

## **Presenter Bio**

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Mr. Myhill has a lifetime of personal and professional experience with issues of disability. Since 1989, he has collaborated with and provided services for diverse individuals with disabilities, through extensive research, teaching, and advocacy. At BBI and the SU College of Law he directs the legal analysis of the latest ADA case law, and is Project Director for the “Information Technology Works” and “Demand-side Employment Placement Models” grants from the National Institute for Disability & Rehabilitation Research. As a Faculty Associate with the Center for Digital Literacy, he collaborates on accessible web-based learning activities for students with diverse special needs. Mr. Myhill earned his Masters degree in Special Education from the University of Texas–Austin, where he was selected for the Phi Delta Kappa Educational Honor Society, and his Law degree from the University of Iowa, where he served as Managing Editor of the *Iowa Law Review*. His chief research interests include assistive technologies, universal design principles, accessible electronic & information technology, and legal and policy developments affecting students with disabilities. Mr. Myhill is published in peer-reviewed and legal journals, edited books, and has authored or co-authored Reports for Norwegian Social Research [NOVA] and the National Council on Disability.

## **Resources and Further Reading**

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## ***1. State Supported Online High School Curriculum Courses***

Melanie, a high school student with grade level cognitive abilities, has limited use of hands and slurred speech due to cerebral palsy. Melanie receives special education and related services under the IDEA including speech-language services, occupational therapy, adaptive physical education, and use of assistive technologies to facilitate written and spoken communication. She intends to enroll in an advanced civics elective available through the state's virtual high school for credit toward high school graduation. The IEP team agrees the course is appropriate to meet her personal academic goals of applying for admission into a competitive liberal arts college.

The course is designed to be self-paced and reached from any computer with Internet access. It entails extensive reading and writing assignments using specified online and/or library resources. The course includes mini multimedia lectures, online progress quizzes, and major assignments submitted via email. Melanie will be one of 30 students taking the course from around her state. The instructor provides general information to the students via a Listserv, and is reachable during set office hours via phone or email.

The cornerstone of a free and appropriate public education (FAPE) is the individualized education plan (IEP), prepared annually by a multidisciplinary team of experts, and which must be "reasonably calculated" to meet the student's specific educational needs. Violations of the FAPE occur when services a) are not free, b) are not appropriate, c) do not meet state educational standards; d) do not comport with the student's IEP, e) are not provided under public supervision, f) do not comply with IDEA procedural safeguards, g) do not occur in the least restrictive environment, or h) do not provide educational content commensurate with that provided to grade level peers without disabilities. Common violations occur when significant evidence indicates the design or implementation of the IEP was insufficient.

## *2. Municipal College Degree Programs for Working Adults*

Raymond, a local book store clerk, is deaf. He reads lips with average accuracy and uses American Sign Language (ASL) for the majority of his daily face-to-face communications. Raymond's speech is significantly lacking in articulation as is typical of a person who has been deaf since birth. Raymond was accepted into the City College library sciences program as a qualified individual with a disability meeting the essential eligibility requirements. The public college receives federal funding through grants and student loans.

Because Raymond works a regular 8 to 5, Monday to Friday shift, he will participate in the College's working adults degree program, which provides many of the courses Raymond will need after regular business hours or via online distance learning. In the first year of Raymond's studies he will take general credit courses required of all City College students, such as English and History, and introductory courses in the School of Library Science using the distance learning option. The courses largely are self-paced and reached from any computer with Internet access. They entail extensive reading and writing assignments using specified print materials. Compared to the often large sections of most first year courses offered in the daytime, the evening and distance learning courses average 20 to 40 students. All of Raymond's first semester courses require a class meeting once per week, either in person or via web conference, where the instructor and students engage in discussion of course subject matter. This also is an opportunity for students to meet, form study groups, and raise questions to the instructor.

### ***3. Business Providing Skill Training and Certifications***

Eleanor is two years out of high school, providing administrative support for a local insurance agency. She transitioned into this full-time position after working part-time with the company during high school. Eleanor has minimal vision, whereby she can identify shadows and some patterns, but is not able to discriminate faces, pictures, or words. Eleanor is a skilled typist. She uses a standard keyboard for word processing along with a screen reader and headset for reading back what she has written to check its accuracy. She also uses the screen reader to browse the Internet and read email. Eleanor is proficient at reading and typing Braille.

The office has a new claims adjuster position opening in the near future and Eleanor has expressed strong interest in the position to her employer. The essential job functions will require that she develop a few new skills, including client interviewing, auditing, and business writing. She was referred to a private company, Stellar, that offers trainings specifically for these skills via online distance learning. Stellar has its headquarters in another state, providing several hundred distance learning courses, in addition to traditional classroom learning. The online option is convenient for Eleanor and many others with and without disabilities, who do not live near the headquarters. Eleanor intends to register for the three courses she requires and take the classes via online distance learning. She will pay the complete costs of the courses herself.

Stellar's online distance courses are completely self-paced and accessed from the Internet. They entail extensive reading of online textual material, preparing some written reports, taking online quizzes and tests. The materials frequently are enhanced with multimedia examples. The courses do not have assigned instructors; however, Stellar personnel are available via phone, email, and instant messaging to provide technical assistance.

## ***1. State Supported Online High School Curriculum Courses***

The online civics course is an excellent way for Melanie to experience advanced curriculum appropriate to her individualized educational needs. Enrollment and participation may not require Melanie to pay fees, though an exchange of funds may occur between her local high school and the virtual (state) high school. If the online course typically is attended by students away from school, and Melanie will need speech recognition technology to produce and edit her writing along with an alternative input device to access and move through the course materials, the IEP team must designate these needs in her IEP and provide them without cost.

Given the civics course follows and provides state approved curriculum and assessment, and is facilitated and monitored by the state through a highly qualified teacher, the course likely will comply with the IDEA. Though the course is provided to Melanie in isolation from her peers without disabilities, if the IEP team agrees, this would not deny her services in the least restrictive environment because it offers a highly normalizing learning opportunity that is self-paced by preference and not segregated without choice.

## ***2. Municipal College Degree Programs for Working Adults***

Title II of the ADA and § 504 of the Rehabilitation Act require City College to ensure their communications with Raymond are as effective as communications with other students. The College must 1) make reasonable modifications to policies, practices, and procedures, 2) provide services in the most integrated setting appropriate, 3) remove communication barriers, including those posed by the design of the web resources, and 4) provide necessary auxiliary aids and services to ensure Raymond has an equal opportunity to participate in, and enjoy the benefits of City College. The College, however, does not have to make modifications that fundamentally alter the nature of their programs and services.

The online college courses are a beneficial public service to students with and without disabilities in the community. As a student who is deaf, class discussions (in-person or online), communications with the instructor, media presentations (e.g., class video), and audio web course materials must be provided to Raymond in an alternate format, that is equally effective for him as the audible components of these activities for his peers.

Whether attending the weekly class in person or via web conference, the College must provide real time closed captioning or ASL translation for all such communications. Notably, both closed captioning and ASL translation are reasonable accommodations and/or necessary auxiliary services with costs to be borne by the College, not Raymond. Web conferencing applications must have the capacity to display live captioning provided by a third party, or real time video ASL translation. Web based course materials, such as audio/video media clips, must provide concurrent captioning or a complete transcript of the audio content.

## Hypothetical Solutions

Additionally, City College must accommodate Raymond's need to communicate with his class peers (again whether in person or via web conference), in a manner ensuring equality of communication. This may take the form of his signing to a translator who then speaks or writes/types out his communication in real time. It may be reasonable to permit Raymond extra time to speak more slowly in person and in class. Similarly, it may be more effective for Raymond to type out his own messages via instant messaging or for a speech synthesizer to enunciate. Importantly, the instructor must not dissuade Raymond from meaningful participation by virtue of his requiring extra time for communication, but may consider all available possibilities for the mutually optimal method.

These accommodations are not likely to fundamentally alter the nature of the courses as they largely are technological extensions of the College's already existing course web conferencing system. The availability of ASL translators has become a common and widely accepted practice under ADA.

### ***3. Business Providing Skill Training and Certifications***

As a Title III public accommodation, Stellar cannot deny Eleanor the full and equal enjoyment of their services on the basis her disability. Stellar is obligated to make reasonable modifications to their procedures, practices, and policies necessary to accommodate Eleanor's unique needs as a person with a significant visual impairment. Eleanor, attending these courses in the evenings while at home, will use her own computer and Internet access, and will supply her own screen reader and headset. Stellar must ensure that its distance learning materials are compatible with screen readers so that Eleanor effectively can navigate the course content. This includes providing alternative text for all essential content that the screen reader otherwise cannot access, namely graphics.

Additionally, essential content provided only via video media require full text-based descriptions for text to speech conversion. None of these modifications are likely to "fundamentally alter" the nature of Stellar's services as they are common variations on the already web-based, course materials. Moreover, compared with the two prior hypotheticals, the cost of assistive technologies and services under Title III fall largely on the consumer.