Voice of the Student in Medical Assisting, Surgical Technology, and Medical Insurance Billing and Coding

Understanding Tomorrow’s Professionals by Examining Their Inspirations, Challenges, and the Tools They Need to Unlock Their Full Potential
Introduction

Cengage Learning wanted to better understand what today’s Medical Assisting, Surgical Technology, and Medical Insurance Billing and Coding students need to better balance challenging work-life environments, the key skills needed to unlock their full potential, and the technology required to ensure future success in their chosen fields. In order to gather these insights, Cengage Learning conducted more than two dozen face-to-face and online group interviews with students at the Medical Assisting Advisory Board and from colleges and universities across the nation. While extensive research has been done to understand what instructors need and employers desire from tomorrow’s professionals, this is the first time Cengage Learning has conducted its own research to better understand the skills and experiences students require to become more efficient, productive, and higher-quality future employees. Each of the students who participated was a full-time student and 44% had part-time jobs or other responsibilities such as child care. Cengage Learning’s Marketing Team interviewed and surveyed a total of 57 students to more intimately understand the inspirations, challenges, and technological resources students need to become better future employees.

Inspired to Help

The overwhelming majority of students interviewed selected their chosen college programs because they have a calling, or desire, to help people and make a difference in the lives of others. Many were actually inspired to choose their respective field after having witnessed a family member or loved one deal with illness or injury. “My dad had open-heart surgery in October and he has had heart problems since the day he was born, so I’ve always been around doctors’ offices,” said one medical assisting student. “I’ve been in and out of hospitals with him so being around that lifestyle, it really chose me more than me choosing it. I chose the medical field knowing that I wanted to help people.”
Indeed, the desire to help among tomorrow's professionals isn't limited only to those whose loved ones have experienced health-related difficulties. Others said a desire to care for others in a hospital setting is a work environment they've dreamed about since early childhood. “I love to be caring, to care about people and I love to be in hospitals or just helping people. I love it. My patients are my life,” said another medical assisting student. While other participants said they selected their course of study to maintain a professional credential or perceived the field as one that would provide for them financially until the age of retirement, some students cited online videos featuring medical professionals performing relatively complicated procedures as motivation for their choice. “I wanted to be a plastic surgeon since I was eleven and saw a video about the Smile Train and the doctors who travel to countries where people can’t afford cleft palate surgeries,” explain a surgical technology student. “I’ve always wanted to do it and now I’m pursuing my dream of becoming a plastic surgeon.”

The Dream of Helping Others

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Medical Assisting Student

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Surgical Technology Student

Sacrificing for the Future

A typical day as described by the majority of participants includes a combination of dedication, sacrifice, and a concerted effort to fulfill their many obligations in and out of the classroom or hospital. The majority of the students interviewed have maintained a seemingly frenetic pace but, at times, ended their days extremely fatigued and feeling as if they hadn't accomplished all they needed to. “A typical day is crazy and hectic,” said one surgical technology student. Regardless of the course of study, students consistently described lengthy days inside a classroom or hospital that are bookended by early start times and late bedtimes. “Right now I'm getting up at 4:30 A.M. The clinicals run from 6:30 to 3:00 P.M. three days a week, so I've got to get up early for that, and afterward I usually just go home and study,” said another surgical technology student. For a substantial portion of the participants, the long days are compounded by familial obligations that often include transporting children to and from school and extracurricular events. “I have two boys, ages ten and twelve, and I usually prepare for clinicals in the morning, wake them up, and scrub cases at the hospital from 6:30 A.M. to 3:30 P.M. Afterward, I'll pick up my son from tutoring, race home to get the other one, and drive them to baseball. I spend almost every night at the baseball diamond. Then I come home, make dinner, and study until midnight,” said one surgical technology student. Not
surprisingly, the students with jobs, especially the working parents, keep particularly grueling schedules:

- 44% of respondents work 5-10 hours outside of school
- 33% work 10-20 hours outside of school
- 11% work between 20-40 or more hours outside of school

Not only have occupational demands and familial responsibilities dictated when students study, but participants also noted an impact regarding the establishment of a routine study schedule. In some cases, students described taking short naps at odd hours so they can be more productive when they study. “Honestly, it depends on what my daughter’s schedule is like because she has a busy schedule with dance classes,” explained a medical assisting student. “Often, I’ll help her with her homework instead of doing my own. Sometimes I don’t start my homework until 10 o’clock at night when she’s done with everything, has eaten, and is in bed. Afterward, I’ll have time to myself so I can work on my homework.”

**Conquering Formidable Challenges**

Students who participated in the research project have faced a variety of daunting challenges in and out of the classroom. Besides having to balance time-consuming familial and work-related commitments, students described a myriad obstacles encountered inside classroom settings including learning difficult medical terminology, anatomy and physiology, and memorizing the various surgical technology tools. “You have to know the instruments because you’re the one who is responsible for them. It’s a lot to remember,” reported one surgical technology student.

However, two of the most challenging obstacles facing students in these disciplines is a lack of confidence and an abundance of competitive pressure. “I was afraid I was going to hurt somebody because some of the procedures are more invasive, such as venipuncture and injections,” said a medical assisting student. Not surprisingly, the intimidation students sometimes feel in regard to harming a patient may be compounded by the competitive nature of students in medical disciplines. The result is some students feel as if they’re on a different level than their peers. “Sometimes I feel like I’m not getting what I want. I want to know it all and that’s impossible with a bunch of students in one class,” shared one surgical technology student. Outside the classroom, participants described a variety of daily obstacles including whether to hold down a job outside of class, the availability of professors, and remaining disciplined and self-motivated. “Procrastination is a challenge for me because we are at the hospital so much it doesn’t feel like we’re in school any more. You’ve got to remember you also have homework that must be done outside the hospital,” said a surgical technology student. Since each of
the participants is a full-time student, financial struggles were also cited as substantial challenges. “Just budgeting and staying within my means is difficult while being a full-time student. I’m on my own, so I would say it is one of the more challenging parts. I’m ready to get done and start working,” said one surgical technology student. However, it was time management that was the biggest challenge cited by a majority of the students who participated. “Oh, it’s easy to name my biggest challenges: going through a divorce, living out of my car, getting an apartment, working two jobs, taking care of my dog, and still getting a 4.0, and just trying to just do it all,” explained one participant.

Mastering Difficult Skills
Not only did participants display a genuine desire to master difficult clinical skills they’ll be expected to perform as professionals, but they also understood they need to acquire a set of soft skills in order to be successful professionally. Students conveyed a deep desire to hone interpersonal skills they anticipated would help them better work with doctors, patients, and others. “My challenge was mostly in the lab because I was always thinking it was competition. I always thought I had to be fast, but really I just need to be efficient. Once I learned to breathe and relax I was able to overcome my jitters and my nerves,” said one surgical technology student. While other participants described difficulty in learning microbiology, pharmacology, and proper suturing, it was the more invasive procedure, like vascular surgery, many participants struggled to deeply understand. “Understanding which needles can and can’t be used on specific people made me nervous,” said a medical assisting student. Conversely, other students identified skills outside the operating room as more challenging to fully grasp. “The most difficult skills for me to master are the coding manuals because they’re so numerous and voluminous,” reported a medical assisting student.

A Technology Deficit
While participants described having access to a variety of technologies and devices that helped them acquire desired skill sets, students also demonstrated a strong interest in obtaining additional technology and experiences. Besides online practice tests, mock surgeries, and cadavers, students described regularly searching for technology and content outside the classroom. “YouTube is a big trend for everybody right now, I mean, you can find everything on YouTube,” said a surgical technology student. In addition to tools to allow more hands-on experience, students also cited a need for virtual reality technology that simulates hospital and operating room environments. “I wish we could do more virtual reality work. We do have a virtual image for laparoscopy surgery but I wish we could do more hands on,” said a surgical technology student.
Students also indicated that the technology available did not seem commensurate with the tuition fees they were paying their respective schools. “For everything I’m paying, I think there could be a lot more technology available,” said a medical assisting student. Two frequent technology requests made by participants included gamified medical vocabulary applications and a strong desire for platforms that provide instant feedback so students can accelerate comprehension. “It’s really helpful having iPads we can use to pull up EMR [electronic medical records] and use the records just as we would in an actual doctor’s office. But I do wish we had iPads in the clinical labs as well so we could get better experience there,” said a medical assisting student.

Learning Solutions: Bridging the Gap

Despite formidable challenges in and out of the classroom, students studying health care expressed a sincere and immediate desire to do more than simply complete their lab assignments and pass tests. Participants in this research project demonstrated an eagerness to master both the soft and hard skills necessary to become successful health care professionals who make substantial differences in the lives of those they touch.

Cengage Learning is well positioned to fulfill the technological needs students said they needed to become competent and valuable health care professionals. We offer MindTap solutions across Health Care providing a consistent and easy-to-use platform. The simulations in MindTap allow learners to practice the most difficult concepts in a virtual work environment. Developed to help improve program quality and retention, these real-world simulations prepare learners for their careers by increasing comprehension and critical thinking skills. Learning activities such as taking blood pressure or coding an actual case study engage students and simulate real-world environments.

As part of this research project, Cengage Learning asked nine surgical technology students to participate in a MindTap demonstration designed to illustrate the role the platform might play in students’ academic development. Unanimously, the students said they were either likely or very likely to use MindTap to study for classes and tests. More importantly, each of the students involved in the demonstration agreed that using MindTap would help them become more efficient and effective in developing the skills employers value. “MindTap is awesome. That book is heavy and I carry that bad boy everywhere. I feel like MindTap would be more accessible. I love the demo and would definitely buy it,” said a participant.
Conclusion

It was clear that students involved in the MindTap demonstration lacked daily access to many of the tools they deemed necessary to become successful health care professionals. Instead, participants have routinely relied on flashcards, relics of 20th century learning, to help them memorize classroom material. “I’m doing note cards, memorizing games, and just looking at them over and over again. Over and over again. Over and over again,” said a surgical technology student. Tomorrow’s health care professionals have expressed a desire for a digital platform that offers an immersive and personal experience, real-time feedback, and assignments to not only prepare them for tests but also for the professional medical working environments in which they’ll soon participate. Based on the data collected, Cengage Learning believes MindTap can fill the technology void that exists and meet the needs of students in two distinct ways:

**SOFT SKILLS**

Success in the medical workplace hinges, in part, on professionalism, which is difficult to learn without a solution that provides students opportunities to hone those skills.

The simulations and critical thinking activities within MindTap are designed to help learners develop the professionalism skills needed to transition to the real world. MindTap takes learning out of the classroom and into a simulated work environment where users can practice skills in a safe learning environment that provides skills assessment, fosters confidence, drives engagement and understanding of job responsibilities. This solution provides the most accurate information and realistic depictions of the actual medical office environment and skills, so the learner gains essential skills training well in advance of stepping foot into their first position.

**CLINICAL SKILLS**

A learning solution must help tomorrow’s medical professionals acquire a comprehensive clinical foundation and assist them in becoming confident in their knowledge of science, medical terminology, and surgical technology instruments.

In order for students to be successful in Surgical Technology, Medical Assisting, and Medical Insurance Billing and Coding they first need to succeed in the foundational health care courses. MindTap maps to course outcomes with engaging activities that correlate to those outcomes. These activities are both gradable and assignable and help students master the understanding of basic health knowledge—the human body, medical terminology, pharmacology—and how it correlates to their real-world health care profession. The simulations within MindTap address students’ struggle of applying the theory they’re learning to professional practice while reinforcing the concepts.