concepts, including formulae, basis, state taxes, and

capital gains and losses.

In the second example, we noted from the MFTA that about 43% of our BSA students responded incorrectly to certain AGI computational items. To reinforce learning in that area, the faculty decided to use short AGI questions throughout the class to assure that students are continuously exposed to the topic

because of its high importance in *the first* taxation course and relevance to the assigned term project. This is now a standard pedagogical approach in the class and it has helped with students' confidence and performance. MFTA performance among MSA students has remained relatively flat over the review period but a higher proportion of students scoring in the lower tail of the distribution in the more recent administration of the test (See Figure 6.1). Additionally, the heat map (Figure 6-2) shows that roughly 10% of the 81 questions reflect items of high concern (darkest shaded area in the figure), 11% are items of concern and 22% are items to watch. Details appear in Appendix D.



We have used the MFTA to counsel students about the scope of the CPA exam and their need to be thoroughly prepared before they take the exam. We also use the items in the heat map to identify areas in the MSA that might be improved. For example, multiple *items of concern* were in accounting transaction cycles and business process area. As a result, in 2010, faculty strengthened the coverage of these areas in one of our foundation courses and in two core MSA courses.

Currently, most of those items are no longer among the *items of concern*. Though we have seen some improvement in students' knowledge and understanding of transactions cycles, business processes and controls, we continue to pay attention to coverage of these items in our foundation course (6200:603) and elsewhere.

#### Pre-internship Assessment Test (PAT)

The PAT consists of 40 items from a bank of 76 items that cover mainly financial accounting topics from the first course in accounting. The test also includes six ethical awareness items (the same six on the

MFTA). The test, which is administered year-round, is used as a screening mechanism to ensure that all undergraduate students with an interest in the internship program have a basic understanding of accounting principles and are aware of fundamental ethical pressures accountants face.

BSA students normally take this test in the first course (6200:321) in the Financial Reporting sequence. Performance on the test, which assesses basic knowledge and understanding of accounting principles and ethical awareness, has averaged around 75%. We have observed, however, that only about 58% of students who take the test score above the threshold (70%) that the faculty established in 2012. Additionally, performance has trended downward since 2012 (Figure 6:3). The heat map (Figure 6-4) shows that roughly 4% of the 76 questions reflect *items of high concern* (darkest shaded area in the figure), 3% are *items of concern* and 11% are *items to watch*. Appendix D shows further details.

Faculty have been addressing these challenges by agreeing on a more consistent policy for taking the PAT in all sections of 6200:321 and by strengthening the Principles of Accounting I course. We have now standardized our Principles of Accounting I course across all sections, offer group and individual tutorials sessions that all students may attend, and offer review sessions for students. To further strengthen student performance, we piloted a technology-enabled Engaged Pedagogy in Principles of Accounting I in Summer 2016 and fully implemented it in Fall 2016. We have seen substantive improvements in learning outcomes in the accounting principles course and expect to see those improvements carry through on the PAT, starting as early as Spring 2017.

#### Course-embedded Activities

The School uses various course-embedded activities for assessment of written communication skills, presentation skills, ethics, case analysis, and research. We created consensus rubrics for each of those areas and have used them for AOL in each of our programs since 2006. Different course-embedded assessment activities are used in the BS, MS, and MTax programs. The AOL plans in Appendix C show the specific courses where rubrics are used.

Performance of students on course-embedded assessments varies, but in general, most students perform at the satisfactory level or above. For example, at the undergraduate level, we have used rubrics to assess writing and presentation skills extensively in Accounting Information Systems, Information Systems Security, and the Internship course. While students generally satisfy expectations, several students had difficulty with grammar/sentence structure and documentation/references. We also observed that students were not mindful of their body language when making presentations. To address these issues, we provided clearer directions for students when assigning writing assignments and faculty now insist on a preferred documentation style for essays and papers. To address body language concerns when presenting, we now videotape students' presentation in the Internship course (6200:405) and require them to view the tape and write a reflective statement about their presentation skills. These interventions have led to significant improvements particularly in presentations.

By using our consensus rubric for case analysis in the Cost Management course, we observed that students had considerable difficulty in analyzing a full-length, comprehensive case in the Cost Management course. As a result, we moved to using shorter cases and assignments that require students to describe the processes they used in working on them. Referred to as process assignments, this approach has helped with greater student engagement in the classroom, while still effectively covering desired program learning objectives (problem-solving and decision-making).

By analyzing data from a course-embedded assessment activity, we were able to identify challenges and redesign a semester-long project in the Business Entity Tax course to strengthen engagement and enhance competencies in problem-solving, decision-making, and communication. A paper that describes our efforts in the Entity Tax course was published in *Advances in Accounting Education* in 2012.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> Apple, J. E., S. Gradisher, and T. G. Calderon. 2012. 'Enhancing Functional and Other Competencies through Role-playing', *Advances in Accounting Education*, 13: 237-75.

We continue to administer the project in Business Entity Tax and have added a similar project in our first taxation course. We recently received a grant from a major firm to change the tax compliance software used in both taxation courses to one that is used by most of the regional firms in Ohio. The change was motivated based on employer feedback, comments from Advisory Board members, and comments from tax interns.

At the graduate level, we use rubrics in multiple classes to assess ethics, research, writing and presentation skills. In general, students have performed at the expected level or higher. However, we have observed some writing issues related to documenting and referencing the works of others. We use a Plagiarism Quiz to assure that all students are aware of and are sensitive to problems associated with improper documentation and recognition of the works of others. Additionally, we ask students to use  $Refworks^{TM}$  for citing and documenting references in the required major paper in the graduate capstone course. Results have improved considerably since implementing these innovations.

# Surveys and Focus Groups

We administer an Exit Survey each semester to all graduating students. We survey employers periodically to obtain their feedback on SoA students they employ full-time or as interns. In general, employers have been highly satisfied with the knowledge, skills and abilities of our students. Students also report high levels of satisfaction with the accounting program and its contribution to developing skills in the following areas:

- Analysis & Synthesis Analyzing complex data/ Integration of data and information from multiple sources/ Working with unstructured data/ Working with very large data sets.
- Setting Goals, Time Management, and Emotional Intelligence Setting goals and objectives/ Managing your time/ Working in teams/ Controlling your emotions under pressure.
- Communication skills writing a professional report/ making a professional presentation/persuading others.
- Leadership & Ethics Working with persons of different backgrounds and cultures/ Leading a group/ Recognizing and addressing an ethical dilemma.
- Problem Solving & Decision-making Thinking outside the box/ Applying your knowledge/ Solving problems/ Making business decisions.
- Technology Using database tools/ Using presentation tools/ Using online research tools/ Using spreadsheet tools/ Using statistical analysis tools/ Using technology to support a decision or solve a problem.

#### Curriculum Alignment

Curriculum alignment, an administrative process, is an integral part of our AOL activities. It requires faculty to examine their courses and document how the content and assignments contribute to the learning goals of our programs. We have built a comprehensive database in MS Access (now on its second version) to show how each course contributes to the learning goals of our programs. This process has been highly beneficial in creating a more holistic awareness of our curricula. Additionally, it has served as a catalyst for assuring alignment in the curriculum and for supporting modifications in the content of various undergraduate and graduate courses.

## Closing the Loop Examples

Efforts at "closing the loop" represent a continuous process in the School and it is the responsibility of all faculty led by the Assurance of Learning Committee and the School's Chair. Many of the actions to close the loop are documented in the previous section.

Professional Responsibility and Ethics: For several years, we used a course-embedded ethics exercise in Spreadsheet Modeling & Decision Analysis, Accounting Information Systems, and Information Systems Security to emphasize professional responsibilities and ethical behavior. We required students to perform a due diligence task under time pressure and then complete a set of working papers to document the work that they did as part of the task. The task involved making corrections to a spreadsheet after reviewing electronic source data files in a computerized learning

corrections to a spreadsheet after reviewing electronic source data files in a computerized learning management System (Springboard). Faculty tracked students' work and then compare each student's due diligence working papers with computer logs to tell whether students behaved ethically. Faculty finally closed the exercise with a debriefing session that focused on ethical choices that one makes and the dangers of certain choices. On average, we observed that students were truthful in documenting their work up to about the mid-way point and thereafter they were somewhat less truthful in representing their due diligence work. Informed by this assessment activity, we now incorporate an ethics component into every project assigned in the Spreadsheet Modeling course. In general, this exercise and the modifications we implemented represent a significant change in the way our students are introduced to ethics and professional responsibilities.

Each student in the BSA and MSA program completes a six-item ethical awareness quiz. BSA students currently take the quiz as part of the PAT in Intermediate Accounting I. MSA students take the quiz in the Enterprise Risk Assessment & Assurance class and in the capstone course Accounting & Assurance Project. At least 85 percent of students recognize an ethical dilemma in four of the six mini cases used in that quiz. At first, many students (30%) did not appear to appreciate that being technically competent in the field is an important element of professional responsibility and ethics. More recently, that number has been reduced to about 15% in graduate courses. Largely as a result of the observations from students' performance on the ethical awareness quiz, faculty now emphasize in their classes (a) that individuals may be unethical whether their inappropriate actions lead to increases or decreases in earnings, and (b) contemporary professional responsibility standards require accountants to be technically competent, and practicing accountants who are not technically competent are unethical.

*Oral Communication Skills*: Each year, approximately 40 accounting majors complete an accounting internship for credit. Among the requirements for the internship is a presentation about the internship to student peers, faculty, staff, and members of the School's Advisory Board. Students present their internship experience at the end of the semester during what we call the *Internship Celebration*. Initially, we observed that students experienced considerable challenges in making oral presentations. In response, we provided students with online tips on using technology as well as guidelines for making an effective presentation. Additionally, we video record each presentation, and then require students to view and write a reflective statement about their presentation skills. This intervention has been highly effective and is now an integral part of the course. While student presentations have become more effective, we continue to monitor both the presentations and student reflective statements.

*Diversity*: Working with individuals of diverse backgrounds is an important SoA learning objective, particularly for our undergraduate students (see Appendix C1). A key metric in assessing this objective is the percentage of students exposed to diverse settings through the curriculum. Nonetheless, we have traditionally offered our students limited opportunities to work with demographically diverse groups. While about 19% of SoA students are listed as non-white, many of our minority students are pre-majors and have not matriculated into the CBA. This means that our undergraduate students, in particular, have not had much opportunity to work with demographically diverse peers in the classroom. Students in our graduate programs are far more diverse demographically and many have the opportunity to interact with diverse student peers. In 2006, the School created a

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<sup>&</sup>lt;sup>14</sup> For further details, see Chandra, A. T. Calderon & M. Welfley. 2016. Reporting Truthfully: Assessing Ethical Behavior of Accounting Students. *Journal of Forensic & Investigative Accounting* 8(1):140-156.

Volunteer Income Tax Assistance (VITA) clinic largely as an initiative to engage our students in a diverse setting that, in accordance with our program learning goals, includes individuals with varying educational background, experience, gender, age, race, and national origin. Initially, we assisted fewer than 200 low-income individuals. Within the last five years, the clinic has emerged into a Service learning in Taxation course that offers students significant opportunities to interact with individuals of diverse economic, national origin, ethnic and educational backgrounds. In Spring 2017, 60 students assisted about 1,300 diverse taxpayers, and contributed close to \$1.5 million to the community in refunds and saved tax-filing fees.

**Taxation:** Since 2005, the SoA has relied on our MTax Program Governance Board (made up of senior tax professionals and tax faculty) as a focus group for providing feedback and advice on the Master of Taxation curriculum. While the feedback may be considered as *indirect assessment* evidence, it has been invaluable. The group met about twice each year for several years and considered such issues as (a) are the program learning goals relevant and appropriate, (b) are the courses included in the program the right mix of courses, (c) is the content of key courses relevant and consistent with our goals for the program, and (d) are they aware of any deficiencies in the performance of MTax graduates in the workplace. The group's feedback led to significant changes in the MTax program in 2006 and subsequent changes in the content of such courses as Tax Research, State & Local Taxation, and Tax Accounting. More recently, the group endorsed a proposal from the tax faculty to make Corporate Taxation II a required course in the MTax program. The group also endorsed a similar proposal to (1) transform the Tax Practice & Procedure course into a Tax Policy & Ethics course, and (2) to assure that faculty use a common syllabus template with clear learning goals and topics covered for all courses in the MTax program. We continue to use the MTax Program Governance Board to monitor the program and assure that appropriate learning goals are being pursued and achieved.