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DISSERTATION

"EXTRACTING" POLICY DEFINITIONS FROM JUDICIAL OPINIONS: OPERATIONALIZING "REASONABLE ACCOMMODATION" IN HIGHER EDUCATION

Submitted by

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School of Education

In partial fulfillment of the requirements

for the Degree of Doctorate of Philosophy

Colorado State University

Fort Collins, Colorado

Summer 2000

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WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY CHERYL A. HURTUBIS SAHLEN ENTITLED "EXTRACTING" POLICY DEFINITIONS FROM JUDICIAL OPINIONS: OPERATIONALIZING "REASONABLE ACCOMMODATION" IN HIGHER EDUCATION BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

Committee on Graduate Work

Advisor

Department Head

ABSTRACT OF DISSERTATION

"EXTRACTING" POLICY DEFINITIONS FROM JUDICIAL OPINIONS:

OPERATIONALIZING "REASONABLE ACCOMMODATION" IN HIGHER EDUCATION

Judicial opinions from lawsuits, filed by students with disabilities alleging a postsecondary institution denied a reasonable accommodation, were examined in a mixed method study. Seventy-seven cases from Federal Courts and the Office for Civil Rights were selected based on date, court level and substantive opinion information. The two hypotheses analyzed were, (a) A[n] Institution of Higher Education/examination agency/professional board can predict a verdict in favor for themselves, if they provide any type of "reasonable accommodation" to students with disabilities, and (b) Statistically significant independent variables can predict proving a prima facie case. Grounded theory was used to answer two questions, (a) How are the words "reasonable accommodation" described through Federal Court judicial opinions? and (b) What is the current process to determine which factors contribute to whether a student is able to receive a specific "reasonable accommodation"?

A logistic regression predicted which independent variables had significance in determining a final verdict and proving a prima facie case. The quantitative analyses resulted in two major findings. First, a postsecondary institution has a higher rate of predicting a final verdict in favor for themselves, when a student requests extended time. Secondly, cases in which the student did not provide documentation of their disability or if the postsecondary institution proved the accommodation provided was sufficient were significant predictors in proving a prima facie case.

The qualitative findings showed that a reasonable accommodation is a process based upon precedent cases that address individual needs and not generic remedies for groups of students with the same label.

Three recommendations were drawn from the findings. First, the judicial opinions from precedent court proceedings interpret and dictate implementation of Federal definitions. Because past verdicts have been most frequently ruled in favor of the postsecondary setting, students and institutions should try to ascertain fair reasonable accommodations before considering legal procedures. Second, constant interpretation of relevant case history is necessary for decision-makers to provide knowledgeable assessments of reasonable accommodations. Lastly, professionals and students with disabilities in postsecondary settings should identify the concept of a reasonable accommodation in their academic environments by incorporating the process from the theoretical model resulting from this study.

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DEDICATION

This dissertation is dedicated to all individuals who strive to inherently balance social interests and global respect with perpetual reason and intellect.

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CHAPTER I

Introduction

This study was conducted using a mixed method approach combining quantitative statistical outcomes with qualitative information to operationalize Federal definitions describing reasonable accommodation in Institutions of Higher Education and associated agencies. The mixed method approach was chosen as the most appropriate for evaluating and interpreting academic programs, practices and procedures that include multiple interactions involving multiple stakeholders (Patton, 1990; Creswell, 1994).

Designed to assist both students with disabilities and postsecondary personnel, this study's purpose was to explore possible linkages between judicial opinions and postsecondary operations incorporating students with disabilities. For this study, there are three higher education groups that are referred to as postsecondary settings; (a) Institutions of Higher Education (IHE), (b) examination agencies, and (c) professional boards. The groups all address higher education issues and are subject to implement similar Federal policy. Moreover, the study was designed to predict verdict outcomes for cases associated with accommodation practices for higher education institutions and associated agencies in order to provide effective auxiliary aids for students with disabilities. The quantitative data examined in this study included Federal cases and Office for Civil Rights complaints filed under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The Federal case or the Office for Civil Rights complaint also included a citation for an alleged violation of a student with a disability receiving a reasonable accommodation. The data utilized in the qualitative study is a subset of the Federal cases used in the quantitative portion of the analysis.

The sample cases represent students and postsecondary settings from across the nation. Students' filing lawsuits represent multiple disability categories in today's higher education student bodies. The individuals initiating the lawsuits are student's with disabilities who reflect a new dimension of diversity within a postsecondary setting.

Demographics of Diversity

In 1996 there were 5.6 billion people in the world (Hodgekinson, 1996). Within four years, the Census 2000 has cited an estimated increase of 9% to approximately 6.0 billion people. As the world's population continues to grow, it is also becoming more ethnically diverse and ethnically mixed (Hodgekinson, 1996). The population makeup continually changes because of the increase in population numbers and the broad use of labels defining diversity. Today diversity encompasses a variety of individual characteristics, including race, religion and disability. Also, the manner in which the Federal government collects the demographic data has changed because more ethnic categories are included in surveys. The addition of ethnic categories, over the years, improves the method of capturing the most accurate population demographics. The primary reason for the Census adding and adapting specific demographic categories is to present a more accurate picture of today's population. Currently, there are more categories or labels to identify both individuals of different races, as well as individuals of different disabilities then there were in previous years. Typically, postsecondary settings identify individuals in either of the two aforementioned categories, race or disability, as "minority."

Similar to census data, education disaggregates students based on categories in order to provide a snap shot of the diversity within the student body. These categories include race, ethnicity, socio-economic status and disability. Although each category describes specific characteristics of students, the term "minority" tends to be the overarching label, which encompasses multiple categories used throughout educational research. The concept of "minority" within a higher education context describes multiple populations.

Higher education institutions strive to mirror the diversity described in the world demographics through their student body, in order to promote diversity (Hodgekinson, 1992).

Similar to the world "minority" population demographics, higher education "minority" demographics are increasing in total enrollment numbers. For example, more students with labels, such as disability, are entering into higher education at an increasing rate. One reason for the increasing enrollment numbers is due to recognition of how higher education influences the future direction of its graduates. Higher education offers many opportunities to its graduates, including enhancing careers and contributing to economic vitality. These opportunities make learning at a higher education institution a paramount issue for students of diverse needs. Equally critical to the access of education by "minority" students is retention. Policy analysts have begun to examine student retention rates for individuals labeled "minority," through awareness of the students different needs in order to succeed in a postsecondary setting.

An increasingly important aspect of contemporary education policy evaluation is to assess institutional success in retaining students who come from diverse backgrounds. Factors cited by policy researchers in postsecondary institutions, related to overseeing higher education outcomes, were (a) mounting financial pressure for income, (b) insistent demands from political authorities for diversity, and (c) oversight bodies creating greater accountability for graduation rates (Ebbers & Shelley, 1999). Each factor indirectly links to student retention and a commitment to maintain and enhance diversity of the student population. The profile of students enrolled in higher education today is more diverse than past years in academic preparation, family background and ethnicity. The universities and colleges are aware of each of the prominent factors effecting student enrollment. In addition, IHE/examination agency/professional board's are also aware of the declining cohorts of traditionally-aged undergraduates and the diverse needs of each of its students. The IHE/examination agency/professional board's perspective is strained by a need to retain students while under pressure to assist diverse student needs.

All of the above factors contribute to a sharpened focus on how to educate, retain and graduate students from all realms, minority or majority, in the academic world (Ebbers & Shelley, 1999).

Students with Disabilities

One group, which is a newcomer to the "minority" population status of students, includes individuals with disabilities. Similar to other "minority" enrollment numbers in higher education, the representation of students with disabilities has also increased substantially over the past decade (Heyward, 1998). Efforts outlined by specific legislation directed from the Federal legislative branch, assist higher education with increasing the access for students with disabilities. The cited legislation can by seen in the enactment of statutory regulations, such as the Higher Education Act, the Rehabilitation Act and the Americans with Disabilities Act. The fact that IHE/examination agency/professional board's are interested in accessing and retaining students with disabilities, by aligning philosophies with existing legislation, creates an improved climate for all students (Hodgekinson, 1992).

A study from 1960 of United States' higher education institutions found 200 postsecondary institutions provided some degree of accessibility for students with physical disabilities (Blosser, 1984). Two hundred institutions is a relatively small number in contrast to almost twenty years later, when most postsecondary institutions have students with disabilities matriculating on their campus, with a variety of disability labels not just physical disabilities. The number of individuals with disabilities accessing postsecondary education has reached 9.2% of the freshman class (Task Force on Postsecondary Education and Disabilities, 1999), and the overall enrollment figures of students with disabilities in higher education has dramatically increased. Many students with disabilities need academic accommodations in order to succeed in a postsecondary setting.

Statisticians and researchers who attempt to track students with disabilities in higher education and their associated academic accommodation have met with haphazard results at best.

Part of the difficulty in tracking students is that the collection of data related to individuals with disabilities is not longitudinal and, therefore, student comparisons from year to year cannot be made. Further, basic categorical numbers describing students' disabilities, cannot be compared because the labeling process has undergone so many changes. For example, the categories of disabilities in 1973 are only a small subset of the disabilities that could be included in Federal demographics today. Therefore, comparisons regarding student access, retention and success in higher education cannot be analyzed in terms of their relation to specific disability labels. Moreover, even though individuals with disabilities are accessing postsecondary settings at an increasing rate, the available statistical information does not show percentages of students who require an accommodation to complete their degree.

The Rehabilitation Act of 1973, {PL 93-112} and the Americans with Disabilities Act of 1990 (ADA), {PL 101-336}are the two major pieces of legislation guiding how postsecondary institutions collect data on students with disabilities. From these two Acts, the Federal government outlines policies and procedures in the Federal Register. The policies, procedures and guidelines are broad and vague within the mandates, in order to allow for interpretation of the guidelines. Or perhaps because the mandates were passed almost twenty years apart from one another. Vague guidelines allow institutions of higher education to collect data based on the IHE/examination agency/professional board's interpretation of the law and makes it difficult for two IHE/examination agency/professional board's to collect data in exactly the same manner. These two laws and their impact are described next.

Legal Mandates

The Rehabilitation Act of 1973, {PL 93-112} and the Americans with Disabilities Act of 1990 (ADA), {PL 101-336}, require rights for people with disabilities to be actively implemented. Key cases associated with each law provide definition, interpretation and scope to otherwise ambiguous litigation.

For example, cases stemming from the Rehabilitation Act of 1973 are precedings such as the Grove City College v. Bell suit (No. 82-792, 1984), which effects all higher education institutions receiving any Federal funds to be under its jurisdiction. Cases related to the Americans with Disabilities Act of 1990 are more recent and include the Sutton vs. United Air Lines (No. 97-1943, 1999) case. The Sutton lawsuit provided a new dimension to the definition of disability, because Justice O'Connor cited "correctable vision is not intended to be defined as a disability." Today, lawsuits trying to interpret reasonable accommodations, such as correctable vision, are filed under violations to both the Rehabilitation Act and the ADA. Each of the law's associated court cases forge a path of definitions and guidance for higher education's future policies and procedures. Legal issues are now assuming a prominent role in higher education and in particular, for the higher education faculty.

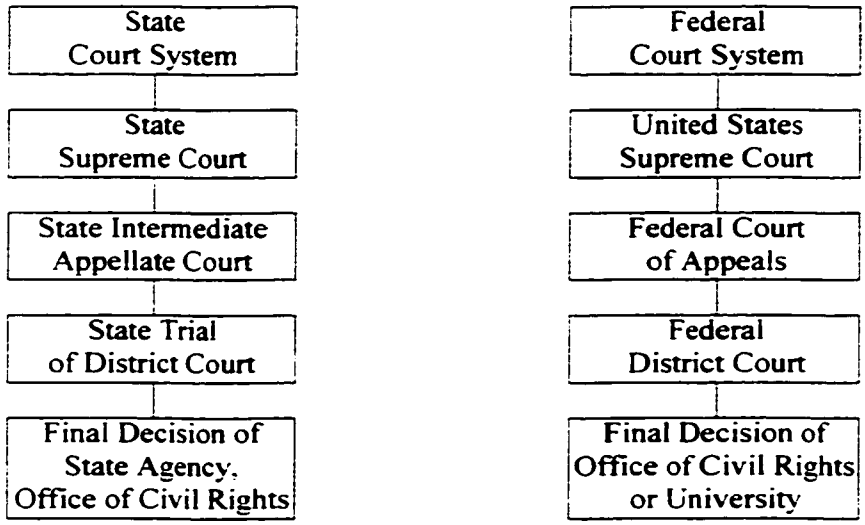
The legislation in the Rehabilitation Act and the Americans with Disabilities Act are implemented in the same manner. By looking at past court rulings, each of the legislative mandates provides additional answers about how higher education is to fulfill requirements described by each law. Extrapolating definitions from Federal Court and State agency rulings clarifies the meaning of legal terms used in the preceedings. For example, terms such as disability and reasonable accommodation can be interpreted differently by different campuses but are ultimately defined by the summative judicial decisions of past court cases. To determine the relative importance of a judicial decision, the cases included in this study identify the particular court from which a decision has been issued. For example, a case decided by a State Supreme Court generally will be of greater significance than a State circuit court case. Hence a basic knowledge of the structure of our judicial system is important to understanding higher education law (McEllistrem, 1999).

State and Federal Court systems typically function independently of each other. Each court system applies its own law according to statutes and the determinations of its respective highest court.

However, judges at all levels often consider opinions from other court systems to decide issues, which are new or provoke definitional interpretation. Lawyers look at the opinions of many courts to locate authority; this enables both the courts and the lawyers to either challenge or substantiate past judicial decisions. Although, State Court process varies from state to state, Figure 1 depicts a typical State Court process and a typical Federal Court process.

Figure 1

*State and Federal Court Systems' Process.



*(McEllistrem, 1999)

In addition to the State and Federal Court system, the education system also utilizes the Federal Office for Civil Rights (OCR) to investigate and decide on complaints filed within their cited region. As with State and Federal precedence, OCR adheres to the opinions and judicial decisions of cases filed and decided in their region, as well as, incorporating past judicial summations from State and Federal cases.

Following the legislative process, the Rehabilitation Act and the Americans with Disabilities Act (ADA) both seek to prohibit discrimination against people who are deemed to be "disabled" under the aforementioned Acts.

As it stands now, a plaintiff may file an ADA claim and/or a Section 504 claim in State or Federal Court. However, most often such claims are filed in Federal Court. Federal judges and their clerks are often more familiar with the intricacies of the Acts than similarly situated people at the State level (McEllistrem, 1999). Moreover, if the claim is filed in State Court, the defendant will often move to have the claim "removed" to Federal Court since the Federal Court also maintains jurisdiction over the claim.

The Office for Civil Rights is the Federal agency charged with investigating non-employment Section 504 or ADA complaints. Typically, the agency will investigate a complaint and determine whether there is any merit to the complainant's allegations. If there is, often OCR and the responsible entity will resolve the matter by taking appropriate steps to accommodate the person who filed the complaint. The process begins with OCR writing a Letter of Finding to both the plaintiff and the defendant describing their investigation and it's associated outcome. If the plaintiff shows sufficient evidence of a violation of Section 504 or the ADA, then OCR would require a Letter of Resolution and/or a Commitment to Resolve letter from the defendant. If the agency finds that there is no merit, or there is not sufficient evidence to the allegations the complainant has the right to file a State or Federal lawsuit under either or both of the Acts against the responsible entity.

Cases filed in State or Federal Court will be brought as either an individual or class action suit. Conceivably, a case could be brought as a class action involving several people with disability who claim the same injury as a result of an action or policy of the responsible entity. The problem is that class actions involve individuals who are similarly situated (i.e., incur the same injury from the same conduct of the responsible entity). This requirement often prevents people form asserting a class action. The process of how a complaint moves through the court system is depicted in Table 1.

Table 1

Process for filing complaint.

Order	Steps taken:
Step 1:	Complaint through the Office for Civil Rights (OCR) of a violation of a United States Code (U.S.C.) and/or a United States Public Law (P.L.).
Step 2:	File lawsuit under public law via constitutional law and through civil rights violation, in the State of the university or college. Hearing at State Court.
Step 3:	Appellate Court of the State of university or college.
Step 4:	State Supreme Court.
Step 5:	State Court of Appeals.
Step 6:	United States District Court.
Step 7:	United State Court of Appeals for the designated district (1-10).
Step 8:	United States Supreme Court.

On rare occasions the United States Supreme Court considers appeals from the highest courts of the State if a distinct Federal question exists and at least four justices agree on the question's importance. While Supreme Court decisions are generally regarded as the last word in legal matters, it is important to remember that trial and appellant court decisions also create important legal precedents.

The Americans with Disabilities Act brought lawsuits filed by students with disabilities and their advocates seeking clarification of not only the intent of the language included in the ADA. but also the language included in the Rehabilitation Act – Section 504. Both the ADA and the Rehabilitation Act were meant to promote access for students with disabilities within educational institutions receiving Federal funds.

The manner in which students with disabilities enter into higher education and matriculate with or without provisions provided under these laws is not only varied but can be exclusively established to meet the needs of each individual student.

A review of cases or complaints filed through Federal Courts or through the Office for Civil Rights and who report a violation of either Section 504 or the ADA indicates the plaintiffs are students with a wide variety of disabilities. Specifically, students with disabilities, who access higher education and who are involved in legal cases regarding reasonable accommodations, report labels as learning disabilities, visual and hearing impairments, mental health impairments and physical disabilities. The range of labels suggests that students with disabilities will need a variety of different types of accommodations in order to be successful at postsecondary settings.

The Rehabilitation Act and the ADA both outline the accommodation requirements if a student has a disability. For example, the Rehabilitation Act – Section 504 lists specific supports including extra time for tests. Yet, the vagueness of the laws created the inability to implement accommodations based solely on a student's disability label and the student's associated assessment of the disability. Even though the guidelines defining "reasonable accommodation" of both legislative mandates are generic, the laws allow individuals with disabilities the opportunity for postsecondary instruction where there once was none.

Significance of Research

Each successive year, students with disabilities access postsecondary education at an increasing rate. Past research has provided higher education with the descriptive statistics for enrollment rates, retention rates and graduation rates. Although this information is beneficial, it offers little specificity regarding exemplary practices for serving students with disabilities. It also offers little to educate higher education personnel on how their interpretation of the laws effect student's with disabilities. Equally as important, the research does not address how or when to implement singular facets of the laws.

Individuals affiliated with higher education, examination agencies and all students need support to provide not only an equal access to education, but also an equitable way to continue an education.

The current research gathered information through a mixed method approach in order to extend the knowledge of interpreting the term "reasonable accommodation," for individuals with disabilities in higher education. Studies have resulted in a variety of theories about higher education and students with disabilities, from attitudes of faculty, to adequacy of accommodations, to retention of students with disabilities. Although many of the past studies have mentioned the law and its definitions, few offer research on how to operationalize "reasonable accommodation."

Significant research needs to be conducted in order to determine how past policy and litigation interprets "reasonable accommodation." Definitions promulgated by the Rehabilitation Act and the ADA appear to change form during their implementation at higher education institutions, creating an atmosphere of uncertainty and ambiguity for both the student and the faculty. For the judicial branch of American government the issues on which most court cases focus are clarifying the uncertainty and ambiguity inherent in the Federal definitions. Federal and State case decisions, as well as OCR findings, currently provide the guidance for universities, examination agencies, professional boards and students with disabilities to follow. The case implications and the judges' decisions dictate the definitional direction of the research of disability policy. However, to better understand the contributions of legislation for students with disabilities in postsecondary education, research should focus on the advancement of accommodations provided by higher education brought to fruition through the judicial process.

Problem Statement

An immense amount of research describes the various benefits a postsecondary education can provide, not only for individuals with disabilities, but also less directly to communities (Lipsky & Garner, 1997; Reiff, Gerber & Ginsberg, 1997; Brinkerhoff, Shaw & McGuire, 1993).

By fostering the development of society's contributing members, the monetary benefits of receiving a four year degree are overwhelming. The Board of Regents and The State Education Department of New York (1999) reported that a student with disabilities with twelve years of education or less can expect to earn just over $19,000 annually, compared to $45,000 annually for those with sixteen years of education more. Yet even with the previously stated research and access to postsecondary institutions, students with disabilities comprise only 14.6% of students who actually take courses from any postsecondary institution and who exited from a secondary special education service (Kohler, 1994).

Students with disabilities are entering into postsecondary settings at an increasing rate and the preparation of universities and colleges to accommodate these students requires a decision for what is "reasonable." The problem lies in understanding how the IHE/examination agency/professional board personnel and students with disabilities interpret what a "reasonable accommodation" is specific to the disability label. The primary reaction of both parties is to look to the Federal laws and requirements to find out how the laws define "reasonable accommodation." However, the language included in the legislation is very vague and convoluted making it difficult to interpret on an individual basis. Furthermore the law offers no operational guidelines to assist IHE/examination agency/professional board personnel and students with disabilities. Ultimately, the interpretation of the Federal definitions on an operational level is up to the judges in Federal Courts. A logical step when interpreting "reasonable accommodation" would be to review past cases citing a violation of a student's rights by a denial of a "reasonable accommodation." In turn the judicial opinions of the court findings would be added to the interpretation of Federal definitions and possibly clarify a way to determine on a day to day basis what constitutes a "reasonable accommodation." The process of interpreting Federal definitions can be deemed not only as a fiscally overwhelming process, but also a mentally overwhelming process (Heyward, 1998).

The overwhelming process leads to confusion about the role of postsecondary educational faculty and their respective requirement to provide accommodations to students with disabilities.

The Rehabilitation Act of 1973 – Section 504 Subpart E, clarifies to some extent to whom the laws apply and what requirements must be met under the statute.

The Federal Register provides a legal definition for the term "reasonable accommodation" based on Section 504 of the Rehabilitation Act (1973). The law asserts a State's recipient of Federal funding (i.e. university or college) shall take steps to provide auxiliary aids for students with impaired sensory, manual, or speaking skills (29 U.S.C. Section 794). The American with Disabilities Act of 1990 utilized the above Statement in Title II and defined it as a "reasonable accommodation" within the work place. The 1999 amendments to the Rehabilitation Act of 1973 have changed the word "modification" to "accommodation." Along with the impact of major legislation to catapult civil rights and equity for all individuals in higher educational settings, the question for higher education is how to implement the law to provide students with disabilities with "reasonable accommodations?" Even with the above guidelines the majority of higher education faculty have limited awareness of their responsibilities and the legal rights of students with disabilities to reasonable accommodations and modification of institutional policies (Thompson, Bethea & Turner, 1997).

Further, the number of court cases addressing reasonable accommodation issues suggest there are many areas that are disputable. For example, is a course waiver a "reasonable accommodation" when it is a core course for a degree? Or is stenography a reasonable accommodation for a student who is Deaf ? Defining how past legislation provides reasonable accommodations for individuals with disabilities in postsecondary education is quickly coming to the forefront of all university and college campuses. Both policy capturing and a constant comparative analysis of current litigation will operationalize one distinct term, reasonable accommodation, and ultimately, will advance equity for individuals with disabilities to enable them to reap the higher educational benefits.

Analysis of Purpose

In an analysis of the social ecological theory underlying legislation for disability rights, Dokecki and Heflinger (1989) identified the challenges of translating theoretical assertion into social policy.

Their investigation of the theory-policy link led them on a course in which, as they stated, "We encounter bold conjectures {statutes}, as with any good theory, and are exposed to death-defying leaps over organizational chasms {higher education}" (p.61). Lipsky and Weatherley (1994) echo Dokecki and Heflinger in their analysis of the introduction of innovative policy into public-service bureaucracies. They state that the role of law containing new conceptions for higher education and the public arena should not be overlooked. Lipsky and Weatherley point out how difficult it is to operationalize or implement policy on a daily basis. Often policy is poorly implemented and allows people to do the least amount required under the law, while advancing vague knowledge of each law. Therefore, litigation is used to clarify rules and meaning in order to implement change.

The purpose of this study is to discover how current statutory legislation has interpreted reasonable accommodation and its implementation for students' with disabilities in postsecondary settings. Specifically, how does a university or a student with a disability know when an accommodation is reasonable. By designing a structured grounded theory analysis for cases pertaining directly to the definition of reasonable accommodation, a resulting operational guideline will be created through the qualitative analysis.

The legislation defines "reasonable accommodation" by expanding the definition stated in the Rehabilitation Act. Even though the Federal statutes engage in a written form of defining "reasonable accommodation" the task of applying the definition in higher education institutions is daunting and unclear. Thus, if the administrators and faculty are uncertain about what is "reasonable" when accommodating a student; then correspondingly the student must also be confused.

Generally, the 1990 Americans with Disabilities Act and its associated Supreme Court ruling on definitions, the Higher Education re-authorization, and the 1973 Rehabilitation Act-Section 504 continue to be the foundation of the each of the definitional terms.

Research Questions

The purpose of this research is to question how Federal policy, specifically the Americans with Disabilities Act and the Rehabilitation Act-Section 504, defines "reasonable accommodation" and provides implementation guidelines for individuals with disabilities in higher education. The analysis begins by utilizing a quantitative technique called policy capturing that quantifies factors in judicial opinions and decision-maker opinions. The research also focuses on qualitative means, specifically grounded theory, to probe further into how "reasonable accommodation" is defined and implemented from past judicial decisions. Actual summations from Federal judges and State agency officials is analyzed to interpret the process a university or a student with a disability must take in order to determine what an effective "reasonable accommodation" is through legal definitions. The following statements are split into the quantitative approaches' hypothesis and the qualitative approaches' questions.

The quantitative approach uses policy capturing, a method which codifies an identified outcome (the dependant variable) regressed on the specific elements of a case (the independent variables). The hypothesis states:

> Ho: A ruling in favor of the IHE/examination agency/professional board, which was cited for a violation of either Section 504 of the Rehabilitation Act or the Americans with Disabilities Act, is independent of the "reasonable accommodation" it provides to students with disabilities.
>
> H1: A[n] IHE/examination agency/professional board can predict a verdict in favor for themselves {defendant}, if they provide any type of "reasonable accommodation" to students with disabilities.

Although the analysis from the policy capturing approach is a powerful way to interpret factors essential to both the university and the students with disabilities when utilizing a "reasonable accommodation," understanding the process to determine the "reasonableness" of an accommodation through the judges' summations is limited without a qualitative analysis. The qualitative approach using a subset of the quantitative data exploring eight Federal cases where the university was cited for a violation of either the Rehabilitation Act-Section 504 or the Americans with Disabilities Act and specifically denied a student's request for a "reasonable accommodation." creates a grounded theory. The posed questions to be explored are:

1. How are the words "reasonable accommodation" described through Federal Court judicial opinions?, and
2. What is the current process to determine which factors contribute to whether a student is able to receive a specific "reasonable accommodation"?

Identifying and analyzing the responses creates a grounded theory analysis for how legislation advances access for students with disabilities in postsecondary education, by providing guidance for faculty through litigated definitions and implementation processes.

Definition of Terms

To provide clarity and consistency, the following terms have been defined for the current study:

Policy capturing: Inferential studies attempting to assess the influence of different factors on a decision or judgement.

Constant Comparative Analysis or Grounded Theory: The concept of "constant comparing" refers to the process that data is ordered into preliminary categories of codes, open or first level according to their conceptual context, and the second level coders are more abstract and organized the fist level codes. This is an inductive process that discovers patterns and theory from data (Patton, 1990).

Content analysis: A qualitative coding process to extrapolate and interpret text, in order to operationalize information.

Disability: Under both statutes, the ADA and Section 504, an individual must first prove that s/he has a disability and is defined as "any person who (i) has a physical or mental impairment which substantially limits one or more of such person's major life activities, (ii) has a record of such impairment, or (iii) is regarded as having such an impairment" (42 U.S.C. section 12101 et seq. And 29 U.S.C. Section 701 et seq.).

Examination agency: Entities, which test students after an undergraduate degree has been obtained, like the Educational Testing Service (ETS).

Reasonable accommodation: The ADA requires public entities " to make reasonable modifications in policies, practices, or procedures" and public entities to "furnish appropriate auxiliary aids and services where necessary to afford an individual with a disability an equal opportunity" (28 C.F.R. Sections 35.130 Section 35.160 (b) (1) and 42).

The Rehabilitation Act – Section 504 requires "a recipient {of Federal funds} shall make reasonable accommodations to the known physical or mental limitations of an otherwise qualified handicapped applicant or employee unless the recipient can demonstrate that the accommodation would impose an undue hardship on the operation of its program" (34 C.F.R Section 104.12 (a)).

Higher Education: Institutions, which provide education to extend and supplement an individual's elementary and secondary education, including vocational/technical colleges.

Professional board: Entities, which test students after a graduate degree has been obtained, like the American Bar Association.

Delimitations

Limits to this study involve condensing research into cases and complaints tried after 1990. The researcher collected data from court cases, which were categorized by specific elements, and analyzed written opinions by both Federal judges and State agency officials.

Because the data was categorized, it limits the ability to incorporate all statutory provisions and court case outcomes. The coding process for an unbiased qualitative analysis is difficult to achieve; however, by utilizing a grounded theory approach the researcher's biases is minimized. This is due to the emergent nature of grounded theory analysis. The researcher approaches the case without preconceived categories and reviews material until a pattern emerges. The data were coded chronologically beginning with 1990 and subjective interpretation was considered during the coding of judicial opinions.

Limitations and Assumptions

Roehling (1993) provides a three-pronged limitation model for policy capturing. The following describes the three limits and their associated assumptions: a) the changes in the law over time, b) sample bias, and c) data aggregation problems. The first argument raised is that judicial opinions are written to justify a particular decision, and thus may not capture all the information actually used to reach such decisions. Addressing the sample bias and data aggregation, Roehling describes a flaw within using statistical analyses that were either to simple or too complex.

> Suffice it to say, that traditional legal analysis is sufficient to determine whether defendants have provided "legitimate nondiscriminatory reasons for their actions." Despite this acknowledged limitation, there is value in ascertaining the extent to which judges make note of issues... with written instructions and "official" reasons for their decisions. (Werner & Bolino, 1997, p. 5)

Along with the policy capturing limitations, the biases inherent within grounded theory, such as coder reliability and researcher influence, are also present. Generalizability of the findings may be limited due to the small sample size reflecting the number of cases actually available for research.

In summary, the analysis allows student's with disabilities, IHE/examination agencies/professional boards, and decision makers review the Federal cases and OCR complaints in a concise manner so they can clearly understand what it means to provide a reasonable accommodation and what it doesn't mean. Also, they can understand the law process around a disability discrimination case.

CHAPTER II

Literature Review

The purpose of this chapter is to summarize literature related to students with disabilities and their associated accommodations in higher education. The literature review explores how the current laws address "reasonable accommodations" for students with disabilities in higher education. Information about students with disabilities in postsecondary settings and distinct research approaches are also synthesized and discussed.

The method for locating information entailed reviewing various databases including ERIC, SAGE, PsychLit, FindLaw, WESTLAW and LEXIS/NEXIS. The majority of the information used came from SAGE and LEXIS/NEXIS and was based upon the descriptors of higher education, law, disability, reasonable accommodation/modification, litigation, definitions and policy. Searches were conducted from material published in 1954 to the present, to provide background information.

This chapter is separated into three main sections (a) legislation, (b) higher education, and (c) research methods. The researcher reviewed the literature by categorical topic and synthesized relevant information. Information included in the literature review establishes the foundation for the chapter's main topics and their associated subtopics. The researcher also identified gaps in the research, in order to establish a beginning point for the current study. The review of literature begins with the examination of two laws that are applicable to postsecondary settings; including (a) IHE's, (b) examination agencies and (c) professional boards. Both laws lay the foundation for understanding requirements related to accommodating students with disabilities in postsecondary settings.

Legislation

Information about legislation is divided into two sections (a) laws relating to higher education and (b) precedent cases. Both sections outline critical background information for the current study.

Laws Relating to Higher Education

Federal law and specific judicial opinions interpreting Federal law are described in this section. Two primary laws govern the majority of policies implemented in higher education, with regard to students with disabilities: the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. One of the many requirements mandated in both laws is the provision to reasonably accommodate students with disabilities in their postsecondary setting. The language included in the Rehabilitation Act and the Americans with Disabilities Act assists in clarifying "reasonable accommodation." Clarifying the laws' intent can be cumbersome for higher education professionals and students, because the laws do not directly state how to use the language in the law on a day to day basis. The following section starts to examine the Federal language used to interpret "reasonable accommodation." The first Federal provision mandating reasonable accommodations was the Rehabilitation Act.

The Rehabilitation Act – Section 504 was the first legislation mandating equal access, reasonable accommodations, assistive technology and auxiliary aids, within higher education institutions. The most hailed piece of legislation was Section 504 of the Rehabilitation Act called the Civil Rights Act for the Handicapped. This was the first Federal civil rights law to specifically prohibit discrimination against students with disabilities while ensuring equal access (Segesvary Oyler & Hurtubis Sahlen, 1998). The 1973 Rehabilitation Act - Section 504 states:

> No otherwise qualified handicapped individual in the United States... shall, solely by reason of his handicap, be excluded from the participation, be denied the benefit of, or be subjected to discrimination under any program or activity receiving Federal financial assistance... (29 U.S.C. 794).

The aforementioned statutory provision was upheld in 1997, when the Rehabilitation Act was reauthorized. Section 504 relates directly to higher education and is incorporated in the 1990 Americans with Disabilities Act (ADA). The ADA was initially heralded as the most significant piece of civil rights legislation in more than twenty years. However, the ADA's passage did not drastically alter the legal terrain with respect to the rights of students with disabilities for most postsecondary institutions (Heyward, 1998). An unintended drawback of the Section 504 statute and the ADA companion legislation is that definitions of important words, such as "disability" and "reasonable accommodation" are vague. This vagueness of definition makes it difficult for students with disabilities and faculty to determine what a "reasonable accommodation" is at their postsecondary setting. Therefore, students and faculty look to outside interpretation when deciding if an accommodation is reasonable. Thus, judicial opinions from past court cases and Office for Civil Rights complaints are the primary source of interpreting the terms "disability" and "reasonable accommodation."

Although the Americans with Disabilities Act of 1990 brought civil rights for students with disabilities into to the forefront, in actuality the Rehabilitation Act- Section 504 and its associated court rulings, continue to be the predominant Federal statute regarding the specific obligations of higher education. Somewhere under Section 504 and the ADA, the answer to the question of whom a "qualified individual with a disability" is and, as a result, could be entitled to an accommodation began to lose its clarity. Trying to define specific group of words within the language of the law becomes increasing more difficult because of recent interpretation of cases decided and filed.

Precedent Cases

There are four precedent cases that directly influence higher education the interpretation of the ADA and Section 504. The judicial opinions from each of the four cases set precedence for future rulings. None of the identified precedent cases were included in this study's sample because they do not fit the case selection criteria (i.e. the decision dates are later than 1973 and before 1990). The cases provide crucial information about rights of underrepresented populations, rights of institutions and programs, what institutions fall under the purview of the law and tackled the concepts of intentional discrimination versus ineptness of institutions. Each case is summarized below.

Brown v. Board of Education of Topeka 347 U.S. 483 (1954). Four African Americans were denied admission to state public schools attended by caucasian children. There were findings that the Negro and white schools had been or were being made equal with regard to buildings and curricula. The Supreme Court held that the plaintiffs, by reason of the segregation, were deprived of the equal protection under the law and guaranteed by the 14th Amendment. The previous legislation promoting separate but equal services decided in *Plessy v Ferguson*, 163 U.S. 537 (1896) was held to be unconstitutional in public education. This began de-segregation for people who are members of disenfranchised groups.

The *Brown v. Board of Education* summation was utilized cross-categorically by all public education entities and eventually extended to the ADA. The use of the 14th amendment and its interpretation were incorporated into today's legislation for higher education policy. Although Plessy was reversed and remanded by Brown, schools in the 1990s continue to struggle with how interpretations of Federal definitions encompass other populations for involuntary race segregation in higher education. Brown v. Board of Education did create the thought that segregation of students based on a characteristic is not tolerable under the law.

Southeastern Community College v. Davis 442 U.S. 397 (1979): This was the first Supreme Court decision issued to interpret Section 504. A student was denied admission to a nursing education program due to her hearing disability. The school, which received Federal funds, denied admission to the student because she could not safely participate in normal clinical training due to her disability. It was viewed that any modification to the program would undermine the benefit of the program. The individual filed suit in claiming a violation of the Rehabilitation Act, Section 504, which prohibits discrimination against an "otherwise qualified handicapped individual... solely by reason of her/his handicap." The District court held the individual was not an "otherwise qualified handicapped'" person and, therefore, was not protected under the law. The Court of Appeals reversed the decision and required the school to accommodate the individual and stated the "handicap" should not be considered in determining if she is "otherwise qualified." The college appealed to the Supreme Court, which reversed and remanded the decision, which held in favor of the college. The Court held Section 504 does not limit the educational entity to require reasonable physical qualification for admission to said program and that Section 504 imposes no requirement to lower the college's standards or effect the program's integrity in order to accommodate individuals with disabilities. The petitioners' unwillingness to accommodate its nursing clinical experience did not constitute unlawful discrimination. The analysis of this case can be seen again in the Supreme Court decisions filed under Title II of the Americans with Disabilities Act. Alleging that schools, {and or businesses} will not be held to alter their standards by accommodating or modifying admissions, content mastery or outcomes.

The Court's ruling was viewed by many students with disabilities and their advocates as a disappointment. Advocates and students with disabilities feared the decision's potential to limit students with disabilities access into postsecondary institutions. An institution's potential to limit access of students with disabilities could also lead to limiting the accommodation of students' needs.

In other words, limiting students with disabilities access to postsecondary settings has potential to limit the type of accommodation provided, once the student is enrolled.

Grove City College v. Bell 104 S. Ct. 1211 (1984). This private liberal arts institution received no direct Federal or State financial assistance. Many of the college's students, however, did receive Basic Education Opportunity Grants (now Pell Grants). The petitioners, the school and four students, filed suit to seek an injunction from the Department of Education, to re-instate financial assistance, even though the school had violated Title IX of the Educational Amendments Act of 1972, 20 U.S.C. @ 1681-1688; which prohibits educational institutions receiving Federal financial assistance from discrimination against students or employees on the basis of sex. The court held that, even though the petitioner did not directly receive Federal financial assistance, the private college was held in violation of Title IX, because grants were administered to some of the colleges' students, via scholarships. This case provided a major foundation to capture policy in the making, by clearly identifying that all institutions, private or public, receiving any form of monies from the Federal government are required to adhere to Federal statues. Because of this decision, colleges and postsecondary institutions are aware of the mandates within Federal law.

The Court determined Grove City to be a recipient of "Federal financial assistance" under 34 C.F.R. sec. 106.2(g)(1) and advised the college to comply with Title IX as required. The Supreme Court held that the student aid constituted aid to the college and that included Grove City College. Because many postsecondary institutions believed they were private and did not receive any Federal monies, they in turn believed they were not subject to the requirements of the Rehabilitation Act and Section 504. By interpreting the terms "Federal monies" to include tuition grants or loans Federally funded to students, the courts essentially included all postsecondary institutions even if only one student utilized Federal monies to pay her/his tuition. This case ultimately involved many other higher educational institutions, which thought they were not under the umbrella of certain Federal legislation including Section 504, and eventually the Americans with Disabilities Act. This case clarified who falls under the purview of the law.

Alexander v Choate, 105 S. Ct. 712 (1985). This case dealt with discrimination under Title VI of the Civil Rights Act, as well as filing under Section 504 to bolster the plaintiffs' discrimination claim. The Court determined that that case does not control the intent issue under Section 504 because Section 504 raises considerations different from those raised by Title VI. In particular:

> Discrimination against the handicapped was perceived by Congress to be most often the product not of invidious animus, but rather of thoughtlessness and indifference-of benign neglect... Federal agencies and commentators on the plight of the handicapped similarly have found that discrimination against the handicapped is primarily the result of apathetic attitudes rather than affirmative animus. Alexander v Choate, 105 S. Ct. 712 (1985).

Faced with these difficulties, the Court declined to hold that one group of considerations would always have priority over the other: "While we reject the boundless notion that all disparate-impact showing constitute prima facie cases under Section 504, we assume without deciding that Section 504 reaches at least some conduct that has an unjustifiable disparate impact upon the handicapped." Thus "splitting the difference" the Court left for another day the specification of what types of Section 504 cases will escape the imposition of a discriminatory intent requirement (Kaplin, 1985). This case created the language stating a discriminatory act cannot hide behind the ineptness of an institution.

In summary, the four cases outlined court standards to be implemented and upheld in regard to cases citing segregation, disability discrimination, and/or scope of disability legislation. The legislation also provides direction for disability policy in postsecondary settings. The implementation of disability policies and procedures at higher education institutions begins with a student substantiating a disability.

Once the student has provided the required disability documentation, the student must then prove discrimination, in order to assert a violation of the student's civil rights. The knowledge gained by reviewing past legislation and case judicial opinions is paramount to the extent that higher education implements the statute responsibly.

Defining Disability. The evolution of the definition of " handicap" under Section 504 and the definition of "disability" under the ADA have led to the introduction of a number of disability labels. Attention deficit disorder, attention deficit and hyperactive disorder, and stress related disorders could now be included under the rubric of "disability." These disability labels remain general descriptions and leave room for specific interpretation. The fact that judicial and state agency opinion promotes slightly different definitions of the disability and renders a new interpretation of the term "disability," defeats the intent of professionals or students trying to stay abreast of the definitions. The fluidity of the definition creates confusion over who is qualified for services as a student with a disability in higher education institutions. The Federal provisions confuse the majority of the professionals and the students. Therefore, the Federal judges are looking to past cases citing a violation of Section 504 and/or Title II, to provide direction for operationalizing definitions that can be implemented on a daily basis and in a variety of situations.

Although there are over fifty differing definitions of disability in Federal statutes and regulations, the predominant definition is found in the Rehabilitation Act of 1973 and is repeated in the ADA. In the words of the ADA the term disability includes an individual who

> (i) has a physical or mental impairment, which substantially limits one or more of such person's major life activities, (ii) has a record of such impairment, or (iii) is regarded as having such an impairment (Federal Register, 28 CRF Part 36).

In 1999 Congress contended that 43 million people in the United States would meet the definition of "disability," or roughly 17% of the population. Other estimates report the number of people with disabilities in the United States ranging from 9% to 20% (National Council on the Handicapped, 1986). The struggle to operationalize the term "disability" occurs when professionals in higher education and students with disabilities interpret the definition of "disability" separately, but use their interpretation universally.

The merger of differing interpretations of the term "disability" from multiple disciplines such as political science, human services and education creates even more difficulty when trying to understand Federal definitions. According to Batavia (1993),

> The relationship between disability issues and other public policy issues is not well understood. Insight into this relationship can be gained through a greater understanding of the concept of "handicap," as distinguished from the concepts of "impairment" and "disability". In everyday conversation, these terms typically are used interchangeably and erroneously. However, when applied correctly, their important differences help us to focus on the appropriate level for analyzing disability and other policy issues.

In other words, different disciplines use the term "disability" interchangeably with "impairment" or "handicap." The nuances of these different terms are critical in operationalizing policy. Thus, students' "disabilities" could have multiple interpretations from IHE/examination agencies/professional board personnel depending on their discipline.

Structurally, government officials in state agencies like the Office for Civil Rights, State Courts and Federal Courts are the decision-makers who establish the definitions of what constitutes an impairment, handicap and/or disability. With three bureaucratic entities interpreting the law, the range of definitions is very broad and constantly changing.

For example, Heyward (1998) contends many of the rights and services that students have enjoyed are a result of an expansive interpretation of regulations by the institutions and soon the courts will narrow those results. In other words, the judicial opinions of previous cases are narrowing the definition of who is "disabled" and who is "not disabled" under the law, as seen in the Sutton case. Until the definition of disability is operational for higher education institutions, uncertainty and inconsistent interpretations will continue to plague higher them.

Researchers from the policy discipline have been identifying principles that are important to consider when addressing the legal definition of "disability," by reviewing text from past court precedings. For example, the Byene v. Board of Education of West allis states, "The statute's inclusion of the limiting adjectives "substantial" and "major" emphasizes that the impairment must be a significant one" [*Byene v. Board of Education of West allis*, 979 F.2d.560, 564, (7th Cir. 1992)]. The words "must be a significant one" creates the foundation of substantiating if a person have a disability and are imperative to any complaint or case.

The most recent ruling from the Supreme Court set the standard process for interpreting cases citing discrimination based on a disability. The Supreme Court standard states that a disability must satisfy a condition that "substantially limits one or more life activities, and does not include the ability to change or alter the condition into a "normal" state through use of medication or accommodations (Sutton vs. United Air Lines, 1999). For example, people taking insulin for diabetes are not considered disabled, unless they are able to prove that taking insulin substantially limits them from one or more life activities. A more recent interpretation of the term "disability" describes persons who are able to limit the effects of their disability as being no longer considered disabled under the ADA (Sutton vs. United Airlines, No. 97-1943). According to this ruling, if a person is taking medication or uses a prosthetic device such as glasses that correct the disability then this person is not disabled and cannot benefit from the label.

Specifically, in Sutton vs. United Airlines twin sisters with severe myopia (herein known as the petitioners) have uncorrected vision of at best 20/200; however, with corrective measures, both function as individuals without severe myopic differences. Both petitioners' applied at United Air Lines (herein known as the respondents) for employment as commercial airline pilots but were rejected because they did not meet the respondents' minimum requirement of uncorrected visual acuity of 20/100 or better. The petitioners filed suit under the Americans with Disability Act of 1990 (ADA), which prohibits covered employers from discriminating against individuals on the basis of their disabilities. The District Court dismissed the petitioners' claim for not being able to show a claim upon which relief could be granted. The court held that the petitioners were not disabled under subsection (A) of the ADA and the Federal interpretation of the definition of disability because they could fully correct their visual impairment. Similarly, the court held that the petitioner's were not "regarded" by the respondent as disabled under subsection (C) of the aforementioned definition. Since the petitioners only alleged that the respondents regarded them as unable to satisfy the requirements of a particular job (i.e. pilots) the allegations were insufficient to state a claim that the petitioners were regarded as substantially limited in one or more major life activities. In this case the major life activity was working.

This ruling to not include the ability to change or alter the condition into a "normal" state is different from past Federal rulings. The current definition differs from interpretation of the law before the case was decided in 1999. Now cases tried after 1999 will not have consider severe myopia a disability; even though it "limits one or more major life activity" when the individual does not wear glasses. The Sutton ruling indicates that the term disability does not apply if the person in some way removes the disabling condition.

The definition of the term "disability" is important because if an individual is unable to prove s/he is an individual with a disability, then the individual is not covered under the extent of the law and, therefore, is not afforded an avenue to have a "reasonable accommodation."

The majority of postsecondary cases stem from needs of students to have "reasonable accommodations" in their academic career. Like the term "disability," the research lacks an operational definition for the term "reasonable accommodation." Describing definitional interpretations of "reasonable accommodation" is found in the subsequent paragraphs.

Reasonable accommodation. The changing definition of the term "disability" combined with the ambiguity of the term "reasonable accommodation" was the exact argument that the Wabash County sheriff's department made in Noland v. Wheatley, 835 F. Supp 476, 484-5 (N.D. Ind.1993). Here, the county contended the "{term} reasonable {accommodation} is so vague and amorphous so as to be incomprehensible and is therefore, unenforceable." However, the court ruled a dismissal by arguing in its summary that "the use of the term "reasonable" to describe required modification of programs or services does not render it vague or amorphous and Federal courts routinely enforce reasonableness clauses in Federal statutes." (Noland v. Wheatley, 835 F. Supp 476, 484-5 (N.D. Ind.1993)). What Noland v. Wheatley asserts is that the key terms (i.e. reasonable accommodation) affecting higher education institutions and students with disabilities are very hard to interpret, and even harder to implement the interpretation correctly in their own school setting. Such ambiguity suggests the need for an analysis of policy research through past court cases in order to understand how to implement "reasonable accommodation." In particular, the research should focus on the judicial opinions associated with each case. The research involving examination of past policy related to the definitional use of "disability" and "reasonable accommodation" is not refined enough to guide the day to day operations in postsecondary settings. Although, the Federal provisions shed light on "disability" and "reasonable accommodation," successive changes in the definitions are included in judicial opinions, and influence current research.

A review of court cases from 1954 to 1990 further elucidates the defining features of ambiguous terms like "reasonable accommodation."

Past precedent cases outline the standards set by judicial opinions for IHE/examination agency/professional board's and students with disabilities; as well as, the intended scope of the legislation. Judicial opinions encompass important elements that identify a process in order to determine if a student with a disability is eligible under the law to receive a "reasonable accommodation."

Deconstructing cases shows that there are three factors related to determining whether or not a student's request for an accommodation is "reasonable" under the law.

1. What is "reasonable," is determined by reviewing and analyzing the facts of the particular case. There is no global definition of the term.
2. Certain limits to the requirement of "reasonable accommodation" do apply. An accommodation is not reasonable if it imposes any "undue financial or administrative burden" or if it requires a "fundamental alteration in the nature of the program." *Darian v University of Massachusetts*, 980 F. Supp 77 (MA 1997) and Arline, supra at 287.
3. The obligation to provide a "reasonable accommodation" is not an absolute standard. It involves compromise and balance. As noted by the court in *Southeastern Community College v. Davis*, U.S. 397 (1979), a determination is made about whether there is a means available "that will satisfy the legitimate interests of both the [institution] and the student."

Both the *Darian* and *Southeastern* cases cited discrimination based on a student's disability first and then determined the due process for the student and the resulting "reasonable accommodation." Critical precedent case summations that involve students with disabilities and "reasonable accommodation" are important to higher education institutions when deciphering how to implement Federal statutes. The following section describes the research conducted to analyze higher education professionals' understanding of their responsibilities, when teaching a student with a disability.

Higher Education

The legislation section is followed by the higher education section and is divided into (a) responsibilities of higher education institutions and students, and (b) barriers to implementation. Higher education institutions hold the primary role for creating and implementing the policies and procedures, which govern "reasonable accommodation" for students with disabilities. The following section explores the roles and perceptions of higher education professionals and students with disabilities.

Responsibilities of Higher Education Institutions and Students

The number of students with disabilities enrolling in higher education has grown nationwide and is consistent with the increased number of grievances filed with the Office for Civil Rights (Thompson, Bethea & Tuner, 1997; Brinckerhoff, Shaw, & McGuire, 1992). The National Center for Education Statistics reported in their 1999 Statistical Analysis Report the following representation of students reporting a disability. Table 2 shows the results.

Table 2

Percent of 1995-96 undergraduates who reported a disability.

Disability Reported	Total Percent
Visual Impairment	16.3%
Deaf/Hearing Impairment	16.3%
Speech Impairment	3.0%
Physical/Orthopedic Impairment	22.9%
Learning Disability	29.2%
Other*	21.2%

Note: *Student reported having other health-related disability or limitation. Percentages will not sum to 100 because some students reported multiple disabilities.

The demographics state the highest percent reported were students with learning disabilities (29.2%).

Although the same report stated students with disabilities enrolled in postsecondary setting increased, the report did not state if each student with a disability reported a need for an accommodation. Statistical reports are able to disaggregate students into categories based upon their disability labels but the reports are not useful in helping student's or faculty identify accommodations that students need in order to achieve success. Regardless of a student's label, the reasonableness of the accommodation s/he requests remains in question. Even after reviewing mandated laws, higher education institutions still find it challenging to interpret and provide their students with accommodations outlined in the law. Although the laws are confusing and inexact, using Federal regulations as guidelines helps to begin to determine the roles of higher education personnel and the roles of students during the implementation of laws.

The Rehabilitation Act of 1973 was not implemented until the Code of Federal Regulations was released in 1977. Interpretation of the law by the U.S. Department of Education clarifies who provides "reasonable accommodations":

> The Office for Civil Rights in the U.S. Department of Education enforces regulations implementing Section 504 with respect to programs and activities that receive funding from the Department (34 C.F.R. Part 104 [1988]). The Section 504 regulations apply to all recipients of the funding, including colleges, universities, and postsecondary vocational education and adult education programs. Failure by these recipients to provide auxiliary aids to students with handicaps that results in a denial of a program benefit is discriminatory and prohibited by Section 504. (Office for Civil Rights, 1991)

Like the requirements outlined in the Rehabilitation Act, the Americans with Disabilities Act of 1990 enacted a supplemental mandate related to higher education institutions through Title II. Language from the Rehabilitation Act was adapted in the Americans with Disabilities Act but convey the same meanings.

For example, the words "auxiliary aid" from the Rehabilitation Act guidelines, became the term "reasonable accommodation" in Title II of the Americans with Disabilities Act.

The obligation of colleges, universities and postsecondary vocational education receiving Federal funds is to provide auxiliary aids to qualified students with disabilities. The IHE/examination agency/professional board, who receives Federal funds, is responsible for providing auxiliary aids and services in a timely manner, as well as ensuring effective participation by students with disabilities. Furthermore, the code states that if the student is being evaluated to determine her/his eligibility under Section 504, the recipient must provide auxiliary aids in the interim.

Under the law, the student also has personal responsibilities related to obtaining an equal education opportunity. Students with disabilities who are in need of auxiliary aids are obligated to provide notification of the nature of the disability to the recipient and to assist the recipient in identifying appropriate and effective auxiliary aids (Office for Civil Rights, 1991). Depending on the nature and scope of the request and in accordance with the respective university policy, students must recognize their need for an auxiliary aid and give adequate notice of the need to one or more of the following: the higher education's support service coordinator, the appropriate dean, a faculty advisor, or professor. Examples of auxiliary aids could include any of the following: taped tests, interpreters, student tutors, or voice synthesizers. Even with the state of the art technology, which is available to some higher education students, the university is not required "to provide the most sophisticated auxiliary aids available; however, the aids provided must effectively meet the needs of a student with a disability" (Office for Civil Rights, 1991). Due to the vagueness of the regulation, further attempts to clarify the meaning of "reasonable accommodation" are offered:

> Aids, benefits, and services, to be equally effective, are not required to produce the identical result or level of achievement for [students with disabilities] and [students without disabilities], but must afford [students with disabilities] equal opportunity to obtain the same results, to gain the same benefit or to reach the same level of achievement, in the most integrated setting appropriate... (34 C.F.R. 784, Subsection E).

The recipient institution is financially responsible for the accommodation. The Federal code states, if an aid is necessary for classroom or other appropriate (nonpersonal) use, then the institution must make it available, regardless of budget constraints. A student with a disability may not be required to pay part or all of the costs of that aid or service.

Barriers to Implementation

There are three major barriers to the implementation of laws, (a) faculty lack of knowledge about disability law, (b) institutions lack disability policy and (c) faculty willingness to accommodate students with disabilities. The first complication of the laws is that faculty may not have knowledge about disability related Federal laws. According to a study by Bethea and Thompson (1996) the laws which require postsecondary institutions to make accommodations and modifications of policy to ensure students' with disabilities rights to an equal education opportunity are not always understood by faculty and administrators in higher education. Expectations of faculty tend to rely on the students or the institution for interpretation of the law. Faculty are required to implement classroom accommodations and make modification to policies that do not fundamentally alter the intent of a course (Kincaid, 1999). Disability laws and recent court cases mandate that programs be accessible to students with disabilities and accommodations need to be disability specific (West, Kregel, Getzel, Zhu, Ipsen & Martin, 1993). In turn, faculty must be astute about the primary legal requirements and be able to make responsible decisions on an individual basis.

Past research shows most higher education institutions do not have a policy instructing professionals how to assist student's with disabilities (Heyward, 1998). Therefore, some faculty look at Federal regulations to provided guidance when implementing a "reasonable accommodation." However, the policy procedures are confusing because accommodations are not generic but must be individualized based upon the student's disability and the anticipated environment. A review of perceptions of higher education faculty illuminates the attitudes and comfort level of teaching students with disabilities in accordance with university regulations.

A review of the literature provided multiple studies about faculty attitudes, willingness, or comfort level with providing accommodations for students with disabilities. From 1981 through 1998 faculty from several higher education institutions were surveyed, investigated, and interviewed, in order to predict faculty willingness or comfortableness to accommodate students with disabilities (Thompson, Bethea, & Turner, 1997). Most of the studies concluded that faculty in higher education want to learn more about providing students with disabilities accommodations.

Wacker, Laurin, Musick, & Kao (1999) found that the majority of the faculty they surveyed were strongly in favor of making appropriate accommodations for students with disabilities. The willingness to provide accommodations was also found in studies where students with disabilities were surveyed. Students ranked instructors' willingness to accommodate in the "good" to "excellent" range (Finn, 1998). Correspondingly, Fonosch & Schwab (1981) sought information about the comfort level of students with disabilities with their professors. This study found professors and faculty received highest scores from students when the faculty had previous experience teaching students with disabilities. This conclusion was confirmed in Fichten, Amsel, Bourdon, and Creti (1988) where they found professors are more likely to be more effective interacting with a student with a physical disability, if the professor had had prior direct experience with students with disabilities.

Despite the reported willingness of faculty to accommodate students with disabilities, the students with disabilities themselves state they encounter many barriers to receiving the accommodations they need to receive an equal educational opportunity (West, et. al., 1993). For example, Lehmann, Davies and Laurin (2000) found students often did not receive any accommodations at all and many of the accommodations provided were inadequate. Faculty may have good intentions of assisting students with disabilities, but they do not know how to discern between what is fair or not fair when making accommodations. Further, it is not clear in terms of the research why students perceive the accommodations to be inadequate.

In sum, discrepancies between the who, what, where, and why of operationalizing a "reasonable accommodation" can be described in several ways. Past studies of faculty and student perceptions toward "reasonable accommodations" highlight a need for both constituencies to be trained in order to increase awareness of their respective responsibilities. Further, in an effort to clarify the terms and roles related to implementing Federal law, it is also important to review past judicial opinions.

Disability policy is the base for forging new ground toward operationalizing Federal regulations into actual local knowledge; where the student and their campus faculty obtain the locus of control.

Research Methods

The final section, research methods, is divided into (a) disability policy, (b) policy-capturing, (c) content analysis, and (d) grounded theory. This section reviews the evolution of disability policy and the procedural aspects of the research approach.

Disability Policy

The majority of political scientists view disability policy as a relatively new research area. Since the passage of the Rehabilitation Act of 1973 and the Supreme Court ruling on the Grove City College lawsuit, disability policy has since increased in both interest and research for interpreting "reasonable accommodation."

The interpretations of the definitional language is important, because the definitions indicate who is qualified for services and who is not. Services are intended to "level the playing field" so that everyone has an equal chance in getting a job, an education and ultimately becoming a contributing member of society. Many persons outside the disability community were surprised during the 1970s and 1980s to learn that there were militant persons with disabilities demanding their rights as citizens (Pfeiffer, 1993, p. 724). The product of the disability movement today consists of a set of public policies referred to as disability policy (DeJong, 1991). In order to design this policy the subsequent section examines the dominant definition of disability used in studying disability policy, the basic paradigm of disability legislation and the evolution of disability policy.

Defining disability can be cumbersome with multiple and differing definitions of the word in Federal statutes and regulations; however, the predominant definition cited in the Disability Definition section of this chapter is found in the Rehabilitation Act and is duplicated in the ADA. The legal definition creates a foundation for analyzing the different fundamental paradigms used by policy scholars (Hahn, 1993; Pfeiffer, 1993).

The disability paradigm is based upon the assumption that the person with the disability is the primary actor and the focus of the research. The problem is seen as one that exists in the environment, such as the attitudinal, architectural, sensory, and economic barriers faced by persons with disabilities (Pfeiffer, 1993). Furthermore, the disability paradigm revolves around the inadequacy of support services to overcome these barriers and an inherent reliance on the professionals in the field (Wehman, 1992; Hahn, 1993). Disability policy is unique to itself. It does not relate to health policy, employment policy, special education policy, housing policy, or transportation policy; however, it subsumes all of these distinctive policies. Disability policy researches' solution to the societal stereotype of disability definitions is guided through self-advocacy, system advocacy, removal of barriers, and control by the person with the disabilities (Pfeiffer, 1993).

The definition of disability and its associated policy paradigm leads to an assumption of a past political succession of policy. The following is the succession of policy created to provide equity for individuals with disabilities. The Urban Mass Transportation Act of 1964, as amended, (49 USC 1612); The Architectural Barriers Act of 1968 (42 USC 794); the Rehabilitation Act of 1973 (29 USC 794); the Education of All Handicapped Children Act of 1975 (20 USC 1401); the Developmental Disabilities Assistance and Bill of Rights Act of 1975(42 USC 6001); Re-Authorization of Education of All Handicapped Children Act into Individuals with Disabilities Education Act, IDEA of 1985 (PL 94-142); The Voting Accessibility for the Elderly and Handicapped Act 1986 (PL 98-435); The Air Carrier Access Act of 1986 (PL 99-435); The Fair Housing Amendments of 1988; and finally the Americans with Disabilities Act of 1990 (PL 101-336) all provided deep roots for disability policy to grow. The passage of the ADA marked the political maturation of the disability movement like the Rehabilitation Act of 1973 and provided a fiscal mandate to bolster its combined implications. This means enforcement is attached to money. Specifically, the associated monetary regulations for each of the Federal policies quickly adds up and provides an avenue of enforcement. Similar to political action groups, the disability movement faces problems including the fact that the ADA may be poorly implemented, and a public backlash against it could appear. Further court decisions could weaken the ADA and other important disability related legislation. Therefore, it is the responsibility of the policy analyst community, especially those analysts who identify with the disability community, to focus on disability policy and understand its implications (Pfeiffer, 1993).

Disability policy implementation at the postsecondary level generally lies with the institutions versus with the individual. But it is up to the individual or student to initiate the implementation of the policy. For example, a postsecondary institution may have a policy detailing the requirements for how and when to ask for a "reasonable accommodation." However, the student must not only have knowledge of the policy but also interpret it to know when s/he should have her/his request for an accommodation submitted.

Each entity plays a particular role in the outcome of a policy and its primary intent. This process is vastly different for the higher education student with a disability then the secondary level student. Currently, at the Pre-K–12 school levels, the teachers, administrators and counselors all are charged with assessing, accommodating and articulating the needs of the student. Yet in the postsecondary settings the students, not the professionals, are the policy initiators. The students with disabilities are required by law to adhere to the IHE/examination agency/professional board's policies and procedures when requesting an accommodation. Ironically, the majority of the students with disabilities have not experienced how to request an accommodation from their secondary school setting (Arnold, 1998). The changing of the guard, so to speak, from the professional being the locus of control to the student being the locus of control is one primary barrier to implementing effective disability policy. The confusion in disability policy begins with the student or the IHE/examination agency/professional board professional interpreting Federal definitions for a "reasonable accommodation."

In order to clarify the Federal interpretation of policies and legislation involving "reasonable accommodation," this study uses "policy capturing." The "policy capturing" technique has been utilized since the early 1980s and is defined in the following section. The subsequent section reviews multiple methods used to interpret policy.

Policy-capturing

A typical description of policy capturing is that it is a quantitative method used to code a decision-maker's or judge's opinion on a complaint or case facts. The opinion can become a dependent variable and statistical procedures are used to assess the influence of the different factors on the variance of the dependent variable. The cases can also utilize other "facts" of the case to be the dependent variable. For example, the actual verdicts of a case for or against the plaintiff may not contain much variability. However, there may be other decisions prior to the verdict that are varied and are influenced by independent factors.

The resulting statistical procedures, typically a regression coefficient, are interpreted as indicators of the influence of the respective factors in the decision process.

As previously stated it is difficult to dispute that individuals with disabilities are accessing higher education and are subject to disability legislation such as Section 504 and the ADA. Further, many researchers and practitioners view terms encompassed in these provisions to be vague and non-operational. Even though the guidelines were adopted in 1973 by the Equal Employment Opportunity Commission, Federal agencies continue to emphasize the need for higher education to validate all policy and procedural criteria, both "objective" and "subjective," where alleged discrimination has been cited. The EEOC guidelines continue to be challenged by decision-makers (OCR officials) and judges. Because of the importance of legal challenges to substantiate and integrate equity into today's postsecondary settings, the primary purpose of the analysis is to extract operational definitions from decision-makers and judges opinions, by utilizing policy capturing. The following substantiates this theory;

> While the statistical analysis allows us to identify trends in the cases and the broader factors influencing outcomes, it fails to provide insight into the often subtle and less tangible courtroom considerations, which often dictate the outcomes of disability cases. This substantive identification of the forces behind statistically significant factors can only be accomplished through traditional legal case analyses. (Miller, 1990, p. 556)

According to Roehling (1993) a typical study, again involves a decision-maker or judge who is asked to provide a holistic response to stimuli that contain varied information about multiple factors. The holistic response becomes the dependent variable and statistical procedures are used to assess the influence of the different factors on the variance of the dependent variable. To date, policy capturing has been used by researchers in multiple disciplines to investigate a wide variety of decisions and judgement processes.

The most prominent decisions that use policy capturing are about employee discipline and performance evaluation decisions (Roehling, 1993; Miller, 1990).

Kidwell & Campion (1999) used policy capturing to explore employment discrimination lawsuits to determine the content validity elements that most influence judges' decisions regarding the interview selection procedures. Previously, studies conducted to link interview structure and litigation outcomes also utilized policy-capturing techniques (Gollub-Williamson, Campion, Malos, Roehling & Campion, 1997). Along with interviewing predictors, performance appraisal system characteristics in discrimination cases also employed policy capturing (Field & Holley, 1982). In 1990, Miller, Kaspin & Schuster utilized the discrimination analysis through interviews archetype to predict verdict outcomes of employment cases on age discrimination. The analysis technique used by Miller (1990) was replicated when Werner and Bolino (1997) used policy capturing vital to explaining U.S. Courts of Appeals' decisions involving performance appraisal issues in accuracy, fairness and validity.

Policy capturing also has been used to assess the factors thought to influence judicial and administrative decisions involving legal constraints relevant to Human Resource Management, HRM (Terpstra & Baker, 1992). Studies of this kind generally use a sample of legal cases for which judicial opinions are readily available. The judicial opinions are analyzed and coded using a limited number of factors selected on an appropriate basis. The judicial decisions are typically regressed on the set of factor values produced by the content analysis and coding process. The resulting regression coefficients are interpreted as predictors of the influence of the respective factors in the decision process. The underlying reason for this use of policy capturing is to provide researchers, practitioners, and students; guidance regarding "best practice" that are or are not likely to be tried in court (Roeling, 1993).

After the statistical analysis the data produced through policy capturing eventually assists businesses in identifying and inherently predicting violations of civil rights among both employees and employers.

The business ultimately is able to interpret the independent variables, which influence the judicial decision the most and in turn operationalize techniques to prevent legal infractions.

Inherently, as with most analyses, an underlying bias is present during policy capturing related to the use of (a) decision-makers or judicial opinions, whether that be interpreted as the judge's, the jury's, or the researchers, (b) influencing factors, and (c) deciding factors. Therefore, a description of related opinions based on what is typically used is needed to provide a basis for the quantitative analysis.

Judicial decisions. A sound understanding of the substantive area involved in a scientific investigation is critical to conducting meaningful research (Roehling, 1993). Because an understanding of a portion of the judicial process is imperative, a distinction among vital definitions is noted below.

The "decision is an adjudication by the court and "opinion" is the official reason given by the court for the adjudication" (Corpus Juris Secundum {C.J.S.}, Courts, Section 70, 1988). Depending upon the level of the court at which the decision making is occurring {trial vs. appellate} and the nature of the issues involved, the decision-maker may be a single judge, a jury, or a panel of judges" (Roehling, 1993). Mitigating circumstances exist in policy capturing and in particular in court summations. Examples of mitigating factors include decision-maker's experiences, attitudes, values, personality, and other personal characteristics. These types of mitigating factors are taken into consideration in order to mediate the influence of case factors on judicial decisions (Roehling, 1993).

Two factions of law revolve around how a case is decided and by which court is handing down the operational use of the verdict. By stated doctrine, *stare decisis*, the hierarchy of court systems is established and followed, indicating that a court of the same or lower ranking of the decision court will in turn hold the identified decision (i.e. a precedent). The hierarchy of the court system is important due to which court hears the suit and which court decides the suit.

The type of decision also has an affect on the accompanied written opinion, as well as having a broader implication than dispute deciding. The hierarchy of the court system is important to policy capturing when looking at data collected and their corresponding court affiliates.

Policy capturing results in a list of predictive independent variables to understand factors contributing to a potential lawsuit. Coupling policy capturing with another research method is common within business and industrial/organizational psychology research. The current study ultimately uses grounded theory or constant comparative analysis to bolster the power of the research; however, content analysis is the quantitative precursor to the qualitative grounded theory method and is used in this study, in order to broaden the understanding of the judicial opinions (Roehling, 1993). Exploring content analysis allows the researcher to provide the needed reliability and validity that policy capturing could be subjected to and then explains why grounded theory is the best technique to analyze and accompany policy capturing. The follow paragraphs describe content analysis and its associated factors when analyzing multiple texts.

Content Analysis

By definition, content analysis is a coding process used to extrapolate and interpret text in order to operationalize information (Krippendorff, 1980). The above stated definition has been evolving through several disciplines and via multiple processes. Both communications and political science areas utilize content analysis to record the response of audiences in order to try and replicate past positive societal responses to a given event (i.e., Inauguration speech). In the early 1950s, an analysis matrix for political science was produced by Lowi in 1952. The matrix or Arenas of Power, placed policies into four distinct arenas; (a) Distributive policy, (b) Re-Distributive policy, (c) Regulatory policy, and (d) Constituent policy. Depending on which part of the policy cycle the researcher was analyzing, the corresponding matrix would allow the researcher to extrapolate information from the policy's content.

Coinciding with Lowi's Arenas of Power in the 1950s, a basis for how content analysis operated was created, by using a tedious method for counting specific words and identifying language (i.e., verbs and nouns) (Berelson, 1952). Categorizing the information gathered through Berelsons' method and "filtering" into models like Lowi's matrix served as a model to operationalize statutes and policy into working knowledge for political decision-makers.

Several factors continue to be utilized today in order to relate different information about each statute. Three actions, (a) audit communication content against objectives: (b) reflect cultural patterns of groups, institutions, or societies, and (c) describe trends in communication content are the foundations at which content analysis and policy capturing intersect. In the late 1960s, content analysis became a primary form of analysis, particularly in the communication fields. It began as a way to interpolate both written and verbal communication and transformed into alternate forms of identifying historical sociological patterns. Krippendorff (1980) identified four major factors encompassed by content analysis. Those factors are (a) theories of analysis, (b) problems of content data, (c) a methodology and (d) computer techniques. Each of the factors rely on messages between two parties in order to relay information accurately and effectively. Content analysis also created a way to track the evolution of the media realm, the political realm and the research realm. First uses of content analysis looked at Presidential inauguration speeches to determine how receptive a population of citizens would be if the President used the word "I" more than the word "We."

Content analysis is a predecessor of qualitative research. Even though the approach uses words, it only uses them in a quantitative measuring capacity. However, it begins to recognize the language. Grounded theory takes content analysis one step further by approaching the data from a strictly qualitative approach (Pandit, 1996).

Grounded Theory

Although the quantitative approach of policy capturing statistically captures the variables influencing the judicial opinion, it lacks the theoretical basis for understanding the meaning of the intended concepts. In grounded theory the word "grounded" refers to being grounded in the empirical world; theory is induced from the details of the actual "grounded experience" of the real world. The theories that result will be grounded in real-life patterns of experiences. Theory follows data rather than proceeding it, as in policy capturing. The patterns or the "theory" developed are discovered through a data analysis process called "constant comparison" or constant comparative analysis (Glaser & Strauss, 1967). The concept of "constant comparing" refers to the process that data are ordered into preliminary categories of codes; open or first level according to their conceptual context, and the second level coders are more abstract and organized then the first level codes. This is an inductive process that allows the researcher to discover patterns and theory from data (Creswell, 1994).

There are three basic elements of grounded theory; they are (a) concepts, (b) categories and (c) propositions. Concepts are the basic units of analysis since it is from conceptualization of data, not the actual data per se, that theory is developed (Pandit, 1996). Leaders in the field of grounded theory state:

> Theories can not be built with actual incidents or activities as observed or reported; that is from "raw data." The incidents, events, happenings are taken as, or analyzed as, potential individuals of a phenomenon, which are thereby given conceptual labels. If a respondent says to the researcher, "Each day I spread my activities over the morning, resting between shaving and bathing," then the research might label this phenomenon as "pacing." As the research encounters other incidents, and when after comparison to the first, they appear to resemble the same phenomena, then these too, can be labeled as "pacing." Only by comparing incidents and naming like phenomena with the same term can the theorist accumulate the basic unties for theory. (Strauss & Corbin, 1990, p. 7)

Strauss and Corbin (1990) define the second element of grounded theory through the re-organization of concepts into categories. These are higher in level and more abstract than the concepts they represent. Categories are generated through the same analytical process of making comparisons in order to highlight similarities and differences, not unlike what is used to produce lower level concepts. Categories are the "cornerstone" of developing theory. They provide the means by which the theory can be integrated. We can show how grouping concepts forms categories by continuing with the example presented above. In addition to the concept of "pacing," the analysis might generate the concepts of "self-medicating," "resting," and "watching one's diet." While coding, the analyst may note that, although these conditions are different in form, they seem to represent activities directed toward a similar process: keeping an illness under control. They could be grouped under a more abstract heading, the category: "Self strategies for controlling illness."

The third element of grounded theory is propositions, which indicate generalized relationships between a category and its concepts and between distinct categories. The third element was originally termed "hypotheses" by Glaser and Strauss (1967).

It is felt that the term "proposition" is more appropriate since, as Whetten (1989, p. 492) correctly points out, propositions involve conceptual relationships, whereas hypotheses require measured relationship. Since the grounded approach produces conceptual and not measured relationship, the former term is preferred.

The generation of and development of concepts, categories and propositions is an inductive, iterative process. Grounded theory is not generated a priori and then subsequently tested. Rather it is,

> ...inductively derived from the study of the cases it represents. That is, discovered, developed and provisionally verified through systematic data collection and analysis of data pertaining to tat phenomenon. Therefore, data collection, analysis and theory should stand in reciprocal relationship with each other. One does not begin with the other, then prove it. After, one begins with an area of study and what is relevant to that area is allowed to emerge. (Strauss & Cobin, 1990, p7).

As with policy capturing the business world uses research based in grounded theory. Pandit (1996) used it to generate a theoretical framework of corporate turnaround. The health field uses it to accurately describe phenomenon such as pain or feelings.

The application of grounded theory is incorporated into the study to explore the opinions of the decision-makers and the judges. Because it is law, these decision-makers and judges hold the "groundedness" of the nation's perceptions not only toward students with disabilities, but also toward academic professionals. The decision-makers' and judges' identified actions and processes are especially important for people at postsecondary institutions in proceduralizing their policy process. Higher education institutions proceduralize their policies by what the Federal courts decide regarding past precedent cases. In turn, the opinions and rulings from decision-makers and judges dictate what higher education personnel do on a daily basis.

Grounded theory offers an approximation of the judges' and decision-makers' creative activity of theory-building found in good observational work, compared to the dire abstracted empiricism present in the most wooden statistical studies (Silverman, 1993).

Utilization of both policy capturing and grounded theory allows a researcher to forge a different path by combining the best of both quantitative and qualitative design. A foundation for a qualitative examination of decision-makers and judicial opinion interpretation of historical events will provide guidance for the methodology chapter.

Both policy capturing and grounded theory analyses can be used to operationalize not only Supreme Court decisions, but also specific terms such as 'reasonable accommodation' in the higher education system. Cases that were described in the Precedent Cases section of this chapter, set the stage for an analysis of preceding litigation and how the judges' opinions examine incremental pieces of Section 504. The cases prior to 1990 and their associated rulings result directly in the implementation of postsecondary policies. Researchers use both policy capturing and grounded theory in conjunction with one another to decipher litigation in order to incorporate policy at higher education campuses. Looking at recent court proceedings related to the Rehabilitation Act-Section 504 and the Americans with Disabilities Act enables researchers to interpret the laws and essentially can provide equity for students with disabilities. Analyses of recent cases begin the operational study for this paper in order to operationally define "reasonable accommodation" within the higher education academic sector.

Summary

Throughout the current research, studies show a steady trend towards students with disabilities accessing higher education institutions at an increasing rate. In response to disability policies, postsecondary professionals continue to try and stay abreast of requirements mandated by Federal laws. The research shows faculty, administrators, and support service staff have a high awareness of the different learning styles of their students with or without disabilities.

However, the research lacks the specificity of what to do with the awareness, primarily around providing students with disabilities a "reasonable accommodation." Regardless of the disability label or the percent of students with particular labels, students and professionals do not understand what "reasonable accommodation" is, nor do the students interpret what a "reasonable accommodation" means for them in order to succeed in higher education. At the secondary level of education, teachers, counselors and parents are the primary "experts" around accommodating their students or child's needs. Yet, the roles are reversed in the postsecondary setting. The student is required by law to be the "accommodation" advocate and in turn, must relay the information to the university, examiners or professional testing professionals. The laws do not specify that what is "reasonable" in a secondary setting is also logically "reasonable" in a postsecondary setting. The gap between not only the applicable laws in secondary and postsecondary, but also the students with disabilities and the professional's role widens with each judicial interpretation of the term "reasonable accommodation." After reviewing the literature, it becomes clear that both students with disabilities and postsecondary personnel alike have little operational or day to day knowledge of the term "reasonable accommodation."

Research methods used in other disciplines such as policy capturing need to cross over to the disability policy researchers' repertoire in order to fill research gaps created by past interpretations of the reasonableness of an accommodation.

The above discussion is merely a starting point to begin a study to operationalize "reasonable accommodation" in the higher education realm. The methods cited in the previous paragraphs explain the qualitative approach of policy capturing and move into a quasi-quantitative/qualitative approach of content analysis and finally into a purely qualitative approach of grounded theory. Each research approach tries to interpret factors, which influence decision-makers' or judges' opinions of complaints or cases filed under the Rehabilitation Act and/or Americans with Disabilities Act. The two research approaches being utilized in this study are policy capturing and grounded theory.

As cited previously, both approaches capture a needed element to operationalize a process standard, which can be used by higher education professionals and students, to request and implement a "reasonable accommodation." The intent is to provide a synthesized process of past cases, which focused and interpreted the term "reasonable accommodation." Thereby allowing the higher education institution and the student, current knowledge of a process to determine if the student requested a "reasonable accommodation." Thus, the request is made prior to circumstances leading to an Office for Civil Rights complaint, or a possible lawsuit.

The Supreme Court continues to use past decisions to interpolate the definition gaps of the Rehabilitation Act and the Americans with Disabilities Act. The use of policy capturing coupled with grounded theory can assist higher education faculty to understand and operationalize Federal definitions into their daily practices. Kincaid (1997) states the main intent of discerning information from past litigation is to prevent future litigation. Supporting Kincaids' theory of operationalizing judicial opinions from past lawsuits are the works done in policy capturing. The utilization of policy capturing is to provide training to future human resource professionals attempting to practice fair hiring procedures (Roehling, 1993).

Without an analysis of interpretations of the law, both the business and academic world risk the error of mis-interpretation and pending litigation. Chapter III describes the methodology used in both the qualitative and quantitative approaches to answer how to operationalize the term "reasonable accommodation" in postsecondary settings.

CHAPTER III

Methods

This study was conducted by using a mixed method approach and a separate analysis of the data through quantitative and qualitative techniques for the purposes of operationalizing the term "reasonable accommodation" in higher education. Using separate strategies allowed for the quantitative data to be supplemented by the qualitative data, which otherwise would have been neglected in a strictly quantitative approach. In this study the quantitative results were used to choose the cases in the qualitative data. The results from the qualitative study were used subsequently to illustrate and enhance the quantitative findings (Creswell, 1990). Specifically, the quantitative research addresses the hypothesis that [H1] a[n] IHE/examination agency /professional board can predict a verdict in their favor if they provide any type of "reasonable accommodation" to students with disabilities.

Separately, the qualitative approach to the research data explores Federal cases, where the university was cited for denying a student's request for a "reasonable accommodation." To create a grounded theory, the posed questions to be analyzed were:

1. How the words "reasonable accommodation" are interpreted through Federal Court judicial opinions, and
2. What is the current process to determine which factors contribute to whether a student is able to receive a requested "reasonable accommodation"?

Research Approach

The following chapter describes how the cases were selected for the study, the sample selection and an in depth description of the research approaches used to analyze the data.

Both quantitative and qualitative paradigms are used to explore factors in the laws relating to "reasonable accommodation" as thoroughly as possible. The quantitative research will focus on what factor or factors influence court decisions involving "reasonable accommodation." The qualitative research fills in the gaps of the quantitative research, by providing a grounded theory model about the meaning and interpretation of the language used during judicial summations.

The organization of the chapter begins with the selection of cases and the sample description. Both the selection of cases and the case descriptions are used in the quantitative and qualitative research. The description of the quantitative research is divided into the following primary sections: (a) Instrument, (b) Measures (c) Data Collection Analysis, and (d) Design and Data Analysis. The qualitative research follows this format: (a) Instrument, (b) Methodology, (c) Procedure, and (d) Design and Data Analysis.

Selection of Cases

Summaries of written judicial opinions in Supreme Court, Federal District Court, or Office for Civil Rights compliant cases involving an allegation of discrimination based on a student's disability and resulting in a student being denied a reasonable accommodation in higher education are the data for this study. Case selection is based on a goal of maximizing the sample, while maintaining the integrity and quality of the case. The primary method for locating cases was done by accessing all cases filed in Federal Court from 1990 to 1999 listed on the LEXIS/NEXIS electronic database. The secondary method for locating cases was based on regional complaints filed with the Office for Civil Rights that asserted a violation of the Rehabilitation Act and/or the Americans with Disabilities Act regarding a denial of a "reasonable accommodation."

The cases from the Office for Civil Rights were identified through reputable and expert Juris Doctorates, Kincaid and Heyward, as pertinent complaints. Both Kincaid and Heyward are experienced higher education lawyers for individuals with disabilities; as well as being the foremost published authors on disability law in postsecondary settings.

Cases and complaints were included in the sample only if they met the following set of criteria:

1. First, the claim was filed under Section 504 of the Rehabilitation Act and / or under the Americans with Disabilities Act.
2. Second, the primary basis of the case was a decision made by one of the following postsecondary settings, (a) a university or college, (b) an educational testing service for higher education, or (c) a certified board examiner, to deny a student's request for a "reasonable accommodation," which resulted in a charge of discrimination toward the student with a disability.
3. Third, the plaintiffs in each case or complaint were students with disabilities and the defendants were one of the following higher education institutions (a) a university or college, (b) an educational testing service for higher education, or (c) a certified board examiner. In addition adequate information about the students and their respective institution provided by the case was included in the opinions or findings.
4. Fourth, cases in the sample had to be tried in the Federal District Court system or investigated through the Office of Civil Rights. Cases tried at the Federal level are assumed to be of broader interest and applicability than those tried in state courts. Although cases are often appealed and district court rulings are sometimes reversed, the decision of the district court is of greater interest in this study because the district courts hear actual evidence and evaluate that evidence with respect to the complaint. Thus, the District Court's focus, like this study's, rests on the facts of the case, whereas state courts tend to examine mostly procedural or legal issues.

   Complaints filed with the Office for Civil Rights also were linked with the Federal Court interpretation of the laws. But these cases were rejected if the findings cited State precedence over or in lieu of Federal Court decisions. In other words, some cases were rejected for this study if the OCR decision-maker cited State requirements.

5. Fifth, cases and complaints had to result in a verdict, for either the plaintiff or the defendant, on a substantive disability discrimination issue. Cases or complaints that were decided on procedural grounds were not included. For example, a case tried in a Federal Court can be remanded for insufficient findings or decided in favor of both the plaintiff and the defendant. Also, a judge may be asked to grant a temporary injunction for a plaintiff, without hearing complete information surrounding the suit. In both situations, cases are decided by the trier of fact strictly on procedural grounds and not necessarily on facts of an alleged denial of a "reasonable accommodation."

Quantitative Study

Sample

For the quantitative approach in this study a purposeful sample of 83 cases was selected involving alleged violations of Section 504 of the Rehabilitation Act or the Americans with Disabilities Act, specific to a denied request for a "reasonable accommodation" in one of the following (a) a university or college, (b) an educational testing service for higher education, or (c) a certified board examiner. The division of the cases is as follows:

Table 3

Quantitative level of cases.

Level of Cases	Number of Cases
Supreme Court	3
Federal District Court	20
Office of Civil Rights	60

The sample frame for this study is composed of all cases from 1990 through 1999 meeting the previous outlined criteria and are listed in Appendix A. Data collection activities occurred from 1998 through 2000. Common language identified with Federal Courts and Offices for Civil Rights is described in the following paragraphs.

The word "case" is unilaterally used to describe both a case tried in a Federal Court and a complaint investigated by the Office for Civil Rights. The purpose of each type of case, whether its path ventured through the Federal Courts or through the Office for Civil Rights, is to determine whether or not there is sufficient evidence to support the plaintiff's claim. In Federal cases, the trier of fact will describe his/her findings through judicial opinions and can consequently mandate damages to either party. An order to comply is also mandated by the trier of fact upon which a plaintiff or defendant can appeal.

The Office for Civil Rights (OCR) conducts the same type of investigation as the lawyers present at the Federal Court level. The OCR official then determines by standards set in Federal legislation if the plaintiff has sufficient evidence proving a violation or act of discrimination by the defendant. If sufficient evidence is found, OCR orders a Commitment for Resolution from the defendant and mandates compliance. A Letter of Commitment or a Commitment to Resolve is sent to OCR based on the OCR officials' investigation findings. If the defendant does not comply with OCR's ruling, then the plaintiff can still appeal by filing another OCR complaint or a State or Federal suit. Access to all OCR cases in this study, was achieved through sending multiple Freedom of Information Act (F.O.I.A.) requests to the appropriate regional office. The format for the F.O.I.A. request is provided in Appendix B. The F.O.I.A. officers from each region researched and located the identified case, redacted names as ordered and mailed the a copy of the findings to the author. Using Federal cases and OCR complaints decided before 1990 to pilot and adjust an existing coding template, the following instrument was designed to code both types of cases.

Instrument design

Policy capturing utilizes a coding sheet for the instrument to calculate the factor frequency used within a judicial opinion. The instrument used for the quantitative analysis was adapted from a previous coding system utilized in Industrial and Organizational Psychology (Thornton & Wingate, 1999).

There were many changes due to the different nature of the cases being reviewed. The number of the questions was reduced from 45 to 33 and the wording of the remaining questions were altered due to the information contained in the pilot court and complaint opinions regarding disability cases. The instrument was different from Thornton and Wingates' (1999) coding because it addressed cases and complaints alleging violations of Section 504 of the Rehabilitation Act and the Americans with Disabilities Act regulations.

Instrument pilot. In replication of Thornton and Wingates' (1999) study to predict factors, which result in work force reduction discrimination, their coding system was piloted and adjusted by simultaneously analyzing and coding two cases, as well as several OCR complaints. The two cases used for the pilot coding template were Southeastern v. Davis (1979) and Camenish v. University of Texas Et. Al. (1983). Both cases and several OCR complaints from California were piloted and used to amend the coding system from Thornton and Wingates' age discrimination study. This process resulted in a final coding format reviewed by Dr. Thornton to substantiate validity. The coding sheet began with 45 independent variables and through coding the pilot cases the final coding format contained 33 independent variables.

Thornton and Wingates' format was originally created by a number of different coding form drafts. The testing approach they used was through a two-phase process and included about fifty cases. Phase 1 was a review of the formatted coding sheet that they did themselves. Phase 2 was having a class of approximately fifteen doctoral student's use coding sheets as practice or training purposes. The final form arrived by incorporating input from the multiple coders and multiple formats. The coding format used in the final cases included in their study sample, resulted from two other students and Wingate coding all 117 cases that met the criteria for inclusion. Wingate then personally reviewed all 117 forms as a final check for errors, questions, or possible differing interpretations; as well as interrater agreement.

The other coders were asked to indicate on the coding sheet any unclear items on the form for a particular case. This called attention to items on the coding form that were confusing and possibly could not by replicated or on which they would not agree. The process established reliability for the existing code template though interrater agreement and produced consistency throughout the series of coding.

For the purposes of this study, content validity was established by adapting Thornton and Wingates' existing coding format. The researcher used the original coding template and altered the content for coding cases alleging disability discrimination. The content of the instrument was adapted to represent the concept it is attempting to measure, which in the current study is disability discrimination and denial of a "reasonable accommodation." The adapted coding template was piloted on several cases and complaints that were not included in the final sample. The pilot process showed which items on the coding form were ambiguous or needed further work in order to describe the actual code. Dr. Thornton also reviewed the coding sheet for this study and provided guidance towards its final format. The draft coding format is in Appendix C, the line by line changes are included in Appendix D and the final coding format for this study is in Appendix E.

Both dependent and independent variables are part of the coding format. Each type of variable is described below.

Dependent variables. There is one primary dependent variable in this study. The primary dependant variable is the verdict or resulting opinion of the court or the Office for Civil Rights. The verdict is a dichotomous criterion based on rulings in favor of the plaintiff or defendant. Although rulings or findings result in numerous issues to be decided, the ultimate outcome has been collapsed into a decision for the plaintiff or defendant.

There are three secondary dependant variables in this study. The three secondary dependant variables are the factors that must be proven prior to the deciding verdict and are independent from the final verdict.

The first secondary dependant variable is if the plaintiff established a prima facie case. The second secondary dependant variable is if the plaintiff established they were a member of a protected class and otherwise qualified. The third secondary dependant variable is if the defendant satisfied the burden to prove it denied an accommodation in a non-discriminatory manner.

The three secondary dependent variables have been identified as items, which must be proven to the trier of fact prior to a ruling for a plaintiff or defendant. The Office of Civil Rights also had to determine sufficient evidence was available to determine these three items. In order to prove discrimination based on a disability, a prime facie case must be proved to trier of fact. The following table outlines the Federal requirement attributed to the plaintiff. The plaintiff must prove the following in order to suffice a prima facie case:

Table 4

Steps to prove a prima facie case.

Step	Requirement	Number of the Secondary Dependent Variable	Question number on the Coding Sheet
Step 1	Proof of a disability under the Federal law.	2	27
Step 2	Proof the plaintiff is otherwise qualified and membership in a protected class.	3	28

The third secondary dependent variable is attributed to the defendant. If the defendant showed sufficient evidence to warrant a denial of a "reasonable accommodation" in a non-discriminatory manner, then the trier of fact would rule based on the evidence in this variable.

Table 5

Defendant requirements.

Step	Requirement	Number of the Secondary Dependent Variable	Question number on the Coding Sheet
Step 3	Defendant cited sufficient evidence to deny "reasonable accommodation."	4	29

Each of the three listed variables must be proven prior to the final verdict and each constitute a dependent variable. The following breaks down the variable information in the following format: name of variable, type of variable, definition of variable and numeric code for variable.

Verdict: is a dichotomous categorical criterion measure and the primary dependent variable. The outcome of each case was examined and if the verdict is in favor of the plaintiff, it is coded as "1." If the verdict is in favor of the defendant then it is coded as "2." Also, an account of the summaries and type of damages awarded will be collected.

Prima facie case: is a dichotomous categorical criterion measure and a secondary dependent variable. The outcome of each case will be examined and if the trier of fact rules there is sufficient evidence to prove a case, it is coded as a "1." If the trier of fact rules there is insufficient evidence to prove a prime facie case, it is coded as a "2."

Elements of prima facie case: is a dichotomous categorical criterion measure composed of two separate and distinct measures, as well as a secondary dependent variable. First, the plaintiff must prove membership in a protected class and then second, must prove s/he is "otherwise qualified."

In both instances, the outcome of each case will be examined and if the trier of fact rules there is sufficient evidence to prove membership in a protected class and then separately if the plaintiff is "otherwise qualified," it is coded as a "1." If the trier of fact rules there is insufficient evidence to prove membership in a protected class and separately if the plaintiff is "otherwise qualified," it is coded as a "2."

Non-discrimination claim: is a dichotomous categorical criterion measure and a secondary dependent variable. The outcome of each case will be examined and if the trier of fact rules there is sufficient evidence to rule the defendant proved their action of denying a "reasonable accommodation" was non-discriminatory, then the decision will be coded as a "1." If the trier of fact rules there is insufficient evidence to rule the defendant proved their action of denying a "reasonable accommodation" was non-discriminatory, then the decision will be coded as a "2."

Independent variables. Virtually every other piece of information on the coding form is an independent variable, because each is related to the verdict as either predictors or control variables. There are five subsets of independent variables and are described below.

Court Information: is an independent predictor variable and is categorical data. This variable was coded based on the location of the court and by the judge trier of fact. If the case has been investigated through the Office for Civil Rights, then the region where the complaint originated was coded; as well as, coding the Freedom of Information Act, F.O.I.A. officer who investigated the compliant.

Plaintiff Characteristics: describes several independent predictor variables and are categorical data. The characteristics was coded on gender, schooling level completed and type of disability.

Defendant (Institution) Characteristics: describes several independent predictor variables and are categorical data. The characteristics of the higher education institution was coded on the number of students, number of years offered by the school, and if it is private or public.

Institution's procedure of Federal policy: describes several independent predictor variables and are categorical data. The procedure was coded under prior action to accommodate, exact section under which the lawsuit was filed, disability policy of the institution, personnel accommodating, self-accommodation, assessments used, scholastic performance and continual accommodation.

Disparate Treatment Claim: is an independent predictor variable and is categorical data. The claim was coded if the plaintiff established a prima facie or disability case under the guise of the law or if the institution presented a legitimate reason for not accommodating the student.

Data Collection Procedure

All data were collected from the LEXIS/NEXIS database to ensure consistency of measures. Similarly, the author also obtained the data collected from the Office for Civil Rights as described in the Sample section. Both the dependent and the independent variables were tested for variability by the chi-square test for independence. The chi-square test for independence tests the association between two variables, an independent variable and a dependent variable, to show where a significant relationship exists between the two variables. The chi-square analyses produced which variables to be used as the independent variables and would have significant variability to regress against the identified dependant variable. The independent variables that did not produce a sufficient difference are utilized as descriptive data in conjunction with the qualitative findings.

Design and Data Analysis

The purpose of this study is to determine what quantitatively predicts a verdict in favor of a student with disabilities or a higher education entity. Most recent policy capturing studies have employed logistic regression in trying to explain judicial decisions.

The policy capturing coded information lent itself to logistic regression, where multiple independent variables are used to predict or explain a single dichotomous dependent variable.

By definition, logistic regression is used to predict a categorical criterion variable from a combination of several independent variables (Gliner, & Morgan, 1998). Although there are primary and secondary dependant variables, each one is regressed as a single dichotomous dependent variable. Also, a variety of descriptive statistics and possible simple comparisons were used to supplement the logistic information.

A chi-square analysis showed which independent variables were related to each dependant variables. A logistic regression approach determines the best linear combination of variables to predict the dependent (dichotomous) variable. The number and type (nominal/categorical predictor variable, continuous/interval predictor variable) of variables and relationships that were examined dictated to some extent what tests or statistic was used.

The following table describes the relationship between the hypotheses and the primary and secondary dependent variables. The secondary dependent variables are included as hypothesis statements in the event the primary dependent variable proves to have no variability.

Table 6

Research hypothesis for primary dependant variable and associated statistical procedure.

Hypothesis	Code Question	Variables	Statistical test
H1a: What independent variables are related to the verdict?	#31	IV=significant variables from Q8 – Q30. DV=Proving a disability discrimination case.	Chi-square
H1: A university can predict a verdict in favor for themselves, if they provide any type of "reasonable accommodation" to students with disabilities?	#31	IV=Factors significant from Chi-Square analysis. DV=Judicial verdict.	Logistic Regression

Note: IV = Independent variables and DV = Dependent variables.

As shown in Table 6, a chi-square analysis was conducted to identify significant independent variables related to a final verdict.

After deciding which independent variables were related to each dependant variable, then the logistic regression tested to see which of the independent variables were best in predicting the primary dependent variable. If the primary dependent variable resulted in low variability, then the secondary dependent variable and it's associated hypothesis was analyzed as shown in Table 7.

Table 7

Hypotheses for secondary dependant variables and associated statistical procedure.

Hypotheses	Code Question	Variables	Statistical test
H2a: What independent variables are related to proving a prima facie case?	#27	IV=significant variables from Q8 – Q30. DV=Proving a prima facie/disability case.	Chi-square
H2: What statistically significant independent variables are best in predicting proving a prima facie case?	#27	IV=siginificant variables from Q8 – Q30. DV=Proving a prima facie case.	Logistic Regression
H3b: What independent variables are related to a plaintiff proving s/he is otherwise qualified and a member of a protected class?	#28	IV=significant variables from Q8 – Q30. DV=Proving otherwise qualified and a member of a protected class.	Chi-square
H3: What statistically significant independent variables are best in predicting a plaintiff proves s/he is otherwise qualified and a member of a protected class?	#28	IV=siginificant variables from Q8 – Q30. DV=Proving otherwise qualified and member of a protected class.	Logistic Regression
H4c: What independent variables are related to proving a non-discriminatory case?	#29	IV=significant variables from Q8 – Q30. DV=Proving a non-discriminatory case.	Chi-square
H4: What statistically significant independent variables are best in predicting a non-discriminatory case?	#29	IV=siginificant variables from Q8 – Q30. DV=Proving a non-discriminatory case.	Logistic Regression

Table 7 also depicts the procedure used in the study. A chi-square analysis was conducted to identify significant independent variables related to each of the three possible secondary dependent variables.

After deciding which independent variables were related to each secondary dependant variables, then the logistic regression tested to see which of the independent variables were best in predicting the secondary dependent variables.

Qualitative Study

A qualitative component accompanied the quantitative research for this study. By using qualitative techniques, the researcher was able to present judicial opinions, plaintiffs and defendant quotes showing the variety and uniqueness of students with disabilities in higher education, similar to Sample (1997). The qualitative research essentially broadens the understanding of the quantitative findings. The qualitative data show the added language attached to the process when interpreting "reasonable accommodation." The data included in the text of judicial opinions uses variables centered on actual practices of higher education institutions. Subsequently the judicial opinions probe the determining factors proved by the court decision. Qualitative theories resulted from a grounded theory approach and are a foundation for further studies.

Sample

The selection of cases for "reasonable accommodation" interpretation were purposeful and targeted Federal cases specific to a postsecondary entity denying a student an accommodation. An exploratory and chronological set of case information was constructed for the purpose of grounded theory arriving at the "theory of reasonable accommodation."

For the qualitative approach in this study a purposeful sample of eight cases were selected from the 83 cases used in the quantitative analysis. The cases included in this sample also involved alleged violations of Section 504 or the Americans with Disabilities Act, specific to a denied request for a "reasonable accommodation" in a higher education institution.

Each of the eight cases was tried at the Federal District Court level or higher. The actual judicial opinions at the date of deciding were utilized for this sample.

Chronological order was based on when the case was filed and when and if its last motion had decided the case. The order was critical in determining precedence and processes outlined in past judicial opinions.

The sample frame for these cases is from 1990 through 1999. Data collection activities occurred from 1998 through 2000. Office for Civil Rights complaints are not included in this sample, strictly because the bulk of information from judicial opinions are inclusive of Federal preceedings influencing the process of determining a "reasonable accommodation." Table 8 outlines the court cases and the date decided.

Table 8

Qualitative sample.

Case name	Date decided	Verdict
Wynne v. *Tufts University School of Medicine	October 6, 1992	In favor of defendant.
Ohio Civil Rights v. *Case Western Reserve University	December 22, 1994	In favor of defendant.
Maczaczyj vs.*State of New York and Empire State College	February 21, 1997	In favor of defendant.
Smith vs. *University of the State of New York et.al.	December 30, 1997	In favor of defendant.
Pell vs. *The Trustees of Columbia University et.al.	January 15, 1998	In favor of defendant.
Guckenberger vs.*Boston University et. Al.	May 29, 1998	In favor of defendant.
Bartlett v. *New York State Board of Law Examiners	September 14, 1998	In favor of plaintiff.
Zuckle v. *The Regents of the University of California	February 23, 1999	In favor of defendant.

Note: *Denotes IHE, examination agency, or professional board and are subject to laws applicable in the Rehabilitation Act of 1973 and the Americans with Disabilities Act 1990.

Appendix F contains the descriptions of each case by the date they were decided, the case name and a synopsis of the case taken directly from the judges' opinions court text.

Instrument

The qualitative data were collected using the LEXIS/NEXIS electronic database and research from an expert Juris Doctorate, Jeanne Kincaid. The judicial opinions of the selected cases were examined for their citations of "reasonable accommodation."

The author in the present study served as the primary instrument through the data collection process (Patton, 1990, Banning, 1999, Sample, 1997). Biases she possessed as she designed and implemented both the quantitative and qualitative studies must therefore be considered. The author has been a professional working with individuals with disabilities in the employment arena for eight years and had evaluated the Colorado Community College Occupation Educational Services (CCCOES), Supplemental Service departments for her master's thesis. Her concern as she approached this study was to determine if any of the cases used through Supplemental Services seemed to be particularly effective in helping students with disabilities receive accommodations at the higher education level. She had no preconceived proposition concerning which group, student's with disabilities or IHE/examination agency/professional board's, had been ruled for or against in a Federal Court. Qualitative research is based upon identifying the researchers' biases and understanding "up front" what potential conflicts exists. Through the coding process, the author identified her biases as being (a) students with disabilities should have access to all environments, including all academic programs regardless of professional perceptions to preclude certain students based on their disability and (b) changes incurred as a result of implementing an accommodation for one student essentially benefit all of education. Although the researcher wanted to see positive outcomes for students with disabilities, she kept the qualitative coding focussed on an emergent trend.

Methodology

The use of qualitative coding, as opposed to quantitative analysis, is essential in order to capture the meaning of words, not just the number of the words.

Weber (1990) continues to press the validity and reliability of current research by asserting that the best analysis utilizes both qualitative and quantitative operations on texts and compares multiple techniques that achieve this result. A derivative approach of content analysis can yield an analysis that is an unobtrusive measure, by which neither the sender or the receiver knows the context is being analyzed. The main thrust behind content analysis is the use of the meaning of words and the researcher's interpretation of words. Identifying how the process is reliable and valid allows for analyzing multiple court cases which set the operational definitions and standards for higher education institutions.

Reliability. Content analysis relies heavily on a three-pronged method to ensure reliability (Krippendorff, 1980). The triad of soundness lies within stability, reproducibility and accuracy of the content analysis. First, stability refers to the extent to which the results of content classification are invariant over time. Second, reproducibility refers to intercoder reliability and the extent to which two coders code the text data the same. Lastly, accuracy refers to the extent to which the classification of text corresponds to a standard. The study adhered to each of the aforementioned definitions and allowed the grounded theory to be as rigorous as a quantitative study.

This study used methodological triangulation in order to maintain reliability within the grounded theory analysis. Methodological triangulation is the use of multiple methods to study a single problem or program (Patton, 1990). In addition to designing a mixed method study, triangulation was also achieved by coding two pilot cases not included in the sample.

The two selected cases to be piloted were cases meeting the identified criteria for Federal cases but were decided prior to 1990 and therefore could not be selected for this study. Southeastern v. Davis (1979) and Camenish v. University of Texas Et Al. (1983) were piloted by two independent researches to establish the open codes or first level codes. The researcher and Dr. Timothy G. Davies both coded the judicial opinions in the two cases to determine the reliability of the researcher's open coding analysis.

The codes produced by the two researchers were substantiated by each other and then the cases were coded in chronological order. The chronology of the cases was essential to provide understanding of cases setting precedent for cases tried after standards were set.

Validity. Validity provides an answer to the question of, "How generalizable are the results?" The means of providing a generalizable study is contained in the study's triangulation methods. As with other testing for validity, by checking the face, construct, or content validity, grounded theory also utilizes additional forms of validity by experimenting with the "semantics" of a study. Analyzing words, such as "mine," the researcher can identify if this word indicates a hole in the ground or a possessive pronoun. Added validity and reliability was achieved by triangulation. By utilizing a mixed method approach, the use of both quantitative and qualitative data, provides for higher reliability validity. The data in the quantitative analysis can be compared with the data in the qualitative analysis, in order to substantiate the findings by either approach.

For this study the qualitative data will be collected using informal semi-structured derivative form of content analysis called grounded theory. Through the use of case summation reviews, the judicial opinions are coded based on an emergent theory technique. The data management software for each legal transcription will be coded utilizing HyperResearch©.

Procedure

The cases selected for the study were coded based on content, not on quantifiable words. The legal transcriptions retain the actual plaintiff and defendant word choices; therefore, they will be the primary source for coding the text.

Using the judges' opinions the data were entered into HyperResearch© and were prepared for the first level of coding. The open coding or first level coding produced concepts to be utilized during the second level coding process (Creswell, 1994). The second level or axial coding produces categories and the third level or selective coding produces theories and or processes. HyperResearch© software enables the researcher to sort all text segments that relate to a specific category or theme and allowed the text of multiple cases to be cross-referenced during each coding level.

Design and Data Analysis

The author coded the eight judicial opinions. Coding of the case information took place in several levels: formatting of transcription for analysis using the HyperResearch© software program for the coding, multiple level coding of emergent themes and categories, and coding using the emergent alliances (Creswell, 1994; Patton, 1990). The data was analyzed to render an operational definition of reasonable accommodation based on similarities and differences between each case. The grounded theory approach to the data allows the researcher the capability to have a "process" of interpreting what a "reasonable accommodation" is and how to utilize the definitional process in higher education.

The grounded theory approach for this study also incorporated knowledge of the summative research approach and the legislative monitoring approach (Patton, 1990). These two approaches contributed to the organizational development of the study. The primary purpose of a summative approach is to determine a program or policy's effectiveness. Understanding the summative approach only bolsters the information coded through grounded theory. Therefore, the use of actual judicial opinions to provide the basis of a comparative qualitative study is essential for this inquiry. Patton (1990) defines the process as:

> The ideal-actual comparison is an organizational development process for improving effectiveness. It also helps move toward a reasonably realistic depiction of the programs that can be put to a summative test, that is, one can study the extent to which the model actually does what it its supposed to do. But such a study can only take place when the model has been described in realistic terms. Qualitative inquiry can be used to achieve that description. (p. 108)

Patton (1990) also states if the nature of the distribution system is not understood, then the conceptualization of legislative intent does not easily lend itself to quantitative analysis. In order to monitor the complexities of the program's or policies implementation, it can be helpful to decision-makers to have detailed case descriptions of how policies are operating (Marshall & Rossman, 1995).

The following figure outlines the steps taken to begin the foundation for a grounded theory analysis of an operational definition for "reasonable accommodation."

1. Each judicial opinion is formatted into a text file and prepared for HyperResearch©.
2. Each case then was coded using the "open coding" method (Creswell, 1994). The definition of "open coding" or Level I coding is the process of taking the actual text and producing concepts (codes) that fit the data (Strauss, 1987). Close attention was paid to data that could generate concepts, which relate to the process, conditions, interactions among plaintiffs and defendants, strategies and tactics, and rulings in regards to "reasonable accommodations."

3. Each of the concepts generated by open codes was then examined to find relationships. By grouping the concepts, the data is elevated through inductive reasoning and the open codes begin to appear on more abstract levels. The abstract levels are then identified as categories through "axial coding" or Level II codes (Hutchinson, 1988).

4. The categories and relationships produced by the "axial coding" or Level II were analyzed across all eight cases and paramount classification processes were identified for the purpose of finding the major construct or themes. The constructs or themes are identified as "selective coding" or Level III. Level III coding allowed the data to relate to the major research questions or propositions of the study.

The aforementioned steps guide the research through a constant comparative method (Hutchinson, 1988). The method allows the researcher to constantly compare concepts with concepts and processes with processes to produce the similarities and differences that can lead to an understanding of the data (Creswell, 1994).

CHAPTER IV

Results/Findings

Quantitative Study

For this study 83 cases were coded by policy capturing data analysis methods described in Chapters II and III. Not all areas listed on the policy capturing coding sheets were present in the analyzed cases; therefore, terms not found were coded as "unknown." Some items in the cases could not be coded at all because they did not specifically address the question and were omitted from the total sample for that question and classified as "missing cases." The final number of cases analyzed for the study was 77. Six cases were unable to be categorized by a judgement in favor of the plaintiff or in favor of the defendant. The reasons for the non-categorization was due to the decision maker either splitting the verdict, remanding the case for further investigation or dismissing the case in its entirety. The analysis of the data collected through policy capturing follows these steps: (1) descriptive statistics, (2) chi-square analysis and (3) logistic regression. Specifically, the method followed these steps:

(1) Descriptive statistics were generated through frequencies by analyzing 23 independent variables against one primary dependent variables and three secondary dependent variables;

(2) Inferential statistics were generated by checking X^2 to find dependent variables which contained significant variability for the one primary dependent variable (a) final verdict, and three secondary dependent variables (b) prima facie case, (c) otherwise qualified and member of protected class and (d) non-discriminatory action;

(2a) The secondary dependent variable (c) otherwise qualified and member of a protected class was precluded from further analysis based on legal requirements.

Simply, if a plaintiff proved s/he is an otherwise qualified individual and a member of protected class, then s/he has proven all prongs of a prima facie/disability case. Specifically, an individual must prove s/he has a disability in order to prove the are otherwise qualified and a member of a protected class. Therefore, analysis on proving a prima facie case encompasses the analysis of an individual proving s/he was otherwise qualified and a member of a protected class.

(3) Inferential statistics were generated by checking X^2 to find independent variables which related to the (a) final verdict, the primary dependent variable, (b) prima facie case, a secondary dependent variable and (d) non-discriminatory action, a secondary dependent variable;

(4) Inferential statistics were further analyzed based on the statistical analysis from the chi-square test. A logistic regression for dependent variables (a) and (b), but not (d), was run. The primary dependent variable, the final verdict, directly addresses the first hypothesis (H1). The secondary dependent varialbe, proving a prima facie case, directly addresses the second hypothesis (H2) and inherently the third hypothesis (H3). The four hypothesis (H4) was related to proving a non-dicriminatory case and was determined insignificant after analyzing the chi-square results.

Descriptive Statistics

The descriptive statistics for the quantitative sample are found in Table 9. As shown in Table 8 most plaintiffs were classified as learning disabled (44.4%) and the gender of the plaintiffs was about equally split. The majority of institutions being sued were four-year colleges.

Table 9

Quantitative case sample demographics.

N=number coded	Number	Frequency	Descriptions
Plaintiff gender:	36	44.4%	Female
N=81	41	50.6%	Male
	4	4.9%	Unidentified
Level of current education:	41	60%	Undergraduate
N=83	21	26.3%	Graduate
	11	13.8%	Professional (Bar exam. MCAT)
EEOC Type of disability:	37	44.6%	Learning Disability
N=83			
	6	7.2%	Blind / Visually Impaired
	12	14.5%	Mental Health Impairments
	7	8.4%	Deaf / Hearing Impaired
	9	10.8%	Physical / Mobility Impaired
	4	4.8%	Perceived Disabled
	8	9.6%	Other
Type of institution:	5	2.9%	2 yr. college
N=81	47	58.0%	4 yr. college
	25	30.9%	Professional exam/board
	4	4.9%	Unknown

The next analysis was to calculate the responses for the dependent variable. The number of each response was summed and a percent was calculated. The first calculation determined the variability in the dependent variable(s).

The primary dependent variable selected was the case verdict. In other words, did the judge rule in favor of the plaintiff or the defendant. However, basic descriptive analysis resulted in low variability. As shown in Table 10 most cases ended in a judgment for the defendant (IHE, examination agency or professional board).

Table 10

Verdict variability.

	Judgment in favor of the	
	Defendant	**Plaintiff**
Actual number:	55	22
Percent:	71.4%	28.6%

Note: N=77

The variability between the judge ruling in favor of the plaintiff (22) and the judge ruling in favor of the defendant (55) was relatively low. When a dependant variable contains low to no variability, the likelihood of finding a predicting independent variable is high, because regardless of a variable the chance that the verdict is in favor of the defendant is also high. In this study, the odds of finding an independent variable which predicts the outcome of a case or complaint is fairly certain due to the high number of cases ruling in favor of the defendant or university, examination agency or professional board.

Due to the low level of variability in the primary dependent variable or the final verdict, the researcher also analyzed factors leading up to the final verdict in hopes of determining specific variables related to judicial decisions. Variability is necessary to bring power to the logistic regression and the independent variables that predict the outcome of the dependent variable. In this study, without looking at other factors, one could reasonably predict a judgement in favor of the defendant or university without identifying related independent variables.

Although the variability was low within the final judgement in favor of the plaintiff/student or the defendant/IHE/examination agency/professional board; a logistic regression was completed to identify which independent variables have the most influence in predicting a verdict.

The secondary dependent variables were identified from a court of law or an investigation through OCR. Two distinct criteria must be proven prior to the final verdict (a) a prima facie case (i.e. the student must prove s/he has a disability as defined by law and in order to prove the student has a disability two other factors must be proven (1) membership in a protected class and (2) otherwise qualified) or (b) the IHE/examination agency/professional board must prove it denied an accommodation in a non-discriminatory manner and are the secondary dependent variables. Each of the aforementioned factors is denoted as secondary dependent variables and was also tested for variability. The variability for each secondary dependent variable is charted below in Table 11.

Table 11

Variability in responses.

Independent Variable	**Response**	**Number**	**Percent**
Q27: Did the plaintiff establish a prima facie case?	Yes	56	66.2%
	No	27	33.8%
Q28: a) Did the plaintiff Prove membership in a protected class?	Yes	60	72.3%
	No	23	27.7%
b) Did the plaintiff Prove they were otherwise qualified?	Yes	53	63.9%
	No	30	36.1%
Q29: Did the defendant establish a legitimate non-discriminatory reason for denying the accommodation?	Yes	63	75.%
	No	20	24.1%

Note: N=83

Results of the calculations show that the greatest amount of variability between cases was present in proving a prima facie case and it's associated subset of proving otherwise qualified and a member of a protected class. Proving a prima facie case resulted in 56 cases proving a prima facie case and 27 cases not proving a prima facie case and therefore was identified as the secondary dependant variable for a logistic regression analysis. The relationship between the establishing a prima facie case and 33 independent variables was analyzed to answer what independent variables are related to proving a prima facie case. The chi square analysis was used to narrow the independent variables related to proving a prima facie case. The analysis resulted in two primary independent variables to be included in the logistic regression.

Chi Square Analysis

The chi-square test for independence is a non-parametric, inferential statistical test, which compares an expected frequency with a measured frequency (observed cases). Results from the statistic show whether or not the results could have occurred by chance within that population; when there is only one independent variable that is categorized on at least two levels, and the dependent variable is also categorical (Gliner & Morgan, 1998). Statistics determined whether significant relationships between the statistically significant independent variables existed. Results from the chi-square statistics are charted in Tables 12-14, beginning with the primary dependent variable and ending with the secondary dependent variables.

Primary dependent variable. Although the final verdict question resulted in low variability, several independent variables were related to the final verdict and are of particular importance. Table 12 shows the results of the chi-square analysis for question 31: Final judgement in favor of plaintiff or defendant.

Table 12

Chi-square analysis of relationship for final verdict.

Independent Variable	N	X^2	df
Demographics:			
Type of suit	75	.02412	1
Plaintiff gender	76	1.65146	2
Level of education	74	2.6184	2
Disability	77	9.07490	6
Number of students	77	.73147	3
Type of institution	77	1.36957	3
Public / Private	77	2.82864	2
Institutions procedure:			
Disability policy	72	**23.55990***	2
Assessment	73	3.09693	2
Assessment professional	51	2.21561	3
Plaintiffs request:			
Extended time	77	**5.24801****	1
Test accommodation	77	.63051	1
Personal assistant	77	.85226	1
Alternate test format	77	.63051	1
Test location	77	.12240	1
Course substitution	77	**7.24706****	1
Course waiver	77	.94932	1
Extended time to complete course	77	.45188	1
Extended time to complete degree	77	.05580	1
Distance learning	77	.46200	1
Interpreter services	77	1.24865	1
Note taking services	77	1.46408	1
Real time captioning	77	.40526	1
Instructional material in alternate format	77	2.58806	1
Reader services	77	**4.62723****	1
Tape recording	77	.11324	1
Other	77	.38182	1
Denial of RA due to:			
Not otherwise qualified	77	.38182	1
Timing of notice	77	.02637	1
Lack of documentation	77	3.41312	1
Timing of request	77	.0000	1

Independent Variable	N	X^2	df
Denial of RA due to:			
Did not follow procedure	77	.20699	1
Sufficient R.A.	77	.52027	1
Breach of policy	77	.03468	1
Defendant Action:			
Decision maker	77	1.2133	2
Reviewed decision	77	4.49549	2
Citing self-accommodation	76	1.98992	2
Citing poor student performance	77	.86588	2
Number of months	28	10.4444	5
Action prior to denial	77	1.41100	4
Filed under 504	77	.03468	1
Filed under ADA	77	.07230	1
Assess new accommodation	77	**6.62989***	1
Reason substantiated	61	5.36740	2

Note. *p<.05 ** Denotes significance and the question was included in the logistic regression analysis.

The chi-square analysis between question 16: Did the IHE/examination agency/professional board have a concrete disability policy? and the primary dependent variable was significant. Despite the low variability in the final verdict, the researcher further analyzed the 22 verdicts in favor of the plaintiff. The results concluded that of the 22 verdicts in favor of the plaintiff, 16 to the judicial opinions or OCR rulings mandated the IHE/examination/professional board to implement specific disability policy. The high number of IHE/examination agency/professional board's without disability policies and the associated number of judgements in favor of the plaintiffs is reflected in Table 12 and states $X^2(2) = 23.55990$, $p = .05$.

In addition, the chi-square test of independence demonstrated a significant relationship between the final verdict and assessing a new accommodation, $X^2(1) = 6.62989$, $p = .05$ (the degrees of freedom for this example is one as stated in the parentheses); the results are not as statistically significant as the plaintiff requesting (a) extended time, (b) course substitution or (c) reader services. Therefore, the independent variables questioning whether an IHE/examination agency/professional board has a disability policy or if the IHE/examination agency/professional board assessed the student with a new accommodation are not included in the logistic regression. There are distinct differences between the two aforementioned independent variables and final verdict. Therefore, a logistic regression is not analyzed for these variables.

The three factors most significant identified in Table 12 related to a final verdict were the plaintiffs requesting extended time $X^2(1) = 5.24801$, $p = .05$, course substitution $X^2(1) = 7.24706$, $p = .05$ or reader services $X^2(1) = 4.62723$, $p = .05$ for an accommodation. The three identified significant independent variables were used in the logistic regression.

To summarize the Table 12, the question relating most to a final verdict is if the plaintiff requested extended time, course substitution or reader services for an accommodation. No other independent variables are related to a proving a final verdict more then those three. Therefore, the independent variables, requesting (a) extended time (b) course substitution and (c) reader services were used in the logistic regression for a final verdict decision.

The next analyses are the two secondary dependent variables and are used to either bolster or refute the primary dependent variable results.

Secondary dependent variable. Establishing a prima facie case was the first secondary dependent variable to be analyzed. Table 13 shows the chi-square analysis for proving a prima facie case.

Table 13

Chi-square analysis of proving a prima facie case.

Independent Variable	N	X^2	df
Demographics:			
Type of suit	81	.09729	1
Plaintiff gender	81	.29878	2
Level of education	80	3.25894	2
Disability	83	5.55384	6
Number of students	81	5.3567	3
Type of institution	81	2.7096	3
Public / Private	81	.4306	2
Institutions procedure:			
Disability policy	75	**10.29249***	2
Assessment	77	**8.28129***	2
Assessment professional	54	2.47297	3
Plaintiffs request:			
Extended time	83	1.34545	1
Test accommodation	83	2.34175	1
Personal assistant	83	.00091	1
Alternate test format	83	.24708	1
Test location	83	1.18944	1
Course substitution	83	.03316	1
Course waiver	83	2.02633	1
Extended time to complete course	83	3.43386	1
Extended time to complete degree	83	2.43842	1
Distance learning	83	.98810	1
Interpreter services	83	2.56525	1
Note taking services	83	.74155	1
Real time captioning	83	.98810	1
Instructional material in alternate format	83	.38060	1
Reader services	83	.00190	1
Tape recording	83	2.11005	1
Other	83	.00082	1
Denial of RA due to:			
Not otherwise qualified	82	.48619	1
Timing of notice	82	.11964	1
Lack of documentation	82	**14.26124****	
Timing of request	82	.08395	1

Independent Variable	N	X^2	df
Denial of RA due to:			
Did not follow procedure	82	1.38904	1
Sufficient R.A.	82	**11.36404****	1
Breach of policy	82	2.06434	1
Decision maker	83	.37411	1
Defendant Action:			
Reviewed decision	83	3.74670	1
Citing self-accommodation	82	4.50885	1
Citing poor student performance	83	3.04574	1
Number of months	30	6.28472	5
Action prior to denial	83	5.06640	4
Filed under 504	83	1.65254	1
Filed under ADA	83	.89934	1
Assess new accommodation	83	1.87026	1
Reason substantiated	64	**6.68302***	2

Note. *p<.01 ** Denotes significance and the question was included in the logistic regression analysis.

The chi-square analysis for proving a prima facie case resulted in five independent variables related to the dependant variable. Although the chi-square test of independence demonstrated a significant relationship between the following independent variables; (a) an existing disability policy and establishing a prima facie case, $X^2(2) = 10.29249$, $p = .005$ (the degrees of freedom for this example are two as stated in the parentheses), (b) establishing if an assessment was used to determine a disability, by a doctor and establishing a prima facie case, $X^2(2) = 8.28129$, $p = .01$, (the degrees of freedom for this example are two as stated in the parentheses) and (c) the reason cited for denying the accommodation and establishing a prima facie case, $X^2(2) = 6.68302$, $p = .03$, (the degrees of freedom for this example are two as stated in the parentheses); the results are not as statistically significant as the institution denying an accommodation due to lack of documentation or a sufficient accommodation was provided. Therefore, (a), (b) and (c) are not included in the logistic regression.

There are distinct differences between the three mentioned independent variables and proving a prima facie case. Therefore, a logistic regression would not be necessary for these variables.

The two independent variables denying an accommodation due to (a) lack of documentation or (b) the accommodation was sufficient are not only statistically significant, but also are variables that relate to the same question. The fact they relate to the same question makes it more desirable to include in a logistic regression. The logistic regression not only finds a predictor, but also shows where differences exist. Table 13 shows the results of the chi-square analysis for question 27: Did the plaintiff establish a prima facie case? by question 19 part 3: Reason institution denied accommodation~Lack of documentation. A chi-square test of independence demonstrated a significant relationship between the two variables of the reason cited for denying an accommodation, due to lack of disability documentation and establishing a prima facie case, $X^2(1) = 14.26124$, $p = .0001$. The degrees of freedom for this example is one as stated in the parentheses.

Table 13 also shows the results of the chi-square analysis for question 27: Did the plaintiff establish a prima facie case? by question 19 part 6: Reason institution denied accommodation~Current accommodation was sufficient. A chi-square test of independence demonstrated a significant relationship between the two variables of the reason cited for denying an accommodation, due to a sufficient current accommodation and establishing a prima facie case. $X^2(1) = 11.36404$, $p = .0007$. The degrees of freedom for this example are one as stated in the parentheses.

To summarize the Table 13, the question relating most to a plaintiff proving a prima facie/disability case; is if the defendant denied the accommodation by citing the plaintiff lacked the proper disability documentation or the accommodation offered was sufficient. No other independent variables are related to proving a prima facie case more then those two.

Therefore, the independent variables, denial of accommodation due to (a) lack of documentation and (b) current sufficient accommodation were used in the logistic regression for proving a prima facie case.

Another secondary dependent variable was analyzed using a chi-squared analysis to determine significant relationships. The chi-square analysis for proving a legitimate reason to not accommodate a student is delineated in Table 14.

Table 14

Chi-square analysis of proving a legitimate reason to not accommodate a student.

Independent Variable	N	X^2	df
Demographics:			
Type of suit	81	.00022	1
Plaintiff gender	81	1.65193	2
Level of education	80	3.60783	2
Disability	83	3.9375	6
Number of students	81	.28647	3
Type of institution	81	3.28432	3
Public / Private	81	.41983	2
Institutions procedure:			
Disability policy	75	**23.68879***	2
Assessment	77	1.19619	2
Assessment professional	54	2.06333	3
Plaintiffs request:			
Extended time	83	3.00824	1
Test accommodation	83	.88622	1
Personal assistant	83	.98810	1
Alternate test format	83	.00876	1
Test location	83	1.56107	1
Course substitution	83	.21666	1
Course waiver	83	1.54176	1
Extended time to complete course	83	.19520	1
Extended time to complete degree	83	.01939	1
Distance learning	83	.65060	1
Interpreter services	83	.73575	1
Note taking services	83	.30170	1

Independent Variable	N	X^2	df
Real time captioning	83	.75185	1
Plaintiffs request:			
Instructional material in alternate format	83	.73575	1
Reader services	83	2.37271	1
Tape recording	83	.01939	1
Other	83	.38753	1
Denial of RA due to:			
Not otherwise qualified	82	.02642	1
Timing of notice	82	.00790	1
Lack of documentation	82	**5.09772***	1
Timing of request	82	.01666	1
Did not follow procedure	82	.10368	1
Sufficient R.A.	82	.82222	1
Breach of policy	82	1.70032	1
University action:			
Decision maker	83	1.95697	2
Reviewed decision	83	**9.33045***	2
Citing self-accommodation	82	.64999	2
Citing poor student performance	83	.63988	2
Number of months	30	10.34161	5
Action prior to denial	83	3.65150	4
Filed under 504	83	.14520	1
Filed under ADA	83	.30170	1
Assess new accommodation	83	2.93854	2
Reason substantiated	64	.95430	2

Note. *p<.05.

Although three independent variable show significant relationships with a defendant proving a legitimate reason to not accommodate a student, a logistic regression was not produced for this secondary dependent variable. The significance between the three independent variables was not enough to run a logistic regression.

Again, the question asking if the IHE/examination agency/professional board had a disability policy was related to proving a non-discrimination case. Logically, if an IHE/examination agency/professional board does not have a disability policy it is difficult to prove it did not discriminate.

In turn, the following section discusses the results from the chi-square analyses in two separate logistic regressions for predicting the final verdict and proving a prima facie case.

Logistic Regression Analysis

The chi-square analyses showed which independent variables are related to each dependent variable. Logistic regression tests to see which of the independent variables are best in predicting the dependent variables. Furthermore, the logistic regression determines whether the significant independent variables predict an outcome of the dependant variable or if the outcome simply happened by chance. In this study, the dependent variables are proving a prima facie case, question 27, and a verdict in favor of a plaintiff or defendant, question 31. The logistic regression analysis resulted in the following predictions and is shown in Table 15.

Table 15

Logistic Regression of the final verdict.

Variables in the Equation						
Independent Variable	**B**	**Standard Error**	**Df**	**R**	**R^2**	**Exp(B)**
Requested extended time accommodation	-1.8538	.6611	1	-.2522	**.0360***	.1566
Requested course substitution accommodation	-2.7685	.9010	1	-.2842	.08076	.0628
Requested reader services accommodation	-1.8241	1.0271	1	-.1119	.01252	.1614
Constant	2.3675	.5571	1			

Note: $p<.05$

The results from Table 15 show R=.2522 and an R^2 = .0360 at p < .05 for the step-wise regression on the final verdict with the most significant independent variables being requesting extended time, course substitution or reader services. A post hoc test is also not needed for the regression on the final verdict because the R^2 is low.

Although the R^2 is significant, it only explains 3% of the reason why a student who requested extended time, course substitution, or reader services would have could have the final verdict decided in his/her favor. Therefore, we do not reject H1.

H1: A university can predict a verdict in favor for themselves {defendant}, if they provide any type of "reasonable accommodation" to students with disabilities.

The results from the secondary dependent variable or proving a prima facie case must also be analyzed. The analysis of the secondary dependent variable is conducted to either bolster or refute the results from the final verdict regression. As shown in Table 16, proving a prima facie case has two significant variables to predict whether a student is able to prove a prima facie case.

Table 16

Logistic Regression of proving a prima facie case.

Variables in the Equation

Independent Variable	B	Standard Error	Df	R	R^2	Exp(B)
Cited the student lacked the required documentation.	1.5189	.5452	1	.2355	**.05546***	4.5670
Cited the current reasonable accommodation was sufficient.	-1.3356	.5749	1	-.1808	**.00040***	.2630
Constant	-.8388	.4508	1			

Note: *p<.05.

The results showed significant findings for a student lacking the required documentation. Therefore, if a university/examination agency/professional board cited in the court investigation that a student with a disability lacked the required disability documentation; then when the university/examination agency/professional board predicted the outcome of a student proving a prime facie case, the university/examination agency/professional board would be correct approximately 76% of the time. The tables for percent predication are located in Appendix G.

Another significant variable in proving a prima facie case is if the defendant cited the current accommodation for the student was sufficient to meet the students needs. Although a current accommodation was cited as sufficient was significant, but does not account for 1% of a student proving a prima facie case. A post hoc test is not needed for this regression due to the low R^2 indicating there is little difference between a student lacking the required documentation and a university supplying a sufficient reasonable accommodation.

From the above regression table the following can be stated in relation to the second hypothesis. Although the R^2 is significant, it only explains 5% of the reason why a student would prove a prima facie case. However, since the R=.2355 and the R^2=.05546 at $p < .05$; we therefore do not reject the second hypothesis stating,

H2: What statistically significant independent variable are best in predicting proving a prima facie case?

Summary. From the logistic regression results and the stated hypotheses, the most predictive measures for proving a prima facie case are linked to whether a university proves it did not receive proper disability documentation from the student. Also, if an institution provided a student with an accommodation and felt that the accommodation was "reasonable" and sufficient, then the university/examination agency/professional board could predict at a 76% rate of being correct that the student will not prove a prima facie case. Likewise, if a student requested any one or all of the following accommodations in this order, extended time, course substitution or reader

services; then the judgment in favor of a university can be correctly predicted 79.2% of the time. Appendix G contains the prediction percentages for the final verdict.

Qualitative Study

In order to clarify and expand upon the quantitative results, the qualitative analysis results are described through grounded theory. The qualitative methodology answered the research questions:

1. How are the words "reasonable accommodation" described through Federal Court judicial summations?, and
2. What is the current process to determine which factors contribute to whether a student is able to receive a specific "reasonable accommodation"?

As described in the Methods chapter, the approach to this research was through grounded theory. After analyzing eight Federal cases the results of the approach are described by the following outcomes. The grounded theory analysis begins with open coding and concludes with a theoretical process foundation. Each step of the analysis identifies codes, categories and procedures, along with text from supporting codes or consolidated codes from identified cases.

Open Coding

Level I coding or open coding of the eight cases generated a long list of codes and is provided in Appendix H. Open coding refers to the analysis pertaining to labeling and categorizing of a process as indicated from the data. It also refers to the assigning of information into categories drawn directly from the case text. The cases created active information from judicial opinions, by analyzing the data into segments of language. In some cases the plaintiffs and defendants were quoted about what they felt and said to one another prior to litigation. The open coding reduces the information into operational categories. The product of labeling and categorizing are concepts and are the first steps of grounded theory.

Open coding first asks the who, what, where and why of the data by including interactions, tactics, conditions and consequences and by using a comparative method of multiple

cases. Initially the data is broken down in this method and then grouped back together by the analyzed conceptual label. Examples from the cases analyzed through open coding are depicted below in Table 17 and the coding level comes directly from the data.

Table 17

Level I – Open codes.

A sample of codes generated from open coding and the associated text sample, which created the code name.	
Open codes:	**Sample text data:**
Altering/Benefiting education	".... The Court required BU to propose and to implement a "deliberative procedure" for considering whether course substitutions for the foreign language requirement of BU's College of Arts and Sciences (the "College") would "fundamentally alter the nature" of BU's undergraduate liberal arts degree. Id. at 154-55. BU, using the College's existing Dean's Advisory Committee to consider the issue, decided that [**4] course substitutions would constitute such a fundamental alteration." Guckenberger vs. BU "Plaintiff cautions that in determining whether an accommodation would allow the applicant to receive the benefit [of an education/program], the court should not rely solely on the stated benefits "because programs may attempt to define the benefit in a way the 'effectively denies otherwise qualified individuals the meaningful access to which they are entitled.'"." Maczazjk v NYU
Perceived disenfranchised	"Dr. Bartlett, who has fought an uphill battle with a reading disorder throughout her education.... [Therefore] we conclude the record demonstrates the Dr. Bartlett suffers from a disability..." Bartlett v NY Law Examiners.
Policy	"... removing him from the program, rather than placing him on provisional student status, until he had increased his GPA or placing him on inactive status until he had re-registered, pursuant to existing SUNY policies providing for or practices of doing such, constitute discriminatory and/or retaliatory treatment." Smith v SUNY
Assessment of functional level	"[A] disability should be assessed without regard to the availability of mitigating measures, such as reasonable accommodations or auxiliary aids." Bartlett v NY Law Exam.

After the level one coding was complete for each of the eight cases, the codes were then re-coded based on the action of the original code, which began the level II coding or axial coding.

Axial Coding

Axial coding defines the process of developing main categories and associated sub-categories from the existing open codes. This study's analysis created axial codes that resulted in the following categories: (1) Definitions, (2) Students, (3) Higher Education and (4) Legal Ambiguities. Of the 45 open level codes, the researcher saw distinct relationships between 31 of the open codes and thus the axial coding resulted in the following codes and collapsed into four level II categories. During the axial coding the analysis jumped from level II coding to level III coding or selective coding. When selective coding happens during the axial coding in qualitative analysis; the selective codes begin to form set categories. Level II coding essentially grouped the open coding concepts into larger overarching categories and were then re-distributed during the selective coding process.

Table 18

Axial code definitions.

Axial code name: Definitions used to determine reasonable accommodation	
Included open code	**Code definition**
Altering education	Judicial opinions detailing Federal guidelines about the word "alter" or "altering."
Benefiting the student	Judicial opinions detailing Federal guidelines about the word "benefiting." Strictly in the context of a student "benefiting" from an education or specific instruction.

Axial code name: Definitions used to determine reasonable accommodation	
Included open code	**Code definition**
Comparing to peers	Court testimony describing university or examination agency practice and policy among the student body.
Costs	Court testimony detailing the cost of an accommodation.
Current reasonable accommodation	Judicial opinions and court testimony explaining the university's or examination agency's "current accommodations" are "reasonable" and do not need to be extended.
Denial of reasonable accommodation	Court testimony within the judicial opinions describing why a university or examination agency denied a requested accommodation.

Axial code name: Students	
Included open code	**Code definition**
Past attempts	Court testimony about student's historical use of accommodations.
Timing of request	Court testimony or judicial opinions stating the student must have requested an accommodation within a required time frame.

Axial code name: Students	
Included open code	**Code definition**
Perceived disabled	Court testimony citing the student claimed to be perceived by others as disabled. The student may or may not be disabled, under a specific category but cites information supporting claim.
Perceived disenfranchised	Judicial opinions, court testimony or social perspective portraying students as needing charity, being somehow "lesser" or being victims and not worthy of the position of student.
Perceived over-accommodated	Court testimony or judicial opinions citing the university had "already offered and supplied" a student with an accommodation. Possibly changing the accommodation over time or over classes.
Proven academic record	Court testimony proving students past academic success with GPA or faculty testimonials.
Strengths	Court testimony or judicial opinions citing student's positive achievements within the academic and social realms.

Axial code name: Higher Education	
Included open code	**Code definition**
University Action	Court testimony including the words "action taken by university or examination agency or university faculty." Includes accommodations provided.
Policy	Court testimony defining the policy used by the university or higher education institution.
Regulations	Court testimony citing the regulations used by the university or higher education institution.
Decisions by professionals	Judicial opinions or court testimony citing a professional {MD, psychologist, faculty, administrator, support service staff, legal counsel, or expert in the field} making a judgement on given facts from the student.
Past attempts without reasonable accommodations	Court documentation citing students' attempts to use given accommodations, which result in a negative / failing outcome.

Axial code name: Legal Ambiguities	
Included open code	**Code definition**
Citing cases {Precedent cases}	Judicial opinions or court testimony directly using summations from past cases.
Burden of Proof	Judicial opinions that include the actual words, "burden of proof."

Axial code name: Legal Ambiguities	
Included open code	**Code definition**
Conclusion	Judicial opinion text, taken directly from the last section of the transcript and titled, "Conclusion."
Coverage of ADA/504	Judicial opinion test or court testimony citing the scope and/or coverage of either the Americans with Disabilities Act or the Rehabilitation Act – Section 504.
Definition	Judicial opinions citing any information directly related to a "definition" of a word or words.
Disability	Judicial opinion text including the word "disability."
Future laws	Judicial opinions referencing the impact of their decision on future laws; or citing a time when a future law directs the judge in a specific direction.
Interpretation of law	Judicial opinion text including the actual words, "interpretation of law"; or court testimony used to prove a case based on a lawyers interpretation of the law.

Axial code name: Legal Ambiguities	
Included open code	**Code definition**
Otherwise qualified	Judicial opinions citing Federal guidelines on the term "otherwise qualified," or court testimony used to prove a case based on a student claiming they are "otherwise qualified."
Reasonable accommodation	Court testimony or judicial opinions including the actual words, "reasonable accommodation."
Requirements	Judicial opinions citing the outlined "requirements" of Federal law.
Violation 504	Judicial opinion text including the actual words, "violation of Section 504."

The axial codes were evaluated inductively based on comparing each case. Comparing axial codes between cases lead to a change in the paramount categories when trying to identify a process of determining when an accommodation is "reasonable" and when it is not "reasonable." Appendix I outlines the axial categories and sample text supporting each sub-category.

Whereas open coding deconstructs the judicial opinions into concepts, axial coding re-assigns the coded material by the resulting connections between a category and its sub-category. An analysis of the categories brought the following change to the axial coding by formulating four distinct relationships. The resulting categories are as follows (a) Students, (b) Higher Education, (c) Burden of Proof and (d) Legal Ambiguities. After evaluating the open code concepts the Definition category became a sub-category of Legal Ambiguities and Burden of Proof became its own category separate from Definitions and Legal Ambiguities.

The re-assignment of the Definition category into the Legal Ambiguities category occurred because all of the sub-categories of Definition really were Legal Ambiguities. In other words a definition of disability is inherently proven in a court of law, prior to addressing the operations of the IHE/examination agency/professional board or the student. Throughout the inductive coding process in level II, the overwhelming evidence supporting a student or an institution knowing s/he or its obligation under the regulations of "burden of proof" resulted in the need for it to become its own distinct category. Although the axial coding and the selective coding emerged simultaneously, the level three coding continues to break down the four categories from the axial coding even further to produce an ultimate consequence.

Selective Coding

Selective coding or Level III coding involves the integration of the axial categories that have emerged to form the initial theoretical framework. The selective coding process is defined by analyzing the axial categories in relationship to the words "reasonable accommodation" within the judicial opinions. The context of the word in selective coding refers to the particular set of conditions or intervening condition, which effects the interpretation of "reasonable accommodation."

Through the analysis of open and axial coding, a number of concepts and categories were generated and developed. During selective coding the core category was defined and labeled "reasonable accommodation decision strategy *content*." Three other major categories were then related to this category. The first strategies used by IHE/examination agencies/professional board professionals or students with disabilities were found to be contingent upon six sets of *contextual* factors: (a) the causes of the denial of the reasonable accommodation, (b) the severity of action taken by the IHE/examination agency/professional board prior to the student filing suit, (c) the attitude of the student and higher education/examination agency/professional board personnel, (d) higher education/examination agency/professional board characteristics, (e) costs {monetary and reputation} and (f) the higher education/examination agency/professional board and students'

history related to reasonable accommodation. Each factor listed is represented as a selective code and included in the theoretical model.

The selective codes describe the causal conditions, which in this study are the defendants denying the plaintiff a requested accommodation. The denial of the accommodation is the condition, which causes the emergent process. The process for this study is produced by the qualitative analysis and in particular the answer to the original research question, "What is the process for determining a reasonable accommodation in higher education?" The intervening conditions are factors, which contribute to the process and are revealed through the axial coding analysis. The casual condition, the process and the intervening conditions all lead to the action or interaction strategies which IHE/examination agency/professional board's and students with disabilities use to interpret the Federal definition of reasonable accommodation. The final factor in the model is the consequences, which in this study were already identified as actions both the IHE/examination agency/professional board (operational level) and the student (strategic level) have taken because a requested accommodation was denied.

Sample text and axial codes support the inductive analysis used to create the consequence model shown below. From the four axial categories supported by the open concepts, the following sequence was created:

Contextual Factors ***and*** Federal Action/Interaction of Reasonable Accommodation ***and*** Burden of Proof→ Reasonable Accommodation Decision Strategy Content.

The axial categories in this study do not directly lead from one to another as proposed in other models. Instead, they occur simultaneously to inductively produce the Reasonable Accommodation Decision Strategy Content. In other words, the process is defined through the selective coding or level three coding of the sampled cases. The core category or central process used to describe reasonable accommodation is defined as a process from the judicial opinions.

The selective coding offers consequences and processes of determining when an accommodation is reasonable. Therefore, the *answer* the two qualitative research propositions:

1. How are the words "reasonable accommodation" described through Federal Court judicial summations?, and

The words "reasonable accommodation" are described by the judicial summations of two precedent cases, Southeastern v. Davies (1979) and Wynne v. Tufts (1992). If a student does not prove the factors delineated and explained in these two cases, then the requested accommodation will be ruled as unreasonable.

2. What is the current process to determine which factors contribute to whether a student is able to receive a specific "reasonable accommodation?"

The answer to the second proposition is mainly contained in the findings form the qualitative analysis by an emergent process describing a "reasonable accommodation" in higher education. The primary finding for the second proposition is a "reasonable accommodation" is a process and not necessarily an item or a thing. The model of an operational process emerged from the selective coding analysis by analyzing the language used in each case. Additionally, the answer to the first proposition is a contextual factor in the operational process.

The qualitative analysis found similar results as the quantitative analysis. Cases like Pell v. Columbia (1998) and Smith v. SUNY (1997) parties did not understand the process of reasonably accommodating a student's needs. Furthermore, the case analysis showed student are already at a disadvantage and the judicial system perpetuates the notion that students with disabilities are not capable of benefiting from a postsecondary experience. In cases when the students actually presented a convincing argument to receive their requested accommodation, the student (Bartlett) first had to attain a master's, a Ph.D. and J. D. The qualitative analysis also provided information around limits of intellectuals. In Ohio v. Case Western Reserve (1994) and Zuckle v. Regents of Columbia (1999), the academic professionals could not conceptualize the means to accommodate the students and, therefore, deemed the student not otherwise qualified.

The qualitative analysis incorporates each of the emergent themes into one operational theoretical model and is discussed in Chapter V. The model reveals the process by addressing the research questions more in depth and describing what IHE/examination agency/professional board's and students with disabilities can do about determining the reasonableness of an accommodation.

CHAPTER V

Discussion

The findings of the quantitative and qualitative data analyses focused on the definition of reasonable accommodations and are discussed sequentially. Postsecondary settings adhere to reasonable accommodation laws throughout its operations. The discussion for the current study includes the interpretation of the results/findings, recommendations for practice and for future research.

Quantitative Results

In order to interpret the results, it is important for the reader to review the defined quantitative sample. The cases included in this study were cases filed in Federal Courts and complaints filed through the Office for Civil Rights. The usefulness of the independent variables addressing the hypotheses is the basis for the quantitative discussion. Key findings from the analysis might be enhanced by a larger sample.

Statistical Interpretation

A logistic regression analysis was completed between three independent variables and the primary dependent variable, proving a final verdict. Five independent variables were also analyzed against the secondary dependent variable proving a prima facie case. The results from both regressions are discussed and interpreted.

Final verdict. Two major factors are critical in a final verdict or court decision: (a) identifying if the IHE/examination agency/professional board has a concrete written policy related to students with disabilities, and (b) whether or not the student's request for a specific accommodation was denied by the IHE/examination agency/professional board because the IHE/examination agency/professional board alleged the reasonable accommodation offered to the

student was sufficient. The result of the primary dependant verdict found to be in the university's favor is still a crucial result to this study, regardless of the low variability. The verdict is critical because the universities/examination agencies/professional boards who did not have a concrete disability policy were at higher risk for a judgement against them. Out of the 22 verdicts ruled in favor of the student, sixteen universities/examination agencies/professional boards were mandated to implement a written disability policy. The remaining six universities/examination agencies/professional boards were ordered to provide the accommodation requested by the student. Clearly, students with disabilities are not receiving the accommodations they feel will meet their needs. This coincides with past studies that indicate students report barriers to receiving accommodations in postsecondary settings (Lehmann, Davies & Laurin, 2000).

In terms of students' requests for accommodations, three independent variables showed they were significant to predicting a final verdict despite the low power of the logistic regression. The courts' verdicts in favor of the university/examination agency/professional board are higher if the student requests extended time. However, the predictability of the accommodation could be due to the services being the most requested service in cases or complaints by students with disabilities and not the university/examination agency/professional board using discriminatory actions.

Proving a prima facie case. The logistic regression completed on the secondary dependent variable, proving a prima facie case, resulted in two independent variables with predictive value. In order to prove a prima facie case, a student must first prove s/he is otherwise qualified and a member of a protected class. Both factors legally fall under the prongs of proving a prima facie/disability case. Inherently, when a student is proving s/he is otherwise qualified and a member of a protected class, then s/he is also proving a prima facie case. Therefore, the third hypothesis became a subset of proving a prima facie case and had the highest combined variability.

The results from the logistic regression found five independent variables were significantly related to the plaintiff proving a prima facie/disability case. Of the significant five independent variables, denial of accommodation due to lack of documentation and sufficient reasonable accommodation were most predictive in the plaintiff proving a prima facie/disability case.

Part 3 of question 19 states that the university cited the student did not produce the required disability documentation, in accordance with the IHE/examination agency/professional board's policy. Without disability documentation, the student is unable to prove a disability case and results with the judge ruling in favor of the IHE/examination agency/professional board. The second predictive factor is part 6 of question 19 stating the university claimed the accommodation offered to the student was sufficient to meet the students needs. Therefore, if the IHE/examination agency/professional board was able to prove the accommodation was sufficient to meet the students' need, then the student was unable to prove a prima facie case.

The logistic regressions analyzed for a final verdict and for proving a prima facie case show that the student/plaintiff must satisfy the policies and regulations of the IHE/examination agency/professional board. In order to provide sufficient evidence of the first prong of a prima facie case, the student must follow the procedures written in the IHE/examination agency/professional board's disability policy. Although the burden of proof lies with the plaintiff to provide documentation of the disability, the plaintiff must also understand his/her disability documentation should outline the required accommodation that meets his/her academic need. The regression analysis supports the result stating that if an IHE/examination agency/professional board does not have a concrete disability policy, then a student is more likely to have a ruling in his/her favor, generally this mandates the IHE/examination agency/professional board to implement a disability policy. In turn, students with disabilities are able to follow Federal guidelines depending on if the IHE/examination agency/professional board's policy is in place.

However, if the student challenges the accommodation provided by the IHE/examination agency/professional board, then the answer to determining the "reasonableness" of the requested accommodation is left up to the decision-maker or judge.

Policy capturing allowed the quantitative analysis to narrow the factors causing confusion about the term "reasonable accommodation." Without policy capturing, the analysis would lose the ability to quantify the concepts related to "reasonable accommodation" in cases and complaints. However, the results do not specify what qualifies as a "reasonable accommodation." The qualitative discussion broadens the findings of the quantitative logistic regression. Analyzing the language used in court cases determines what is reasonable via a grounded theory approach. The results from both the quantitative and qualitative analyses are merged at the end of this chapter to provide a process suitable for both students and IHE/examination agency/professional board's to utilize on a daily basis.

Qualitative Findings

The theory emerging from the data incorporates a variety of societal and legal perspectives. In and of itself, the most powerful piece of information is the low number of lawsuits filed and decided in favor of a student. The judicial opinions create a verbal "path" for students and IHE/examination agency/professional board professionals to follow.

Theoretical Process

The content of reasonable accommodation decision strategies was deconstructed into two additional levels (a) operational level actions (higher education institution or university personnel) and (b) the strategic level actions (students with disabilities in post-secondary institutions). An implementation or *process* dimension was discovered. The process, which describes the reasonableness of an accommodation, is the primary element resulting from the case analysis. Successful actions to effect reasonable accommodation fall into four interrelated stages:

1) Reasonable Accommodation Contextual Factors,

2) Federal Implementation/Process of Reasonable Accommodation,

3) Burden of Proof and

4) Reasonable Accommodation Decision Strategy Content.

A depiction of this framework is given in Figure 2 on page 108.

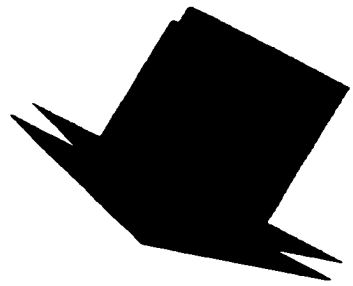
The *process* by which the framework was developed incorporates the Federal judicial opinions where the courts look to previously tried cases to "outline" the standards for identifying the reasonableness of an accommodation. The selective coding or level III coding of the data synthesized information occurring in each case and relevant to describing the reasonableness of an accommodation. The first column of the theoretical model outlines the *process* individuals should go through to determine the *Reasonable Accommodation Contextual Factors* of their own situation. The six contextual factors previously cited create the "check list" for the first column of the theoretical model.

Simultaneously, the individual should review and consider the factors included in column two, *Federal Implementation Process of Reasonable Accommodation*. The data listed in column two emerged from the selective coding. The judicial opinions supporting the analysis is cited in multiple cases and is paramount in accommodation criteria:

> "The Courts' conclusion was directly guided by two opinions of the First Circuit in Wynne v. Tufts University School of Medicine, which concerned a request for reasonable accommodations by a learning disabilities medical student with dyslexia who challenged the multiple choice format of medial school examinations. See 932 F. 2d 19 (1st Circuit 1991) (en bac)("Wynne I"); 976 F.2d ("1st Circuit 1992) ("Wynne II"). Judicial opinion Guckenburger v. Boston University, et.al."

Figure 2: A Theoretical Framework of Determining the Reasonableness of an Accommodation

Reasonable Accommodation Contextual Factors	*Federal Implementation Process of Reasonable Accommodation*	*Entity Carrying the Burden of Proof*
➢ The causes of denying the reasonable accommodation. ➢ The amount of reasonable accommodations requested. ➢ The attitude of the stakeholders. ➢ Perception of students toward HE personnel. ➢ Perception of HE personnel toward student. ➢ HE / University Previous Actions. ➢ Costs {monetary & reputation} ➢ HE's historical strategy.	➢ Southeastern factors require to make reasonable modifications in the nature of their programs to accommodate disabled persons, they are not required to make fundamental or substantial modifications or to lower or substantially modify standards. ➢ Wynne factors demonstrate relevant officials of the institution considered alternative means, their feasibility, cost and effect on the academic program, documented intent	➢ Determination of who carries the burden of proof. ➢ What stage of the "reasonableness" is it at? ➢ Deference of the court.



Reasonable Accommodation Decision Strategy Content

1. Operational levels
IHE/University personnel
Policy
Regulations
Procedures
Support Services
Timing Request
2. Strategic Levels
Students disabilities
Past attempts
Strengths
Academic record
Perceived
over accommodated

The judicial opinions included the factors outlined in Wynne v. Tufts (1992) and provided the foundation of all rulings in the eight sampled cases. All eight qualitative cases cited Wynne in their final opinions. The following factors of Wynne must be proven by sufficient evidence after a prima facie case has been established. Although the Southeastern v. Davis (1979) criteria were determined prior to the Wynne v. Tufts (1992) case, it is discussed after the Wynne factors. The Southeastern factors essentially were the basis for determining the factors in Wynne because of the broad scope the judicial opinions encompassed.

Wynne factors. The first Circuit crafted the following test for evaluating the decision of an academic institution with respect to the availability of reasonable accommodations for the learning disabled:

> If the institution submitted undisputed facts demonstrating that the relevant officials within the institution considered alternative means, their feasibility, cost and effect on the academic program, and came to a rationally justifiable conclusion that the available alternatives would result either in lowering academic standard or requiring substantial program alteration, the court could rule as a matter of law that the institution had met its duty of seeking reasonable accommodation. (Taken from Wynne I)

Although the circuit court specifically addressed learning disabilities, other courts have upheld the factors and utilized them to determine "reasonableness" for any student with a disability. Some courts then expand the requirements to prove certain factors decided in Wynne. For example, to show "reasoned deliberation" the following must be offered into evidence:

> The court's first task under this test is to find the basic facts, giving due deference to the school..." (Wynne I) Those "basic facts" must include showings of the following: (1) an "indication of who took part in the decision {and} when it was made;" (2) a "discussion of the unique qualities" of the foreign language requirement as it now stands: and (3) "a consideration of possible alternatives" to the requirement. Id. ... As these elements suggest, the required showing of undisputed facts refers to the "consideration" of the request." (Guckenberger vs. Boston University)

Similar to the quantitative data analysis, the qualitative analysis also found the plaintiff must first prove a prima facie case to the judges' by establishing evidence of disability documentation before challenging the higher education institutions' denial of the requested accommodation. Federal Court judicial opinions take in account past precedent cases, such as Southeastern v. Davis or Wynne v. Tufts (1992), and do not sway far from the original interpretation. Therefore, in order to establish the following prongs of a prima facie case, the following criteria must be met by the plaintiff or student before a judge will consider the reasonableness of an accommodation.

Prima facie case. Cited in Ohio Civil Rights Commission v. Case Western Reserve University (1994), the judicial opinion concisely organized the prongs of a prima facie or disability case.

> In order to meet this standard [of establishing a denial of a reasonable accommodation], the commission [plaintiff] must make a prima facie case, indicating that (1) complainant (Fischer) is handicapped within the framework of R.C. 4112; (2) the Complainant, though handicapped, is "otherwise qualified" for admission and, (3) the alleged unlawful discriminatory action was taken because complainant was handicapped."
> (Ohio Civil Rights Commission v. Case Western Reserve University, 1994)

Once again, similar to the Wynne factors, the words within the language used to establish a prima facie case must also be proved and have associated requirements. An example of proving the words within the ruling is discussed in the Zukle v. Regents of University of California (1999) judicial opinions is shown in this discussion of the term "otherwise qualified."

Otherwise qualified. The first prong of proving a prima facie case is for the student with a disability to prove s/he is "otherwise qualified" for the IHE/examination agency/professional board program or examination. The student must prove her/his qualifications again regardless of the admittance to the IHE/examination agency/professional board by the following requirements:

> "A handicapped person who cannot meet all of a programs requirements is not "otherwise qualified" if there is a factual basis in the record reasonably demonstrating that accommodating the person would (A) require either a modification of the essential nature of the program or (B) impose an undue burden on the school. (citing **Southeastern v. Davis** (1979) , 442 U.S. 397.) Although educational institutions are required to make reasonable modifications in the nature of their programs to accommodate disabled persons, they are not required to make fundamental or substantial modifications or to lower or substantially modify standards. Maczaczyj v. State of New York (**citing Southeastern v. Davis**)." (Zukle v. Regents of University of California, 1999)

Ironically, the plaintiff or the defendant may be asked to prove the guidelines in Southeastern v. Davis (1979). At first glance, one would assume it is the IHE/examination agency/professional board's responsibility to provide sufficient evidence to the court that a reasonable accommodation does not alter a program. However, the inductive selective coding shows that both students and the postsecondary settings carry the burden of proof throughout the course of the hearing and not solely one or the other.

Once the burden of proof is noted, it is the responsibility of the plaintiff or defendant to show the court, beyond a reasonable doubt, that s/he adhere to the Wynne and Southeastern factors. Showing the courts what happened sounds like a relatively easy task; however, as noted in Zukle the burden of proof shifted, merely by the plaintiff's claim:

> The Regents argue, however, that Zukle was not "otherwise qualified" to remain at the Medical School. Zukle responds that she was "otherwise qualified": with the aid of reasonable accommodations and that the Medical School failed reasonably to accommodate her" (Zukle v. Regent of University of California, 1999).

By introducing the denial of a reasonable accommodation prior to proving her ability to be "otherwise qualified," Zukle shifted the burden of proof back to herself, and away from the university. This ultimately lost her the case, because she could not prove she was "otherwise qualified" with the assistance of an accommodation. How to determine who holds the burden of proof in a case can be identified by the steps listed in column three of the theoretical model and is supported by the inductive analysis outlined below.

Burden of proof. In showing or describing what is "reasonable" either the student of the IHE/examination agency/professional board is responsible for adhering to the "burden of proof."

> Based on an administrative regulation that course substitutions "might" be a reasonable means of accommodating the disabilities, 34 CFR Pt 104, App. A P31 (1997), and evidence introduced at trail, the Court held that plaintiff had "demonstrated that requesting a course substitution in foreign language for students with demonstrated language disabilities is a reasonable accommodation." Guckenberger II, 974 R. Supp. At 147. Therefore, the burden of demonstrating "that the requested course substitution would fundamentally alter the nature of [BU's] liberal arts degree program " shifted to the University. Id. (Guckenberger vs. Boston University, 1998).

> Zukle also had the burden of proof shifted to her as indicated in the following text:

> [The plaintiff] bears the burden of pointing to the existence of a reasonable accommodation that would enable her to meet the medical School's essential eligibility requirements. Once she meets this burden, the Medical School must show that Zukle's requested accommodation would fundamentally alter the nature of the schools' program. (Zukle v. Regents of the University of California, 1999)

Students may hold the burden to prove their disability and their qualification, but typically a university must shoulder the burden of proving an accommodation is not reasonable if it fundamentally alters a program or course. Unlike the students with disabilities, the university has the advantage of the courts deferring decisions about the "nature of a program or course" to higher education personnel. In other words, the courts do not provide deference to students as the "expert" when they claim they have a disability or they are otherwise qualified; but the courts do provide deference to the academic world as the "expert" when deciding what is altering and what is not altering an IHE /examination agency/professional board's program.

Deference of the court. One paramount factor cited in each of the judicial opinions is the deference of the courts toward the IHE/examination agency/professional board's. The judges would defer their opinion to the university or examination agency when determining if a reasonable accommodation fundamentally altered the nature of a course or program. Wynne v. Tufts (1992), states "finding basic facts, gives due deference to the school..." Wynne I, 932 F.2d. at 27. Other cases such as Zukle v. Regents of the University of California (1999) also cite the deference of the courts to the university/examination agency/professional board.

> We agree with the First, Second and Fifth circuits that an educational institution's academic decisions are entitled to deference. Thus, while we recognize that the ultimate determination of whether an individual is otherwise qualified must be made by the court, we will extend judicial deference to the evaluation made by the institution itself, absent proof that its standards and its application of them serve no purpose other than to deny an education to handicapped person's. (Zukle v. Regents of the University of California, 1999)

The deference conclusion to the theoretical model describes a key finding in the analysis. If the university or IHE/examination agency/professional board has met or considered each factor outlined in the three columns, then the process leading into the bottom column becomes routine. The three overarching categories simultaneously lead directly to the bottom column *Reasonable Accommodation Decision Strategy Content.* The decision strategy content is what the IHE/ examination agency/professional board and the student should consider when implementing policies and procedures designed to reasonably accommodate students with disabilities

The qualitative analysis supports the following findings in regard to the research questions.

1. How are the words "reasonable accommodation" described through Federal court judicial summations?

The actual words "reasonable accommodation" are described in depth through the factors supported in Wynne v. Tufts (1992). The theoretical model and its interpretation discussed a succession of definitions beginning with words used to define a reasonable accommodation. Words such as disability, otherwise qualified, and fundamentally alter make up the definition of reasonable accommodation. The court case judicial opinions which set precedent for future cases are the Southeastern v. Davis (1979) ruling and the Wynne v. Tufts (1992) ruling. The Federal definition of the term reasonable accommodation uses the both Southeastern and the Wynne verdicts to describe what a reasonable accommodation is in the higher education setting. The second qualitative research question is as follows:

2. What is the current process to determine which factors contribute to whether a student is able to receive a specific "reasonable accommodation?"

The theoretical model answers the question about a current process for determining whether a student is able to receive a specific accommodation (Refer to model on page 108). The key finding in the selective coding is that the term reasonable accommodation is a process, not an actual tangible item. Although, an actual tangible item can be a reasonable accommodation, all accommodations are not tangible. The theoretical model shows three propositions, which must be considered simultaneously, in order to determine which factors contribute to students requested accommodation. Furthermore, the student's request is individualized to that particular student and not generalized to several other students with similar disabilities. In other words, it is more difficult to prove a policy designed to accommodate one student will satisfy the needs of multiple students. The Guckenberger decision cited a "blanket policy concerning course substitution for individuals with learning disabilities" is not a reasonable accommodation.

The court further described that a course substitution "may be a reasonable accommodation for one student, but this does not automatically make it so for another student by virtue of their similar label." The model creates a foundation for determining what students and faculty can do when determining the reasonableness of an accommodation.

Implications / Recommendations for Practice

Institutions and faculty. Both Section 504 and the ADA obligate colleges and universities/examination agencies/professional boards to provide reasonable academic accommodations to students with disabilities. At the same time, this duty is tempered by the recognition that institutions are not required to fundamentally alter their programs by eliminating requirements, which are essential to the student's program of study. Conflicts arise when students and their schools cannot agree on an appropriate balance between these competing concerns. Although these conflicts may present an inevitable result of competing interests, colleges and universities may take steps to minimize the chance that they are violating Federal law.

Colleges and universities/examination agencies/professional boards should implement, and follow, a clear policy regarding the process through which students may request academic accommodation. This policy should clearly articulate the institution's dedication to nondiscriminatory treatment and fully apprise students of their rights. By implementing such a policy, the institution ensures that its students have an effective opportunity of fulfilling their notification and documentation obligations. These policies protect the IHE/examination agency/professional board and the student from a denied request for a reasonable accommodation.

The recommendations for IHE/examination agency/professional board's mirror previous research studies that state most IHE/examination agency/professional board professionals do not fully understand the legislative intents of Section 504 or the ADA (Bethea & Thompson, 1993; Heyward, 1998). In the event a dispute arises, the postsecondary institution should thoughtfully articulate its position and explain the reason why a requested accommodation is unnecessary.

Guckenberger cites to avoid blanket requirements, which refuse to acknowledge the possibility of an accommodation or exemption. Moreover, the IHE/examination agency/professional board should document that it has carefully considered various alternatives to the requirement at issue and has objectively determined that the requirement is essential. In most cases, court judgments and OCR rulings are reluctant to disregard an institution's academic judgment when documentation and adequate reflection have supported that judgment.

Students. Similarly, students may elect to adhere to the aforementioned steps cited for the IHE/examination agency/professional board's. In addition, students with disabilities find greater success with their requested accommodation if the university already has a disability policy in place. Students with disabilities may also follow the theoretical model to ensure they understand their rights as a student in a postsecondary setting.

The practical implications of the theoretical model also describe what students with disabilities should know upon exiting high school. One key finding states that students with disabilities must be self-determined when entering into a postsecondary setting, in order to succeed (Arnold, 1998). Self-determination does not indicate they should have all the answers; however, the student should be able to disclose her/his disability and request an accommodation in accordance with the IHE/examination agency/professional board policy. In order for students with disabilities to achieve this level of self-advocacy, professionals at the secondary level must offer guidance and support to pull the focus away from the professional and back toward the student. The locus of control residing with the student is a critical piece of information, strictly because a student with a disability in postsecondary setting is required to initiate the process of receiving a reasonable accommodation. Additionally, the student with a disability must also identify the appropriate accommodation s/he might need in order to succeed. IHE/examination agency/professional board's are not equipped as a "testing" ground for different accommodations in alternate environments. Each student may need a different support or accommodation based upon his or her need and the requirements of the courses into which he or she is entering.

Both the student and the environmental context must be considered together when implementing a reasonable accommodation.

As noted previously in Chapter II, Bethea and Thompson (1993) found students with disabilities and IHE/examination agency/professional board professionals are not aware of the requirements provided in the legislation availing reasonable accommodations to students with disabilities. The qualitative analysis found that the gap between what the professionals are providing and what students with disabilities need to succeed academically, widens with each judicial opinion and substantiates past research (Finn, 1998). Thus, students are unable to rely on professionals to assist them with interpreting IHE/examination agency/professional board regulations or Federal policy.

Students with disabilities are already at a disadvantage heading into postsecondary settings. The student interpreting IHE/examination agency/professional board policies and procedures written by professionals without disabilities compounds these disadvantages. Even when a small advantage is present, like in the Bartlett v. New York State Board of Law Examiners (1998), the student with a disability must continually prove her/his academic capability in order to receive an accommodation. Similarly, the IHE/examination agency/professional board's are also at a disadvantage because they are required to create policies that must encompass multiple students on an individual basis. The identification of future research discusses incorporating multiple stakeholders and multiple needs.

Recommendations for Future Studies

The current study replicates past research findings through an alternate method and can be viewed as a starting point to launch research in a direction that determines a universal design for enhancing student learning as well as individual teaching. Currently, there are multiple cases in Federal Court in which reasonable accommodations for students with disabilities are being argued.

Likewise, there are studies underway to analyze the application of the ADA in the higher education context. A student at Yale Law School is tracking information to identify possible trends in reasonable accommodation higher education policy based on the size, nature, reputation, geographic region, and type of academic program of the IHE. The study will also describe whether the types of accommodation identified in the reported cases are typical or anomalous.

Data reported since about 1993 on what schools are actually doing to assist students with disabilities and just how many students are requesting accommodations, is another area of research (Heyward, 1998). As cited in Chapter I, the demographic data linking students with disabilities to the accommodation they requested are not adequate (Lipsky & Gardner, 1997). Future studies will also need to recognize that many schools would not have their data available in the detailed format requested. Therefore, studies need to detail what data all postsecondary institutions can collect for the purpose of comparison. Further, these studies shoaled result in data collection formats that facilitate the systematic analysis of student accommodations as well as the impact of these accommodation on postsecondary setting.

Future research could also question stakeholder's interpretation of reasonable accommodations, including perceptions from students with or without disabilities, faculty, administrators, policy makers and professionals from secondary educational institutions. Along this vein, research should also delve into the actual experience of students with disabilities engaged in a lawsuit. Future studies in this area would dispel the image of academically "less than" the norm, which is currently connected to students with disabilities. The language, like "suffers" and "cannot gain from academic study," used by judges and lawyers in cases citing reasonable accommodation warrant a dominant look into societal legal perceptions regarding individuals who are already at an inherent societal disadvantage.

Conclusion

In summary, the main conclusion from the quantitative analysis is that the student must understand her/his disability and have corresponding documentation to substantiate the disability and the requested accommodation. The student shoulder's the burden of proof to show s/he has a disability, her/his need for the requested accommodation and s/he followed the IHE/examination agency/professional board's policies. In order to accomplish all or one of the aforementioned, the student must also know legal definitions for disability labels and have precedent case knowledge.

Conclusions from the qualitative analysis are that a reasonable accommodation is a process. As cited in past literature, the concept of a reasonable accommodation is not a global definition or an absolute standard and must adhere to the rulings from precedent cases. Primarily, the grounded theory concluded the rulings from precedent cases are the standard and are rarely reversed or challenged. Therefore, if a[n] IHE/examination agency/professional board is utilizing the information cited in past cases as a daily practice, then the likelihood of the IHE/examination agency/professional board being involved in court litigation is minimized substantially. The responsibility of IHE's to adhere to Section 504 and the ADA becomes increasingly clearer when professionals and students with disabilities interact.

The data in both the quantitative and qualitative analysis show that postsecondary institutions have an advantage over students with disabilities. When actually describing what a reasonable accommodation is the courts use two prominent cases to define a process by which a student or a university faculty member could use on an individual basis. Along with common judgment, students with disabilities and IHE/examination agency/professional board professionals must use the Federal guidelines as a starting point and then keep abreast of judicial or decision-makers rulings in order to operationalize reasonable accommodation into their daily academic lives. The challenging portion of the reasonable accommodation concept is the manner in which each person interprets the process.

The manner in which a student with a disability or an IHE/examination agency/professional board professional learns a concept is convoluted, as described by educational psychologists. A concept is a way of mentally grouping or categorizing objects or events. For instance, the concept furniture encompasses such objects as chairs, tables, beds, and desks (Ormrod, 2000). Similarly, the concept reasonable accommodation encompasses such objects as auxiliary aids, course substitution, curriculum development and demeanor. In some cases, students with disabilities and IHE/examination agency/professional board professionals undergerneralize a concept and in turn they have too narrow a view as to which objects or events are included. Like with reasonable accommodation, some students with disabilities learn if they have not used an accommodation before, it is difficult for them to conceptualize that they need an accommodation now. The students tend to undergeneralize the concept of reasonable accommodation and sometimes realize the need for an accommodation after a course is almost ended. On other occasions, students or IHE/examination agency/professional board professionals may overgeneralize the concept of reasonable accommodation. They may identify objects and events as examples of a concept when in fact they are not examples. Generalizing to a segment of the population tends to fall in overgeneralization of a concept. Such as, a professional accommodating one student with a learning disability by allowing a course extension and therefore, every future student with a learning disability also automatically receives a course extension. Students with disabilities and IHE/examination agency/professional board professionals do not fully understand what the concept of reasonable accommodation is until they can identify both examples and nonexamples of the concept with complete accuracy. To be able to provide examples and non-examples, experience and knowledge of others experiences through court texts are ways to be sure to understand the concept of reasonable accommodation (Ormrod, 2000).

The most common way of explaining concepts is through feature lists and or prototypes. The Federal guidelines provide both a feature lists and prototypes of what a reasonable accommodation is in the postsecondary setting. The difficulty of explaining all concepts of learning strictly in terms of feature lists and prototypes is we categorize an object depending on the context in which we find it. Therefore, if most people use the Federal guidelines as a means of describing a reasonable accommodation, they run the risk of undergeneralization. Without incorporating the judicial opinions of past cases, the lay public does not fully understand the concept of reasonable accommodation. The theoretical model emerged to produce the interconnectedness of concepts in order for students with disabilities and IHE/examination agency/professional board professionals and way to live the process of the concept: reasonable accommodation.

In addition to learning the concept, reasonable accommodation, students with disabilities and IHE/examination agency/professional board professionals also must learn how concepts are interrelated to many situations, concepts are nested within one another in a hierarchical fashion. The more general, all-encompassing concepts (those near the top of the hierarchy) the more they are likely to be relatively abstract, whereas the more specific ones (those near the bottom of hierarchy) tend to be fairly concrete. A phenomenon known as single classification, describe people unable to view objects as belonging to two or more categories at the same time. The multiple classification, is when people reach the concrete operational stage. From the perspective of concept learning, the ever, multiple classification is not an ability that children either have or don't have. Instead, children become able to categorize objects in tow or mores simultaneously when they learn how various concepts are interrelated – knowledge that is likely evolve, at least in part, as a result of formal education.

The cumbersome element to implementing the process of reasonable accommodation is based on the reliance between two parties, the students with disabilities and the IHE/examination agency/professional board professional. Both stakeholders rarely interact prior to the students with disabilities entering into the postsecondary setting.

The limited contact between the primary stakeholders makes it difficult for conceptual ideas of a reasonable accommodation to come to fruition. Therefore, the concepts held by each stakeholder do not produce a symbiotic or compatible process. While the IHE/examination agency/professional board's are creating policies to assist individuals with disabilities, the individuals with disabilities are trying to identify their accommodation needs based on an academic environment they have yet to experience.

In addition, the court system is steadfast in judicial opinions being in line with past decisions. As with other venues of court litigation, past cases, which set the precedent for the lawsuit, are the standard. Studies incorporating lawsuit research and race equity are inherently similar to cases involving individuals with disabilities. Chavez (1995) identified factors related to legal experiences for individuals citing race discrimination that are similar to cases for students with disabilities. She notes that most cases are argued in the narrow context of social privilege and sums up her position by stating:

> The current legal system and higher education institution were originally developed to service the needs of a particular and homogenous group of persons...middle and upper class white males. Theses systems perhaps worked well in that context; but the world has changed a great deal and dispute resolution and protective systems must continue to evolve into systems that are effective within an increasingly diverse society. In addition, we must look beyond systems of dispute resolution into new paradigms for the entire higher education system. Universities and colleges must continue to seek out the ways in which our own systems reflect biases and priorities and continually seek better ways to serve out students, out academic communities, and society. (Chavez, 1995, p 18)

As with most legalese, the intent of legislation is to better good of the whole. However, the road to implementing the better good is laden with lawsuits trying to define words instead of providing detailed processes. This study confirms that each stakeholder has a perceived role by the judicial system, whether that is a victim of circumstance or an uninformed faculty member. Higher education is currently not offering the best academic experience for students with disabilities. The postsecondary settings should be at the forefront of creative endeavors to teach all students and not stop thinking about how to find a reasonable accommodation by hiding behind the deference of the court. The laws are not allowing change to occur simply because laws exist. However, the laws do give parameters to students and IHE/examination agency/ professional board professionals. The parameters now need people to strive to break the past historical precedence.

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APPENDICIES

APPENDIX A

Case List

Appendix A: Case list.

Federal Cases		
	Case Number	Case Name
1	03-97-0541	Price v. National Board of Medicine
2	00-92-3711	McGregor v. Louisiana State University Board of Supervisors
3	00-90-1311	Natheson v. School of Medicine; College of Pennsylvania
4	00-97-9162	Bartlett v. New York State Law Examiners
5	CV-96-0823©	Maczazyj v. State of New York
6	2-95CV2	Dubois v. Alderson – Broaddue College
7	94-521-5D	Lee v. Trustees of Dartmouth
8	96-3450	Knapp v. northwestern
9	95-3681	Linson v. Trustees of University of Pennsylvania
10	5-94cv 193c	Tips v. Regents of Texas Tech.
11	95-2321	Pahulu v. university of Kansas
12	95-cv-0477	Smith v. SUNY System
13	97-2249	McGuinness v. University of New Mexico School of Medicine
14	97civ0193ss	Pell v. Trustees of Columbia
15	4-97-cv2592-djs	Tatum v. NCAA and Saint Louis University
16	96-11426-pbs	Guckenberger v. Boston University
17	97-4041	Kaltenberger v. Ohio University College of podiatry
18	97-16708	Zukle v. Regent of University of California School of Medicine
19	99-cv-72190dt	Gonzalez v. National Board of medical Examiners
20	99-4532	Doe v. National board of Medical Examiners
21	04-94-2143	Rutschman v. University of North Carolina ~ Greensboro
22	94-66721	Ohio Civil Rights v. Case Western Reserve School of Medicine
23	92-1437	Wynne v. Tufts School of Medicine

Office for Civil Rights Complaint's		
1	09-91-2157	Loyola Marymount University
2	09-92-2101-I	University of California Davis
3	1993	University of California
4	02-94-2074	Education Testing Service
5	03-94-2099	University of Virginia ~ Commonwealth
6	04-94-2143	University of North Carolina ~ Greensboro
7	05-94-2197	Redacted
8	08-94-2090	University of Colorado
9	09-94-2077	California State University ~ Long Beach
10	10-94-2022	Bellevue Community College
11	01-95-2089	Salem State College
12	02-95-2012	Cumberland College
13	03-95-2055	West Virginia University
14	04-95-2146	York Technical College
15	05-95-2109	Northern Michigan University
16	05-95-2004	University of Wisconsin School of Law
14	05-95-2105	University of Wisconsin ~ Madison
18	08-95-2111	Dixie College
19	09-95-2154-I	California State University ~ Sacramento
20	09-95-2065-I	Western State University College of Law
21	09-95-2189	Los Angeles Community College
22	09-95-2196-I	California State University ~ Sacramento

Appendix A: Case list.

23	10-95-2031	Columbia Basin College
24	01-96-2053	Bates College
25	01-96-2088	New England School of Law
26	01-96-2085	University of Massachusetts
27	03-96-2078	Chesapeake College
28	04-96-2051	Wingate University
29	05-96-2101	Ball State University
30	06-96-2068	University of Oklahoma
31	09-96-2148	University of Laverne
32	09-96-2149	Golden Gate University
33	09-96-2150	Cabrillo Community College
34	09-96-2151-I	Mount San Antonio College
35	09-96-2056-I	San Jose State University
36	09-96-2200-I	San Francisco State University*
37	09-96-2212-I	San Francisco State University
38	09-96-2206	Hastings College of Law
39	10-96-2044	Edmonds Community College
40	10-96-2053	Everett Community College
41	11-96-2006	University of Virginia
42	01-97-2006	Northeastern University
43	01-97-2095	University of Massachusetts ~ Boston
44	01-97-2005	Central Connecticut State University
45	02-97-2119	Briarcliffe College
46	02-97-2045	Corning Community College
47	03-97-2062	Hood College
48	04-97-2032	Florida Atlantic University
49	05-97-2038	Northern Central Technical College
50	09-97-2007	University of California San Diego
51	09-97-2053	San Jose State University*
52	09-97-2053-I	San Jose State University*
53	09-97-2093	San Jose City College
54	09-97-2145	City College of San Francisco
55	02-98-2038	Audrey Cohan College
56	03-98-2077	Villanova University
57	05-98-2033	College of DuPage
58	09-98-2180	California State University ~ Fullerton
59	09-99-2101-I	California School for Professional Psychology, Fresno
60	09-99-2078	San Diego Community College District

APPENDIX B

Freedom Of Information Act {F.O.I.A.} request.

January 17, 2000

Office for Civil Rights–Boston Office
U.S. Department of Education
J. W. McCormack Post Office & Courthouse
Room 707, 01-0061
Boston, MA 02109-4557

Attn: F.O.I.A. Officer

To Whom It May Concern:

I am currently a doctoral candidate at Colorado State University and my research is incorporating several cases from your region. Please accept this fax as a formal F.O.I.A. request for any or all of the following items:

1. *Letter of finding;*
2. *Resolution letter; and/or*
3. *Commitment to resolve.*

In regards to the following cases:

01-95-2030	Lesley College
01-95-2089	Salem State college
01-96-2053	Bates College
01-96-2088	New England School of Law
01-96-2085	University of Vermont
01-97-2005	Central Connecticut State University
01-97-2006	Northeastern University
01-97-2095	University of Massachusetts
01-97-2014	University of Massachusetts

I understand that several of these cases could be archived; however, as soon as you are able to retrieve the above information please send it to either my email address:
Sahlen@lamar.colostate.edu

Or my home address:
1801 Wynkoop Street, #204
Denver, CO 80202

I would like to thank you in advance for all your time and effort, it is definitely appreciated! If you believe it will take longer than three weeks, please contact me at the following phone number: 303.293.9941.

Respectfully,

Cheryl A. Hurtubis Sahlen

UNITED STATES DEPARTMENT OF EDUCATION
REGION I
JOHN W. McCORMACK POST OFFICE AND COURTHOUSE, ROOM 222
POST OFFICE SQUARE
BOSTON, MASSACHUSETTS 02109

FEB 11 2000

OFFICE FOR
CIVIL RIGHTS

Ms. Cheryl A. Hurtubis Sahlen
1801Wynnkoop Street, #204
Denver. Colorado 80202

Dear Ms. Sahlen:

This is in response to your Freedom of Information Act (FOIA) request received in the Office for Civil Rights (OCR) on January 18, 2000. Specifically you requested a copy of the Letter of Findings or resolution letter and the corrective action agreement in nine cases filed against schools that you identified. The letters and the agreements, in the cases where an agreement resulted, are enclosed. We have also enclosed OCR's letter in response to the complainant's request for reconsideration of our findings in one of the cases (01-97-2095). Another case (01-97-2014) resulted in administrative closure because the complaint was untimely and the complainant did not provide a signed consent form. A copy of that letter is enclosed as well.

Under Department of Education regulations for FOIA requests, a photocopying fee of $.10 per page is charged exclusive of 100 pages that are provided at no cost. Since the number of pages in our response to your request is under 100, there is no charge for the documents. If you have any questions, please do not hesitate to contact Nancy Taylor at (617) 223-9690 or me at (617) 223-9683.

Sincerely,

Carolyn F. Lazaris

Carolyn F. Lazaris
Program/Administrative Manager

Enclosures

APPENDIX C

Thornton & Wingate draft coding.

Draft 11/9/98
Coding System
Federal District Court Cases Involving Age Discrimination, Reductions in Force, and Statistics

Coder Name _____

Case Identification

1. Case ID number (# circled at the top of the case)_____

2. Plaintiff name(s) alleging age discrimination_____

3. Defendant name(s) _____

Court Information

4. District Court location _____

5. Date decided _____

6. Trier of fact
   Judge (1) _____ Judge name _____
   Jury (2)_____

7. Judge party affiliation (ignore this item; Pete will code later)
   Democrat (1) _____
   Republican (2) _____

8. Other Federal discrimination claims alleged by the plaintiff(s) claiming age discrimination
   (Check all that apply)
   Gender discrimination (1) _____
   Racial discrimination (2) _____
   Disability (3) _____
   Other Age discrimination statute (i.e. state age law) (4)_____
   _____

Plaintiff Characteristics

9. Number of plaintiffs (that alleged age discrimination and received judgment) _____

10. Type of suit
    Individual (1)_____
    Class action (2) _____

11. Age of plaintiff(s) when terminated _____

12. Age of plaintiff(s) when hired by the company _____

13. Age of plaintiff (s) when hired for the position from which later terminated _____

14. Plaintiff race
    White (1) _____
    Black (2) _____
    Hispanic (3) _____
    Asian American (4) _____
    Other (5) _____
    Unknown (6) _____

15. Plaintiff gender
    Male (1) _____
    Female (2) _____
    Unknown (3) _____

16. Job of plaintiff immediately prior to termination _____

17. Plaintiff job tenure (for job listed above in item 16) _____

18. Plaintiff job tenure at the company _____

19. EEO 1 job category of plaintiff(s) (of job held immediately prior to termination; write in number from list below) _____
    1. Official and managers
    2. Professional
    3. Technician
    4. Sales
    5. Office and clerical
    6. Craft-skilled
    7. Operatives-semi-skilled
    8. Laborers-unskilled
    9. Service workers

Defendant Organization Characteristics

20. Number of employees (√ one)
    <100 (1) _____
    100-500 (2) _____
    >500 (3) _____
    Unknown (4) _____

21. Industry _____

22. Organization is
    Private (1) _____
    Public (2) _____
    Unknown (3) _____

The Reduction in Force (Layoff, Downsizing) Procedure

23. Adverse employment actions taken against plaintiff *prior* to termination (√ all that apply)
    None (1)_____
    Demotion (2) _____
    Pay Cut (3)_____
    Transfer (4) _____
    Other (5) _____

24. Nature of organizational RIF (√ all that apply)
    Merger with another company (1)_____
    Consolidation of units within organization (2) _____
    Elimination of all similar positions (3) _____
    Elimination of poorest performers in plaintiff position (4) _____
    Elimination of poorest performers in various, different positions (5) ____
    Reorganization of job duties and responsibilities (6) _____
    Other (7) _____

25. Stated reason for RIF _____

26. Was there a concrete, written RIF policy prior to termination?
    No (1)_____
    Yes (2)_____
    Unknown (3) _____

27. Who made the decision to fire the plaintiff?
    Immediate supervisor (1)_____
    Other (specify) (2)_____
    Unknown (3) _____

28. Was the individual who *fired* the plaintiff the same individual who *hired* the plaintiff?
    No (1)_____
    Yes (2)_____
    Unknown (3) _____

29. Was the decision to terminate reviewed by other personnel?
    No (1)_____
    Yes (2)_____ If Yes, state position of reviewer_____
    Unknown (3) _____

30. Was the RIF
    A unique occurrence for the organization (1) _____
    Part of an ongoing series of layoffs (2) _____
    Unknown (3) _____

31. Was performance evaluation/appraisal used with the RIF?

No (1)_____
Yes (2) _____
Unknown (3) _____

If Yes, was the performance appraisal based on:
(√ all that apply)
Traits (4)_____
Behaviors/results (5)_____
Job Analyses (6)_____
Other (7)_____
Unknown (8)_____

32. Was *poor* performance (or *poorer* than other retained employees) by the plaintiff?

Not documented by the defendant (1) _____
Documented by the defendant (2) _____
Other (3) _____
Unknown (4) _____

33. According to the trier of fact, was the employee replaced after being terminated?

No (1)_____
Yes (2) _____
If Yes, was the new employee
Younger (3) _____
Same age or older (4)_____
Unknown age (5) _____
Unknown (6) ____

34. *If* the RIF encompassed a reorganization of job duties or responsibilities, did the organization assess the capability of the plaintiff to perform the different/new duties (go to question 35 if RIF did not involve reorganization of duties)?

No (1)_____
Yes (2) _____

If yes, how? (√ all that apply)
Performance appraisal (3)_____
Supervisor judgment (4)_____
Other (5) _____

The Disparate Treatment Claim

35. Did the plaintiff successfully establish a **prima facie** case?

No (1)_____
Yes (2) _____

36. Which steps of the prima facie case were proven successfully to the trier of fact (√ all that apply)?

Proved membership in protected class (1)_____
Proved qualified for the position (satisfactory job performance) (2) _____
Suffered adverse employment decision (fired) (3) _____
Younger employee(s) retained (4)_____
Discharge circumstances lead to inference of age discrimination (5) _____

37. Did the employer successfully present a **legitimate non-discriminatory reason** for termination?

No (1)_____
Yes (2) _____
If yes, what was the reason (√ all that apply):
Economic reasons (3) _____
Employee performance (4) _____
Employee qualifications (5)_____
Disciplinary issues (6) _____
Other (7) _____

38. Did the plaintiff claim that the employer's reason for termination was **pretext** for discrimination?

No (1)_____ Go to question 40.
Yes (2) _____
If Yes, what types of evidence did the plaintiff produce?
Age-related comments (3) _____
Statistical evidence (4)_____
Evidence regarding retained workers (5)_____
Evidence regarding plaintiff performance (6) _____
Evidence that employer denied training or made no attempt to place the plaintiff in another position (7) ____
Other (8) _____

39. Was the plaintiff's claim of pretext successful?

No (1)_____
Yes (2) _____
If Yes, what evidence of pretext did the judge rely on (√ all that apply)?
Age-related comments (3) _____
Statistical evidence (4)_____
Evidence regarding retained workers (5)_____
Evidence regarding plaintiff performance (6) _____
Evidence that employer denied training or made no attempt to place the plaintiff in another position (7) _____
Other (8) _____

Statistical Evidence Related to *Employment* (not financial) Practices

40. Which of the following types of statistical evidence did the **plaintiff** introduce during any phase of the case? Which of the statistics presented were found probative (relevant and valid) or not probative by the judge? Enter in the correct numbers from the list at the bottom of the page.

Plaintiff Presented (Place number for **one** type of statistic per line, #1-8)	**Probative** Because (may place multiple numbers per line, choose from #'s 9-18)	**Not Probative** Because (may place multiple numbers per line, choose from #'s 9-18)

41. Which of the following types of statistical evidence did the **Defendant** introduce during any phase of the case? Which of the statistics presented were found probative (relevant and valid) or not probative by the judge? Enter in the correct numbers from the list at the bottom of the page.

Defendant Presented (Place number for **one** type of statistic per line, #1-8)	**Probative** Because (may place multiple numbers per line, choose from #'s 9-18)	**Not Probative** Because (may place multiple numbers per line, choose from #'s 9-18)

Type of Statistic (Goes in Column 1)
Mean age comparison (1)
Percentage age comparison (2)
Standard deviation analyses (3)
T-test comparison (4)
Chi-square analyses (5)
Regression analyses (6)
Other/unknown (7) _____
_____
Other/unknown (8) _____
_____

Probative Value (Goes in Column 2 and/or 3)
Sample size
- Small (9)
- Large (10)

Statistical significance
- Not significant (11)
- Significant (12)

Magnitude of findings (Practical Significance)
- Too small (13)
- Large and/or valuable (14)

Comparison group (e.g. older vs. younger workers)
- Incorrect (15)
- Correct (16)

Other reason (17) _____
Other reason (18) _____

Disparate (Adverse) Impact Claim

42. Did the plaintiff allege disparate impact?
No (1)_____ Go to question 44
Yes (2) _____
If Yes, did the judge allow the use of disparate impact theory under the ADEA?
No (3)_____
Yes (4) _____

43. What employment practice did the plaintiff claim resulted in disparate impact?
Defendant's layoff policy/procedure (1) _____
Other (2) _____

44. Trial Result for the ADEA claim (√ one)

For Defendant
Summary judgment granted for defendant (1) _____
Jury verdict for defendant (2) _____
Reversal of jury verdict by judge, defendant prevails (3)_____
Trial (judge) verdict for defendant (4) _____

For Plaintiff
Summary judgment granted for plaintiff (5)_____
Jury verdict for plaintiff (6) _____
Trial (judge) verdict for plaintiff (7)_____

For Neither/Both
Summary judgment denied for defendant (8)_____
Other (9) _____

45. **If the plaintiff won**, what type of damages were awarded (write in amount if known)?
Back pay (1)_____
Front pay (2) _____
Lost pension benefits (3) _____
Liquidated damages (4) _____
Attorney fees (5) _____
Contingency multiplier (6) _____
Other (7) _____

Any additional questions, comments, or difficulties in coding this case?

_____
_____
_____
_____
_____
_____
_____
_____
_____

APPENDIX D

Line by line iteration coding changes.

Appendix D: Line by line iteration coding changes.

First Iteration Coding System.

Wingate & Thorntons' coding questions.	First Iteration: Explanation of resulting codes.
Coder Name	Remained the same.
Case Identification	
1. Case ID Number	1. Remained the same.
2. Plaintiff name(s)	2. Remained the same.
3. Defendant name(s)	3. Remained the same.
Court Information	
4. District Court location	4. Remained the same.
5. Date decided	5. Remained the same.
6. Trier of fact	6.
Judge (1)	Remained the same.
Jury (2)	*Omitted. Sample included cases reviewed by judges or OCR officials.*
7. Judge part affiliation	*7. Omitted. Determined irrelevant to current study.*
8. Other Federal discrimination claims alleged by the plaintiff(s) claiming age discrimination.	*8. Omitted. Determined irrelevant to current study.*
Plaintiff Characteristics	**Plaintiff / Student Characteristic**
9. Number of plaintiffs (that alleged discrimination and received judgement)	9. Remained the same.
10. Type of suit	10.
Individual	Remained the same.
Class Action	Remained the same. Determined from legal counsel that OCR cases can be class action complaint's. See Chapter I, page 7.
11. Age of plaintiff(s) when terminated	*11. Omitted. Determined irrelevant to current study.*
12. Age of plaintiff(s) when hired by the company	*12. Omitted. Determined irrelevant to current study.*
13. Age of plaintiff(s) when hired for the position from which later terminated.	*13. Omitted. Determined irrelevant to current study.*
14. Plaintiff race	14. Remained the same.
15. Plaintiff gender	15. Remained the same.
16. Job of plaintiff immediately prior to termination.	*16. Omitted. Determined irrelevant to current study.*
17. Plaintiff job tenure (for job listed above in item #16)	*17. Omitted. Determined irrelevant to current study.*
18. Plaintiff job tenure at the company.	*18. Omitted. Determined irrelevant to current study.*
19. EEO 1 job category of plaintiff(s)	19. Remained and altered to the following choices based on disability: • Learning Disability • Blind / Visually Impaired • Mental Health Impairments • Deaf / Hearing Impaired • Physical / Mobility Impaired
Defendant Organization Characteristics	**Defendant University/IHE Characteristics**
20. Number of employees.	20. Remained in current study ~ altered to code as Number of students.
21. Industry.	*21. Omitted. Determined irrelevant to current study.*
22. Organization is:	22. Remained in current study ~ altered to code as University is:
Reduction in Force (Layoff, Downsizing)	***Omitted heading.***

Appendix D: Line by line iteration coding changes.

Procedure	
23. Adverse employment actions taken against plaintiff prior to termination.	23. Remained in current study ~ altered to code as Adverse institution actions taken against plaintiff prior to accommodation.
24. Nature of organization RIF	*24. Omitted. Determined irrelevant to current study*
25. Stated reason for RIF	25. Remained in current study ~ altered to code as Stated reason for not accommodating student.
26. Was there a concrete, written RIF policy prior to termination.	26. Remained in current study ~ altered to code as Was there a concrete, written disability policy prior to claim?
27. Who made the decision to fire the plaintiff?	27. Remained in current study ~ altered to code as Who made the decision to not accommodate the student?
28. Was the individual who fired the plaintiff the same individual who hired the plaintiff?	28. Remained in current study ~ altered to code as Was the individual who did not accommodate the plaintiff, named in the suit?
29. Was the decision to terminate reviewed by other personnel?	29. Remained in current study ~ altered to code as Was the decision to not accommodate the plaintiff reviewed by other personnel?
30. Was the RIF: A unique occurrence: Part of an ongoing series of layoffs: Unknown:	30. Remained in current study ~ altered to code as Was the 'accommodation' suit:
31. Was performance evaluation/appraisal used with the RIF?	*31. Omitted. Determined irrelevant to current study.*
32. Was poor performance (or poorer than other retained employees) by the plaintiff?	31. Remained in current study ~ altered to code as Was poor performance (or poorer than other students) cited?
33. According to the trier of fact, was the employee replaced after being terminated?	*33. Omitted. Determined irrelevant to current study.*
34. If the RIF encompassed a reorganization of job duties or responsibilities...	*34. Omitted. Determined irrelevant to current study.*
The Disparate Treatment Claim	
35. Did the plaintiff successfully establish a prima facie case?	35. Remained in current study ~ altered to code as Did the plaintiff successfully establish a prima facie/disability case?
36. Which steps of the prima facie case were proven successfully to the trier of fact?	36. Remained in current study ~ altered to code as Which steps of the prima facie case were proven successfully to the trier of fact? Proved membership in protected class: Proved qualified student:
37. Did the employer successfully present a legitimate non-discriminatory reason for termination?	37. Remained in current study ~ altered to code as Did the institution successfully present a legitimate non-discriminatory reason for not accommodating? Yes: If yes, what was the reason: Undue hardship: Compromised curriculum: Student performance with accommodation: Other: No:
38. – 41.	*38. - 41. Omitted. Determined irrelevant to current study.*

Appendix D: Line by line iteration coding changes.

Disparate (Adverse) Impact Claim	***Omitted heading.***
42. Did the plaintiff allege disparate impact?	*42. Omitted. Determined irrelevant to current study.*
43. What employment practice did the plaintiff claim resulted in disparate impact?	*43. Omitted. Determined irrelevant to current study.*
44. Trial Result for the ADEA claim	**44. Remained in current study ~ altered to title as: Trial Result for the ADA claim.**
45. Summary judgement granted for the defendant: Summary judgment granted for the plaintiff:	45. Remained the same.

Appendix D: Line by line iteration coding changes.

Second Iteration Coding System.

First iteration coding questions.	Second iteration coding questions.
Coder Name	Remained the same.
Case Identification	
1. Case ID Number	1. Remained the same.
2. Plaintiff name(s) alleging violation of Section 504/ADA:	2. Remained the same.
3. Defendant name(s)	3. Remained the same.
Court Information	
4. District Court location	4. Remained the same.
5. Date decided	5. Remained the same.
6. Trier of fact	6. Remained the same.
Judge (1)	
Plaintiff / Student Characteristic	**Plaintiff / Student Characteristic**
7. Number of plaintiffs (that alleged discrimination and received judgement)	7. Remained the same.
8. Type of suit	8.
Individual	Remained the same.
Class Action	Remained the same.
9. Plaintiff race	9. Remained the same.
10. Plaintiff gender	10. Remained the same.
11. Sufficient evidence to add.	***11. Schooling of plaintiff prior to suit:*** • ***High school*** • ***Undergraduate*** • ***Graduate*** • ***Professional***
12. EEO 1 job category of plaintiff(s)	12. Remained and altered to the following choices based on disability: • Learning Disability • Blind / Visually Impaired • Mental Health Impairments • Deaf / Hearing Impaired • Physical / Mobility Impaired
Defendant Organization Characteristics	**Defendant University/IHE Characteristics**
13. Number of students.	13. Remained the same.
14. Sufficient evidence to add.	***14. Type of institution attending:*** ***2 year college:*** ***4 year college:*** ***Professional school:*** ***Professional exam/board:***
15. University is:	15. Remained the same.
The Institution Procedure of Federal Policy	
16. Adverse institution actions taken against plaintiff *prior to accommodation*..	16. Remained the same.
17. Sufficient evidence to add.	***17. Sections filed under:*** ***Section 504*** ***ADA***
18. Stated reason for not accommodating.	18. Remained the same.

Appendix D: Line by line iteration coding changes.

19. Was there a concrete, written disability policy prior to claim?	19. Remained the same.
20. Who made the decision to not accommodate the student?	20. Remained the same.
21. Was the individual who did not accommodate the plaintiff, named in the suit?	21. Remained the same.
22. Was the decision to not accommodate the plaintiff reviewed by other personnel?	22. Remained the same.
23. Was the 'accommodation' suit: A unique occurrence: Part of an ongoing series of layoffs: Unknown:	23. Remained the same.
24. Sufficient evidence to add.	***24. Was the institution citing 'self-accommodation' as a viable past means of adaptation?*** ***Yes:*** ***No:*** ***Unknown:***
25. Sufficient evidence to add.	***25. Was an assessment used to determine disability?*** ***Yes: If yes, what was the assessment?*** ***No:*** ***Unknown:***
26. Was poor performance (or poorer then other students) cited?	26. Remained the same.
27. According to the trier of fact, was the suit enforceable?	27. Remained the same.
28. If the institution accommodated the plaintiff prior did the institution assess the capability of the plaintiff to perform with the new accommodations?	28. Remained the same.
The Disparate Treatment Claim	
29. Did the plaintiff successfully establish a prima facie disability case?	29. Remained the same.
30. Which steps of the prima facie case were proven successfully to the trier of fact?	30. Remained the same.
31. Did the employer successfully present a legitimate non-discriminatory reason for termination?	31. Remained the same.
32. Trial Result for the ADA claim	**32. Remained the same.**
45. Summary judgement granted for the defendant: Summary judgment granted for the plaintiff:	45. Remained the same.

Appendix D: Line by line iteration coding changes.

Third Iteration Coding System.

Second iteration coding questions.	Third iteration coding questions.
Coder Name	Remained the same.
Case Identification	
1. Case ID Number ***Sufficient evidence to add.***	1. Remained the same. ***OCR docket number:***
2. Plaintiff name(s) alleging violation of Section 504/ADA:	2. Remained the same.
3. Defendant name(s)	3. Remained the same.
Court Information	
4. District Court location ***Sufficient evidence to add.***	4. Remained the same. ***OCR Region:***
5. Date decided	5. Remained the same.
6. Trier of fact	6. Remained the same.
Judge (1) ***Sufficient evidence to add.***	***OCR official:***
Plaintiff / Student Characteristic	**Plaintiff / Student Characteristic**
7. Number of plaintiffs.	7. Remained the same.
8. Type of suit	8.
Individual	Remained the same.
Class Action	Remained the same.
9. Plaintiff race	9. Remained the same.
10. Plaintiff gender	10. Remained the same.
11. Sufficient evidence to change. ***Schooling of plaintiff prior to suit:*** • ***High school*** • ***Undergraduate*** • ***Graduate*** • ***Professional***	***11. Level of education:*** • ***Undergraduate*** • ***Graduate*** • ***Professional***
12. EEOC Type of disability.	12. Remained and altered to the following choices based on disability: • Learning Disability • Blind / Visually Impaired • Mental Health Impairments • Deaf / Hearing Impaired • Physical / Mobility Impaired
Defendant Organization Characteristics	**Defendant University/IHE Characteristics**
13. Number of students.	13. Remained the same.
14. Type of institution attending: 2 year college: 4 year college: Professional school: Professional exam/board:	Remained the same.
15. University is:	15. Remained the same.
The Institution Procedure of Federal Policy	
16. Adverse institution actions taken against plaintiff *prior to accommodation.*.	16. Remained the same.
17. Sections filed under: Section 504	17. Remained the same.

Appendix D: Line by line iteration coding changes.

ADA	
18. Stated reason for not accommodating. Sufficient evidence to change.	***19. Stated reason for not accommodating:***
19. Was there a concrete, written disability policy prior to claim?	19. Remained the same.
20. Who made the decision to not accommodate the student?	20. Remained the same.
20. Was the individual who did not accommodate the plaintiff, named in the suit? Sufficient evidence to change.	***21. Omitted. Determined insufficient evidence within cases & complaints.***
22. Was the decision to not accommodate the plaintiff reviewed by other personnel?	22. Remained the same.
23. Was the 'accommodation' suit: A unique occurrence: Part of an ongoing series of layoffs: Unknown:	23. Remained the same.
24. Was the institution citing 'self-accommodation' as a viable past means of adaptation? Yes: No: Unknown:	24. Remained the same.
25. Was an assessment used to determine disability? Yes: If yes, what was the assessment? No: Unknown:	25. Remained the same.
26. Was poor performance (or poorer then other students) cited?	26. Remained the same.
27. According to the trier of fact, was the suit enforceable?	***27. Omitted. Determined irrelevant to current study..***
28. If the institution accommodated the plaintiff prior did the institution assess the capability of the plaintiff to perform with the new accommodations?	28. Remained the same.
The Disparate Treatment Claim	
29. Did the plaintiff successfully establish a prima facie disability case?	29. Remained the same.
30. Which steps of the prima facie case were proven successfully to the trier of fact?	30. Remained the same.
31. Did the employer successfully present a legitimate non-discriminatory reason for termination?	31. Remained the same.
32. Trial Result for the ADA claim	**32. Remained the same.**
33. Summary judgement granted for the defendant: Summary judgment granted for the plaintiff:	33. Remained the same.

Appendix D: Line by line iteration coding changes.

Final Iteration Coding System.

Third iteration coding questions.	Final iteration coding questions.
Coder Name	Remained the same.
Case Identification	
1. Case ID number OCR docket number	1. Remained the same.
2. Plaintiff name(s) alleging violation of Section 504/ADA:	2. Remained the same.
3. Defendant name(s)	3. Remained the same.
Court Information	
4. District Court location OCR Region	4. Remained the same.
5. Date decided ***Sufficient evidence to add.***	5. Remained the same. ***If OCR case, then date filed:***
6. Trier of fact	6. Remained the same.
Judge (1) FOIA (2)	
Plaintiff / Student Characteristic	**Plaintiff / Student Characteristic**
7. Number of plaintiffs.	7. Remained the same.
8. Type of suit	8.
Individual	Remained the same.
Class Action	Remained the same.
9. Plaintiff race	***9. Omitted. Determined insufficient evidence.***
10. Plaintiff gender	10. Remained the same.
11. Level of education: • Undergraduate • Graduate • Professional	11. Remained the same.
12. EEOC Type of disability.	12. Remained and altered to the following choices based on disability: • Learning Disability • Blind / Visually Impaired • Mental Health Impairments • Deaf / Hearing Impaired • Physical / Mobility Impaired ***Sufficient evidence to add:*** • ***Perceived disabled*** • ***Other***
Defendant Organization Characteristics	**Defendant University/IHE Characteristics**
13. Number of students.	13. Remained the same.
14. Type of institution attending: 2 year college: 4 year college: Professional school: Professional exam/board:	Remained the same.
15. University is:	15. Remained the same.
The Institution Procedure of Federal Policy	
RE-ORGANIZED QUESTION SEQUENCE	
16. Adverse institution actions taken against	16. Remained the same.

Appendix D: Line by line iteration coding changes.

plaintiff *prior to accommodation..*	
17. Sections filed under: Section 504 ADA	17. Remained the same.
18. Stated reason for not accommodating. Sufficient evidence to change.	***19. Stated reason for not accommodating:***
19. Was there a concrete, written disability policy prior to claim?	19. Remained the same.
20. Who made the decision to not accommodate the student?	20. Remained the same.
20. Was the individual who did not accommodate the plaintiff, named in the suit? Sufficient evidence to change.	***21. Omitted. Determined insufficient evidence within cases & complaints.***
22. Was the decision to not accommodate the plaintiff reviewed by other personnel?	22. Remained the same.
23. Was the 'accommodation' suit: A unique occurrence: Part of an ongoing series of layoffs: Unknown:	23. Remained the same.
24. Was the institution citing 'self-accommodation' as a viable past means of adaptation? Yes: No: Unknown:	24. Remained the same.
25. Was an assessment used to determine disability? Yes: If yes, what was the assessment? No: Unknown:	25. Remained the same.
26. Was poor performance (or poorer then other students) cited?	26. Remained the same.
27. According to the trier of fact, was the suit enforceable?	***27. Omitted. Determined irrelevant to current study..***
28. If the institution accommodated the plaintiff prior did the institution assess the capability of the plaintiff to perform with the new accommodations?	28. Remained the same.
The Disparate Treatment Claim	
29. Did the plaintiff successfully establish a prima facie disability case?	29. Remained the same.
30. Which steps of the prima facie case were proven successfully to the trier of fact?	30. Remained the same.
31. Did the employer successfully present a legitimate non-discriminatory reason for termination?	31. Remained the same.
32. Trial Result for the ADA claim	**32. Remained the same.**
33. Summary judgement granted for the defendant: Summary judgment granted for the plaintiff:	33. Remained the same.

Appendix D: Line by line iteration coding changes.

APPENDIX E

Coding system.

Coding System
Supreme & Federal District Court Cases and Office for Civil Rights complaints involving Section 504/ADA

Coder Name:_____

Case Identification

1. Case ID number: _____
   OCR docket number: _____

2. Plaintiff name(s) alleging violation of Section 504 / ADA:_____

3. Defendant name(s):_____

Court Information

4. District Court location (1):_____
   OCR Region (2):_____

5. Date decided:_____
   If OCR case. then date filed:_____

6. Trier of fact:*
   Judge (1):_____ Judge name:_____
   FOIA (2):_____ FOIA officer:_____

Plaintiff Characteristics

7. Number of plaintiffs:_____

8. Type of suit:*
   Federal Individual (1):_____
   Federal Class Action (2):_____

9. Plaintiff gender:*
   Female (1):_____
   Male (2):_____
   Unknown (3):_____

10. Level of current education:
    High school:_____ Undergraduate:_____
    Graduate:_____ Professional:_____

11. EEOC Type of disability:
    Learning Disability:_____ Deaf / Hearing Impaired:_____
    Blind / Visually Impaired:_____ Physical / Mobility Impaired:_____
    Mental Health Impairments:_____ Perceived disabled:_____
    Other:_____

* Denotes for descriptive statistics only

Defendant Institution Characteristics

12. Number of students:*
    <5.000 (1):_____
    5.000 – 10.000 (2):_____
    10.000> (3):_____
    Unknown (4):_____

14. Type of institution attending:*
    2 year college (1):_____
    4 year college (2):_____
    Professional school (3):_____
    Professional exam/board (4):_____

15. Institution is:*
    Private (1):_____
    Public (2):_____

The Institutions Procedure of Federal Policy

16. Was there concrete, written disability policy prior to claim?
    Yes (1):_____
    No (2):_____
    Unknown (3):_____

17. Was an assessment used to determine disability?
    Yes (1):_____ *If yes, was the assessment administered by a: MD (a):_____
    No (2):_____ ψ (b):_____
    Unknown (3):_____ Social Worker (c):_____

18. Method of accommodation(s) requested by student/plaintiff:
    Extended test time (1):_____
    Test accommodation (2):_____
    Personal assistance (3):_____
    Altering Test administration (4):_____
    Test location (5):_____
    Course substitution (6):_____
    Course waiver (7):_____
    Extended time to complete course (8):_____
    Extended time to complete degree (9):_____
    Home / Distance learning (10):_____
    Interpreter services (11):_____
    Note taking assistance (12):_____
    Real time captioning (13):_____
    Instruction material in alternate format (14):_____
    Reader services (15):_____
    Tape recordings of lectures/meetings (16):_____
    Other (17):_____

19. Stated reason for denying the accommodation:
    Not otherwise qualified (1):_____ Breech of instution/unversity policy (7):_____
    Timing of notice of disability (2):_____
    Lacking required documentation (3):_____
    Timing of requesting (4):_____
    Did not follow procedures (5):_____
    Sufficient current accommodation (6):_____

* Denotes for descriptive statistics only

20. Who made the initial decision to not accommodate the student?
    Faculty (1):_____
    Administrator (2):_____
    Counselor (3):_____
    Support Service staff (4):_____

21. Was the decision to not accommodate the plaintiff reviewed by other personnel?
    Yes (1):_____ If yes, state position of reviewer:_____
    No (2):_____
    Unknown (3):_____

22. Did the institution cite 'self-accommodation' as a viable past means of adaptation?
    Yes (1):_____
    No (2):_____
    Unknown (3):_____

23. Was poor performance (or poorer than other students) cited as a reason for denying plaintiffs request?
    Not documented by the defendant (1):_____
    Documented by the defendant (2):_____
    If documented, for how many months/years prior to suit was performance poor:_____
    Other (3):_____

24. Institution action taken *prior to the denial of the accommodation request*:
    None (1):_____ Hearing (4):_____
    Transfer of student (2):_____ Dismissal (5):_____
    Other (3):_____

25. Sections filed under:
    Section 504 of the Rehabilitation Act: 29 USC §794:_____
    Title II of the Americans with Disabilities Act: 42 USC §12131:_____

26. If the institution accommodated the plaintiff prior did the institution assess the capability of the plaintiff to perform with the new accommodations?
    Yes (1):_____ If yes, how did the defendant assess the accommodation?_____
    No (2):_____
    Unknown (3):_____

The Disparate Treatment Claim

27. Did the plaintiff successfully establish a prima facie/disability case?
    Yes (1):_____
    No (2):_____

28. Which steps of the prima facie case were proven successfully to the trier of fact?
    a) Proved membership in protected class: Yes (1):_____ No (2):_____
    b) Proved qualified student: Yes (1):_____ No (2):_____

29. Did the institution successfully present a legitimate non-discriminatory reason for not accommodating?
    Yes (1):_____ If yes, go to question 30.
    No (2): _____ If no, go to question 31.

30. What was the reason:
    Undue hardship (3):_____
    Altering curriculum (4):_____
    Student performance w/accommodation (5):_____
    Other (6):_____

* Denotes for descriptive statistics only

Judgment for the Section 504/ADA Claim

31. Final judgement found in favor of the:
Plaintiff / Student (1):_____
Defendant / University / Professional testing institution (2):_____

32. If the plaintiff won, what type of damages were awarded (write in amount if known)?

(a) District Courts
Attorney fees (1):_____
Cost of Accommodation (2): _____
Costs of Tests (3): _____
Cost of Assessment (4):_____
Other (5): Written policy _____

(b) Office for Civil Rights Hearings
Cost of Accommodation (1): _____
Costs of Tests (2): _____
Cost of Assessment (3):_____
Other (4): Written policy_____

33. If the defendant won, what type of damages were awarded (write in amount if known)?
(a) District Courts
Attorney fees (1):_____
Cost of Accommodation (2): _____
Costs of Tests (3): _____
Cost of Assessment (4):_____
Other (5): Dismissal_____

(b) Office for Civil Rights Hearings
Cost of Accommodation (1): _____
Costs of Tests (2): _____
Cost of Assessment (3):_____
Other (4): Insufficient evidence/complaint dismissed_____

* Denotes for descriptive statistics only

APPENDIX F

Qualitative case summaries.

October 6, 1992: Wynne v. Tufts University School of Medicine:

The facts pertinent to Wynne's banishment from the groves of academe are chronicled in our earlier opinion. Wynne matriculated at Tufts in 1983. He failed eight of fifteen first-year courses. Although academic guidelines [**2] provided for dismissal after five course failures, the dean granted Wynne a special dispensation and allowed him to repeat the first year of medical school. Over the summer of 1984, Wynne underwent neuropsychological testing at Tufts' instance and expense. The results showed cognitive deficits and weaknesses in processing discrete units of information. However, no differential diagnosis of dyslexia or any other particularized learning disability was made at this time. During Wynne's second tour of the first-year curriculum, Tufts arranged to supply him with tutors, counselors, note-takers, and other aids. This time, he passed all but two courses: pharmacology and biochemistry. Tufts still did not expel Wynne. Instead, it permitted him to take make-up examinations in these two subjects. He passed pharmacology but failed biochemistry. [In turn,] Wynne was dismissed in September, 1985. Wynne alleged that he was learning-disabled and that Tufts had discriminated against him on the basis of his handicap. In short order, Wynne refined his claim [**3] to allege that his disability placed him at an unfair disadvantage in taking written multiple-choice examinations and that Tufts, had stubbornly refused to test his proficiency in biochemistry by some other means. Eventually, the district court granted summary judgment in Tufts' favor on the ground that Wynne, because of his inability to pass biochemistry, was not an "otherwise qualified" handicapped person within the meaning of section 504 of the Rehabilitation Act of 1973, 29 U.S.C. § 794 (1988).

On appeal, a panel of this court reversed. That opinion was withdrawn, however, and the full court reheard Wynne's appeal. We concluded that, in determining whether an aspiring medical student meets section 504's "otherwise qualified" prong, it is necessary to take into account the extent to which reasonable accommodations that will satisfy the legitimate interests of both the school and the student are (or are not) available and, if such accommodations exist, the extent to which the institution explored those alternatives. See Wynne, 932 F.2d at 24-26

(citing, inter alia [**4] , School Bd. of Nassau County v. Arline, 480 U.S. 273, 94 L. Ed. 2d 307 , 107 S. Ct. 1123 (1987)). [*793] Recognizing the unique considerations that come into play when the parties to a Rehabilitation Act case are a student and an academic institution, particularly a medical school training apprentice physicians, we formulated a test for determining whether the academic institution adequately explored the availability of reasonable accommodations. Wynne still does meet the elements of the test and therefore the summary judgement is for the defendant. (Wynne v. Tufts; 976 F.2d 791; 1992 U.S. App. LEXIS 24933).

December 22, 1994: Ohio Civil Rights v. Case Western Reserve University;

Cheryl Fischer was 27 seven old at the time of the hearing before the OCRC. Ms. Fischer began losing her eyesight in 1982 at 18 years of age. She became legally blind in 1983, and totally blind in 1986 at 22 years of age. Although legally blind, Ms. Fischer was admitted to CWRU as an undergraduate student in 1983. Ms. Fischer majored in chemistry, and minored in nutrition and physics. Such courses included laboratory work. Ms. Fischer also attended summer courses at Cleveland State University (hereinafter "CSU") studying philosophy (1984), science (1986), and psychology (1987). She also participated in a Masters Program at CSU. In August, 1987 Cheryl Fischer graduated cum laude (3.34 G.P.A.) from CWRU with a degree in chemistry. Ms. Fischer was also in the honor Society in Chemistry for Women. While completing her undergraduate degree, Ms. Fischer determined that she would like to become a psychiatrist. Therefore, in October, 1987 Ms. Fischer applied for admission to CWRU School of Medicine after successfully completing the Medical College Admission Test. Dean Albert C. Kirby, Ph.D., Associate Dean for Admissions and Student Affairs conducted an interview with [*6] Ms. Fischer. After the interview Dean Kirby advised Ms. Fischer that she was a "very good applicant regardless of handicap" and a qualified student for admission to CWRU Medical School. Dr. Kirby presented Ms. Fischer's application into the admissions committee, however, the committee failed to vote on the application and her name was placed on the alternate list in April, 1988 to keep her file open. Subsequently, Ms. Fischer received notice by letter dated August 18, 1988 that

the 1988-89 class had been filled. Ms. Fischer re-applied for admission to CWRU Medical School for the 1989-90 incoming class. Again, she was interviewed by Dr. Kirby who opined that Ms. Fischer had the intellectual ability and knowledge to successfully complete CWRU's program.

Although deemed qualified for admissions by the Dean of Admissions, Ms. Fischer was nonetheless referred for two additional independent interviews. Ms. Fischer was thereby the only prospective medical student to undergo three individual interviews on a single application. These subsequent [*7] interviews took place on November 18, 1989 and centered primarily on whether a blind student could successfully complete the medical school's curriculum. Ms. Fischer was interviewed by Dr. Mildred Lam who was not an Admissions Committee member when Ms. Fischer re-applied in 1989. Dr. Lam was impressed with Ms. Fischer's academic achievements. Since Ms. Fischer was aware that her blindness was the principal impediment to her medical school admission, she advised Dr. Lam that another blind individual, Dr. David Hartman, a psychiatrist, had successfully completed Temple University School of Medicine in 1976. (Tr. 226).

Despite this information, and although recognizing Ms. Fischer's academic qualifications, Dr. Lam considered it "ridiculous to believe a blind student could successfully complete medical school." (Tr. 229, 299). [In the previous hearing, the court reviewed] the evidence and ruled to admit Ms. Fischer. The facts clearly demonstrate that CWRU made no attempt to determine if reasonable accommodations could be made to enable Mr. Fischer's admission to medical school even in light of Dr. Hartman's admission to Temple University Medical School twenty years earlier. CWRU admits it did not contact Temple University Medical School or Dr. Hartman; CWRU admits it did not consult with an expert working with the visually impaired; and admits it did not do any research into the area of technical advances for the teaching of visually-impaired students. Indeed, Dr. Lam [a faculty member at CWRU] testified that her decision on whether to admit Ms. Fischer was based merely on her personal opinion, and from the outset, Dr. Lam thought it ridiculous that a blind person could complete medical school. In short, CWRU relied

on misconceptions, unfounded conclusions, and the admittedly biased and uniformed opinions of Admission Committee members to deny Ms. Fischer equal access to medical school. A disturbing display from an institution that claims to be one of the most innovative medical resources in the world. CWRU also argued that admitting Ms. Fischer would threaten the medical school's accreditation with the American Association of Medical Schools [*12]. However, these technical standards are not mandatory but mere recommendations. Furthermore, the AAMC standards do not prohibit the admission of blind students to medical school. Dr. Donald Kassebaum, secretary to the Liaison Committee for the AAMC, testified at deposition that CWRU was not limited in its approach to teaching students. In addition, although in the instant case no waiver has been requested, Dr. Kassebaum also testified that even the waiver of a course to accommodate a handicapped student would not put a medical school accreditation in jeopardy. (Kassebaum Depo. at 37).

[The final ruling from this court is as follows:] The trial court [previous hearing] made mistaken findings of fact concerning the admissions process at CWRU, and its undertakings in reviewing Fischer's application. Further, the court relies not on what would be required to graduate Fischer in the 1990's but on what Temple undertook to graduate Hartman in the 1970's. Clearly, Hartman's experience at Temple does not measure up to the standards set forth by CWRU and the AAMC. In addition, the trial court criticizes CWRU for interviewing Fischer, and remarkably, for not interviewing Hartman. The arbitrary findings of the court [*24] are not supported by evidence in the record. Although Fischer would appear to be a truly remarkable student, the accommodations required to graduate her from CWRU would not only be unduly burdensome, but would leave her with far less than the full medical experience required of CWRU graduates.

February 21, 1997: Maczaczyj v. State of New York and Anne Berholf, Individually and as the Center Director-Associate Dean of Empire State College of the State University of York,State of New York:

Plaintiff brings this action claiming that defendant denied plaintiff admission into the Masters of Arts in Liberal Studies program ("masters program") at the Empire State College of the State University of New York ("Empire State College") on the basis of his disability and that defendants have willfully and unlawfully denied reasonable accommodation. Plaintiff seeks compensatory damages, punitive damages, attorney's fees, and litigation expenses. Specifically, plaintiff, a resident of Jamestown, New York, alleges that although he has been accepted into the masters program at Empire State College for the February term, school administrators have demanded that he attend a residency program on February 22, 1997, in Buffalo without providing him with a feasible reasonable accommodation. Plaintiff contends that due to his mental illness he is unable to personally attend this program. He asserts that he would be able to participate in the program over the telephone and has requested that the college provide such accommodation. Plaintiff contends that if his request for a reasonable accommodation is not granted, he will be denied admission into the February term of the masters program which begins on Saturday, February 22, 1997, and will thereby suffer economic loss as well as immediate and irreparable emotional injury. Thus, plaintiff seeks to amend his complaint to add a cause of action based on the denial of his request for a reasonable accommodation and a preliminary injunction preventing defendants from rejecting the reasonable accommodation requested by plaintiff to appear at the residency [**3] program by telephone and requiring defendants to give plaintiff credit for his appearance by telephone. Plaintiff alleges that has suffered from severe panic attacks since September13, 1989. He has been treated at both the W.C.A. Hospital and the Chautauqua County Mental Health Center, both in Jamestown, New York, for panic disorder. At one time in 1993 plaintiff was diagnosed as suffering from anxiety disorder, social phobia, and panic attacks (Item 6, Exhibit C). Marshall Greenstein, a mental health therapist at the Chautauqua County

Mental Health Clinic who has treated plaintiff's disability since 1993, explains that plaintiff has a great deal of difficulty dealing with public places and that he suffers from severe panic attacks and emotional trauma whenever he is forced to interact with the public in general. Because he is a former drug addict and alcoholic, plaintiff resists taking medications whenever possible. However. he does take medication in the form of Xanax p.r.n. when he faces unavoidable anxiety-provoking procedures, [*405] such as dental work (Id.,P2). When plaintiff experiences a panic attack, it is impossible for him to think about anything else, he becomes completely agitated. his heartbeat races, he sweats profusely, and he feels as though the walls are caving in on him. Since the onset of his illness, plaintiff has not traveled to the City of Buffalo. He avoids crowds and public places at all costs (Item 6, P 17). He is virtually housebound and relies on others for most of his daily needs. He communicates with individuals by telephone and has access to the Internet through a home computer.

Despite his disability, plaintiff obtained a Bachelor of Arts Degree in Anthropology through Empire State College's distance learning program. [The court ruled in favor of the university for the following reasons.] The court finds defendants' arguments regarding the pedagogical purposes of the residency program to be persuasive. The record demonstrates that despite their continued insistence that plaintiff attend the residency, the administrators at Empire State College have made efforts to accommodate plaintiff's disability. It [**22] is thee severe nature of plaintiff' handicap rather than the defendants' failure to offer reasonable accommodation that is limiting plaintiff's ability to achieve his educational objectives. The affidavits submitted by defendants demonstrate that administrators at Empire State College designed the residency program to achieve definite pedagogical objectives. The court does not wish to substitute its judgment for that of experienced education administrators and professionals in assessing whether the program does in fact meet its pedagogical objectives. Based on the record, the court finds that allowing plaintiff to participate in the residency program would be a substantial modification of the educational program. As such, under the circumstances plaintiff's requested accommodation is

unreasonable. Since he has not demonstrated a substantial likelihood of success on the merits, the court rejects plaintiff's motion.

December 30, 1997 : Smith vs. University of the State of New York, State University of New York, George Bobinski, SUNY, Kathryn Galvin, SUNY, Elizabeth Gilbert, SUNY, New York State Department of Education, Board of Education of the Hornell City School District and Susan Gray:

In this civil action, the plaintiff alleges that the State University of New York at Buffalo ("SUNY") and agents thereof discriminated and retaliated against him on the basis of his alleged disability -- clinical depression –by conferring and then refusing to withdraw a failing grade in a course taken in pursuit of a Masters Degree in Library [*2] and Information Science and subsequently dismissing him from the Masters program.

The plaintiff claims that SUNY failed to reasonably [*35] accommodate him by waiving a required course, which in turn made him lose his job. This Court finds that such evidence is insufficient to raise a genuine issue of fact whether the plaintiff needs an accommodation. When determining whether a genuine issue of material fact exists for the purposes of a motion for a summary judgment, "the mere existence of a scintilla of evidence in support of the plaintiff's position [is] insufficient; there must be evidence on which the jury could reasonably find for the plaintiff. The judge's inquiry, therefore, unavoidably asks whether reasonable jurors could find by a preponderance of the evidence that the plaintiff is entitled to a verdict." Anderson, 477 U.S. at 252. This Court finds that the plaintiff has not presented sufficient evidence upon which a reasonable jury could conclude that he was entitled to a verdict in his favor and will grant a summary judgment in favor of the defendant. (Smith, 95-CV-0477E(H) 1997 U.S. Dist. LEXIS 20782)

January 15, 1998: Pell vs. The Trustees of Columbia University in the City of New York Barnard College Columbia University, Christina Bickford, Sergio Castilla, Annette Insdorf, and James Schamus.

Karen Pell was a graduate student in film at Columbia University. She contends that she has a right as a disabled person under [the law] to be treated fairly and reasonably. Plaintiff contends that she was subject to continual ridicule because of her disability:

> "I was repeatedly accused of faking my dyslexia. I was also repeatedly told that I was mentally retarded, that I should be in the mentally retarded Olympics and that I am lazy and stupid."

A campaign [was launched] to draw undue focus on a person's disability, and to accentuate the stigma attached by many in society to the possession of a disability, in a concerted effort to ostracize a student and to compel her to leave. [This] is clearly an attempt to exclude the student from participation in the school's program and a denial of benefits. Plaintiff's Reply Memo at 19. Plaintiff asserts, in essence, a harassment claim. Although @ 504 does not specifically address harassment claims, the few courts considering this issue have held that hostile work environment harassment [*52] is actionable under the Rehabilitation Act. See, e.g., Davis v. York Int'l. Inc., 1993 U.S. Dist. LEXIS 17649, *16, 1993 WL 524761 at *9 (D.Md.1993) (Title VII applied to disability based harassment under @ 504); [Et al.] Hostile educational environment claims under @ 504 and the ADA have been recognized by several courts. No courts in New York have addressed whether a hostile educational environment claim exists under @ 504. However, at least two courts in New York have found that hostile work environment claims are actionable under the ADA.,

In considering whether an action for hostile educational environment exists under @ 504, the [first ruling in] Guckenberger began with the statutory language. The statute applies to discrimination by educational facilities in receipt of federal funds, see 42 U.S.C. @ 1218(7)(J) and 29 U.S.C. @ 794(b)(2)(A), and does not limit its prohibitions to employment discrimination.

Guckenberger, 957 F. Supp. at 312. As noted in Guckenberger, "the language of both Title III of the ADA and Section 504 of the Rehabilitation Act is substantially similar to Title IX of the Educational Amendments Act of 1972, 20 U.S.C. @@ 1681-88 (1988), which courts have held is the statutory basis for hostile learning environment claims based on sexual harassment." Id. at 312 (citations and footnotes omitted). It is not possible at this juncture to sever plaintiff's Title IX hostile environment allegations based on gender from plaintiff's @ 504 harassment allegations based on disability. The allegations of pervasive hostility to plaintiff's disability endured throughout plaintiff's tenure at Columbia are more than adequate to warrant denying Columbia's motion to dismiss on this ground. Unlike the facts in [*56] Guckenberger, plaintiff's complaint is replete with "the sharply-pointed, crudely-crafted, and frequently-launched 'slings and arrows' that courts have found sufficient to establish severe and pervasive harassment that alters a plaintiff's working conditions."

[Specifically, to the plaintiffs denial of a reasonable accommodation claim.] The plaintiff further alleges that defendants violated @ 504 by refusing to accommodate her disability (dyslexia) by exempting her from Columbia's foreign language requirement. C at P 178. Plaintiff contends that "on the first day of my French class at Columbia, I was told flat out by a Columbia professor of French that if I have dyslexia, I should drop the class because there would be no help for me, or any one else with dyslexia." Reply Memo at 20. "As a result, I was forced to attend a foreign language class at CUNY [The City University of New York] which readily accommodated me . . ." Id. n12 Plaintiff also claims that Columbia should have offered to pay for any medical tests it required in order to permit plaintiff to substantiate her need for accommodation. [The judge] notes that plaintiff does not allege what accommodations were necessary to accommodate her disability or what accommodations CUNY made to "readily" accommodate plaintiff. Shortly after plaintiff dropped her French class at Columbia, but before plaintiff's decision to take French at CUNY, plaintiff made a request to Columbia officials for a foreign language exemption because of her disability. Columbia Notice of Motion, Exh. I.

Columbia requested medical documentation in order to evaluate the request. Plaintiff disputes the reasonableness of Columbia's request for medical documentation. She contends that a letter from her doctor confirming the existence of her disability should have sufficed to exempt plaintiff from the language requirement. Two letters, one dated May 19, 1995, and one date June 8, 1995, were submitted by plaintiff's physician in support of her accommodation request. The May 19, 1995 letter also contained a general information sheet entitled "Suggestions For Academic and Related Accommodations" ("suggestion sheet"). However, these letters are neither consistent nor supportive of plaintiff's claim. The May 19 letter simply recommends that plaintiff be tested orally and untimed, but does not mention a foreign language exemption. The June 8, 1995 letter similarly does not recommend that plaintiff be exempt from taking a foreign language. I note that the suggestion sheet states, "do not expect to be asked to change course requirements or standards of performance that are justifiable in your field." Columbia Notice of Motion, Exh. J. Plaintiff's physician made no recommendation that Columbia change its degree requirements for plaintiff or exempt plaintiff from the foreign language requirement. Under these circumstances, Columbia properly sought more specific medical information from plaintiff and her physician regarding plaintiff's disability.

Plaintiff admits she was capable of successfully completing a foreign language requirement. As such, plaintiff cannot simultaneously claim that her disability required an exemption from a core Master's Degree requirement and that Columbia's refusal to grant her request without sufficient documentation was unreasonable. In addition, plaintiff cannot simultaneously claim that she is "otherwise qualified" under @ 504 but that her disability allegedly necessitated an exemption from a degree requirement. "Otherwise qualified" by definition means that plaintiff is "able to meet all of the program's requirements in spite of [her] handicap." Southeastern Community College v. Davis, 442 U.S. 397, 99 S. Ct. 2361, 60 L. Ed. 2d 980 (1979).

I do not reach the issue of whether Columbia failed to reasonably accommodate plaintiff's disability because it appears that plaintiff never gave Columbia the chance to consider this issue. When Columbia requested further information in order to consider her request, plaintiff refused to comply and on her own initiative, decided to take French at CUNY. Thus, it was plaintiff, not defendant, who prevented the decision making process from proceeding by refusing to comply with repeated University requests for documentation regarding her disability. Plaintiff's actions thus belie any claim that Columbia failed to accommodate her. Finally, plaintiff's completion of the foreign language requirement at CUNY contradicts her assertion that Columbia should have granted her a foreign language exemption under @ 504. (Pell v 97 CIV. 0193 (SS) 1998 U.S. Dist. LEXIS 407).

May 29, 1998: Guckenberger vs. Boston University, Jon Westling, Criag Klafter:

A class of students with learning disabilities brought this action against defendant Boston University ("BU") alleging that BU's policies toward them violated the Americans With Disabilities Act ("ADA"), 42 U.S.C. [*85] §§ 12101-12213, the Rehabilitation Act, 29 U.S.C. § 794, and state law. The Court issued its findings of fact, conclusions of law, and order of judgment on August 15, 1997, after a ten-day bench trial. See Guckenberger v. Boston Univ., 974 F. Supp. 106 (D. Mass. 1997) ("Guckenberger II"). n1 In paragraph two of its order, the Court required BU to propose and to implement a "deliberative procedure" for considering whether course substitutions for the foreign language requirement of BU's College of Arts and Sciences (the "College") would "fundamentally alter the nature" of BU's undergraduate liberal arts degree. Id. at 154-55. BU, using the College's existing Dean's Advisory Committee to consider the issue, decided that [**4] course substitutions would constitute such a fundamental alteration.

Plaintiffs challenge that determination. After hearing, the Court holds that BU has complied with the order.

As part of a wholesale attack on BU's policies toward the learning disabled, plaintiffs alleged that BU's refusal to allow learning disabled students at the College to satisfy its foreign language

requirement by completing selected non-language courses constituted a violation of federal and state discrimination law. Unlike some other portions of the case, the dispute over foreign language course substitutions involves only the College of Arts and Sciences and not other BU faculties. The Court rejected plaintiffs' sweeping argument that "any across-the-board policy precluding course substitutions" violates discrimination [**5] law. 974 F. Supp. at 149. Rather, the Court concluded that "neither the ADA nor the Rehabilitation Act requires a university to provide course substitutions that the university rationally concludes would alter an essential part of its academic program." Id. Plaintiffs did not appeal this or any other aspect of the Court's order of judgment.

Plaintiffs were successful, however, in pressing an inquiry into reasonable accommodation. Based on an administrative regulation that course substitutions "might" be a reasonable means of accommodating the disabled, 34 C.F.R. Pt. 104, App. A P31 (1997), and evidence introduced at trial, the Court held that plaintiffs had "demonstrated that requesting a course substitution in foreign language for students with demonstrated language disabilities is a reasonable modification." Guckenberger II, 974 F. Supp. at 147. Therefore, the burden of demonstrating "that the requested course substitution would fundamentally alter the nature of [BU's] liberal arts degree program" shifted to the University. Id.

The Court determined, for two reasons, that BU had failed to meet its burden at trial of demonstrating why it should not have to accommodate plaintiffs' [**6] request. First, BU's president, defendant Jon Westling, had been substantially motivated by uninformed stereotypes (as reflected in the "Somnolent Samantha" metaphor) when he made the decision to deny the request. Second, President Westling did not engage in any form of "reasoned deliberation as to whether modifications would change the essential academic standards of [the College's] liberal arts curriculum." Guckenberger II, 974 F. Supp. at 149. The Court's conclusion was directly guided by two opinions of the First Circuit in Wynne v. Tufts University School of Medicine, which concerned a request for reasonable accommodations by a learning disabled

medical student with dyslexia who challenged the multiple choice format of medical school examinations. See 932 F.2d 19 (1st Cir. 1991) (en banc) ("Wynne I"); 976 F.2d 791 (1st Cir. 1992) ("Wynne II"). Because of BU's failure to "undertake a diligent assessment of the available options," Guckenberger II, 974 F. Supp. at 149 (quoting Wynne II, 976 F.2d at 795), the Court ordered BU to propose, within 30 days of the receipt of this order, a deliberative procedure for considering whether modification [**7] of its degree requirement in foreign language [*86] would fundamentally alter the nature of its liberal arts program. This testimony summarized in Guckenberger II was available to the members of the Committee. In light of the tight timetable which the litigation imposed on the Committee, and the expert evidence in prior proceedings, I am unpersuaded that further academic [**25] study (like a "longitudinal" study) would have refined or altered the decision-making process, which ultimately involved a [*91] qualitative evaluation: What is essential to a liberal arts education?

Plaintiffs' vigorous attacks on BU's submission generally overstate the Court's level of scrutiny at this stage of litigation. My opinion as to the value of foreign languages in a liberal arts curriculum is not material so long as the requirements of Wynne have been met. Despite plaintiffs' attempts to pull truly academic policy debates into the courtroom, the facts "essential" to this order are actually undisputed: BU implemented a deliberative procedure by which it considered in a timely manner both the importance of the foreign language requirement to this College and the feasibility of alternatives. Plaintiffs' argument that the procedure should have been more extensive and inclusive -- effectively, more like a legal proceeding -- does not have any support in the Wynne opinions. BU's deliberations and conclusions pass muster under Wynne. The Court has no cause to doubt the academic qualifications and professionalism of the eleven members of the Committee. There is no evidence [**26] that the Committee's decision was mere lip service to the Court's order or was tainted by pretext, insincerity, or bad faith, beyond plaintiffs' unsubstantiated speculation that President Westling's bias infected the Committee. See Wynne II, 976 F.2d at 796 (placing burden on plaintiffs "to produce specific

facts" of pretext). The Report is rationally premised on the Committee's conclusion that the liberal arts degree is "in no sense a technical or vocational degree" like other degrees and that, in its view, the foreign language requirement "has a primarily intellectual, non-utilitarian purpose." (Report at 5.) With the justifiable belief in mind that this decision could not be made empirically, the Committee concluded that "knowledge of a foreign language is one of the keys to opening the door to the classics and so to liberal learning. It is not the only key, but we do judge it as indispensable." (Id. at 7.)

The Court concludes that the Committee's judgment that "a person holding a liberal arts degree from Boston University ought to have some experience studying a foreign language," (id.), is "rationally justifiable" and represents a professional judgment with which [**27] the Court should not interfere. Therefore, the Court concludes as a matter of law that BU has not violated its duty to provide reasonable accommodations to learning disabled students under the ADA by refusing to provide course substitutions. (CIVIL ACTION NO. 96-11426-PBS 8 F. Supp. 2d 82; 1998 U.S. Dist. LEXIS 8469; 9 Am. Disabilities Cas. (BNA) 228).

September 14, 1998: Bartlett v New York State Board of Law Examiners, James T. Fuller-New York State Board of Law Examiners, John E. Holt-Harris, Jr. Richard J. Bartlett- New York State Board of Law Examiners, Laura Taylor Swain, , Charles T. Beeching, Jr., and Ira P. Sloane, individually and as members of New York State Board of Law Examiners;

Plaintiff Dr. Marilyn Bartlett is a 49 year old woman with a cognitive disorder that impairs her ability to read. Despite her limitation, she has earned a Ph.D. in Educational Administration from New York University, a law degree from Vermont Law School, and has met all prerequisites to sit for the New York State Bar Examination (the bar examination). The defendant-appellant Board is a State entity charged with testing and licensing applicants seeking admission to the New York State Bar. Since 1991, Dr. Bartlett has taken the bar examination five times. On at least three and possibly four separate occasions, she has applied as a reading disabled candidate to take the bar examination with accommodations. Dr. Bartlett has sought unlimited or

extended time to take the test, permission to tape record her essays and to circle her multiple choice answers in the test booklet. The Board has denied her request each time, contending that her application does not support a diagnosis of a reading disability or dyslexia. In total, Dr. Bartlett has taken the examination four times without accommodations and has yet to pass. On July 20, 1993, after the Board denied her most recent application for accommodations, she commenced [*325] this action in the district court alleging, among other things, violations of Title II of the ADA, 42 U.S.C. @ 12131 et seq., and @ 504 of the Rehabilitation Act, 29 U.S.C. @ 794.

In her complaint, she sought, among other things, injunctive relief in the form of reasonable testing accommodations and compensatory damages for fees paid in connection with past attempts to pass the examination. She requested accommodations for the July 1991, February 1993 and July 1993 examinations. Dr. Bartlett did not seek accommodations for the February 1992 bar examination and the record is unclear as to whether she sought accommodations for the July 1992 exam. With respect to the July 1992 exam, the district court found that "[Dr. Bartlett] claims she [applied for accommodations], but the Board has no record of the request."

On July 26, 1993, the parties entered into a stipulation. Under its terms, Dr. Bartlett received accommodations during the July 1993 bar examination that included time-and-a-half for the New York portion of the test and the use of an amanuensis to read the test questions and to record her responses. In addition, the Board allowed Dr. Bartlett to mark the answers to the multiple-choice portion of the examination in a question book rather than on a computerized answer sheet. However, the parties [**9] agreed that if Dr. Bartlett passed the examination, the results would not be certified unless she prevailed in this lawsuit. Despite accommodations, Dr. Bartlett failed the examination.

The Board has denied Dr. Bartlett's requested accommodations because its expert on learning disabilities, Dr. Frank Vellutino (Dr. Vellutino), does not believe that she has dyslexia or a reading disability. Dr. Vellutino's opinion is grounded primarily on Dr. Bartlett's performance

on two subtests of the Woodcock Reading Mastery Test-Revised (the Woodcock), a battery of tests commonly employed to assess learning disabilities. Because Dr. Bartlett achieved scores above the 30th percentile on two subtests of that battery, Dr. Vellutino concluded that she did not have a reading disability. For reasons other than those articulated by the district court, we affirm the judgment that Dr. Bartlett is disabled within the meaning of the Americans with Disabilities Act and the Rehabilitation Act and thus was and is entitled to reasonable accommodations in taking the New York Bar Examination. Dr. Bartlett's cognitive impairment -- her difficulties in automatically decoding and processing the printed [**36] word -- limits her major life activities of learning and reading to a substantial degree. Reasonable accommodation of this disability will enable her to compete fairly with others in taking the examination, so that it will be her mastery of the legal skills and knowledge that the exam is designed to test -- and not her disability -- that determines whether or not she achieves a passing score. We vacate and remand for findings of fact and recalculation of compensatory damages due Dr. Bartlett in accordance with this decision.

Dr. Bartlett, who has fought an uphill battle with a reading disorder throughout her education, is among those for whom Congress provided protection under the ADA and the Rehabilitation Act. As a result, she is entitled to reasonable accommodations in sitting for the New York bar examination. The ADA and the Rehabilitation Act do not guarantee Dr. Bartlett examination conditions that will enable her to pass the bar examination – that she must achieve on her own. What Congress did provide for, and what the Board has previously denied her, is the opportunity to take the examination on a level playing field with other [**5] applicants. (Docket No. 97-9162, 156 F.3d 321; 1998 U.S. App. LEXIS 22361; 8 Am.Disabilities Cas. (BNA) 1004).

February 23,1999: Zukle v. The Regents of the University of California:

Sherrie Lynn Zukle entered the University of California, Davis School of Medicine ("Medical School") in the fall of 1991 for a four-year course of study. The first two years comprise the "basic science" or "pre-clinical" curriculum, consisting of courses in the function,

design and processes of the human body. The final two years comprise the "clinical curriculum." In the third year, students take six consecutive eight-week clinical clerkships. During the fourth year, students complete clerkships of varying lengths in more advanced areas. Most clerkships involve treating patients in hospitals or clinics, and oral and written exams.

From the beginning, Zukle experienced academic difficulty. During her first quarter, she received "Y" grades in Anatomy and Biochemistry. Upon reexamination, her Biochemistry grade was converted to a "D." She did not convert her Anatomy grade at that time. In her second quarter, she received a "Y" grade in Human Physiology, which she converted to a "D" upon reexamination. The Medical School assigns letter grades of A, B, C, D, F, I and Y to measure academic performance. A "Y" grade in a pre-clinical course is provisional; it means that a student has earned a failing grade but will be or has been permitted to retake the exam. However, a "Y" grade in a clinical clerkship indicates unsatisfactory performance in a major portion of that clerkship and may not be converted until the student repeats that portion of the clerkship.

In April 1992, the Medical School referred Zukle to the Student Evaluation Committee ("SEC"). Although subject to dismissal [*1043] pursuant to the Medical School's bylaws, n3 Zukle was allowed to remain in school. The SEC (1) placed Zukle on academic probation, n4 (2) required her to retake Anatomy and Biochemistry, (3) required her to be tested for a learning disability, and (4) placed her on a "split curriculum," meaning that she was given three years to complete the pre-clinical program, instead of the usual two years. Zukle continued to experience academic difficulty. For the spring quarter of 1992 (while on academic probation) she received a "Y" grade in Neurobiology. In the fall, she received a "Y" grade in Medical Microbiology and in the winter she received a "Y" in Principles of Pharmacology. In total, Zukle received eight "Y" grades during the pre-clinical portion of her studies. Five were converted to "C" after reexamination, two to "D" and one to "F."

The Medical School's Committee on Student Evaluation and Promotion, which consists of two Promotions Boards and the SEC, monitors the progress of students with academic difficulties. Promotions Board A, reviews preclinical students (i.e. students in the first two years of study); Promotions Board B reviews clinical students (i.e. students in the last two years of study). Generally, the SEC meets with students and their advisors before making a recommendation to the appropriate Promotions Board. The Promotions Board then conducts an independent review of the student's performance and decides whether to accept or reject the SEC's recommendation. The Medical School's bylaws provide that a student is subject to dismissal if she receives two or more failing grades within one academic quarter. Zukle received two "Y" grades in her first quarter. The Medical School's bylaws provide that a student on academic probation is required to remedy her deficient grades, and is subject to dismissal for failure to do so or if she receives another deficient grade while on academic probation.

In November 1992, Zukle was tested for a learning disability. The results received in January 1993, revealed that Zukle suffered from a reading disability which "affects visual processing as it relates to reading comprehension and rate when under timed constraints." In short, it takes Zukle longer to read and to absorb information than the average person. n5 Zukle asked Christine O'Dell, Coordinator of the University's Learning Disability Resource Center, to inform the Medical School of her test results in mid-July 1993. O'Dell informed Gail Currie of the Office of Student Affairs in a letter dated July 21, 1993. O'Dell recommended that the Medical School [**5] make various accommodations for Zukle's disability and recommended various techniques for Zukle to try to increase her reading comprehension. The Medical School offered all of these accommodations to Zukle.

We must decide whether a medical school violated the Americans with Disabilities Act or the Rehabilitation Act when it dismissed a learning disabled student for failure to meet the school's academic standards. In conclusion, we are persuaded that Zukle failed to establish that she could meet the essential eligibility requirements of the Medical School with the aid of

reasonable accommodations. Accordingly, she failed to establish a prima facie case of disability discrimination under the ADA or the Rehabilitation Act. (No. 97-16708166 F.3d 1041; 1999 U.S. App. LEXIS 2702; 99 Cal. Daily Service 1355; 99 Daily Journal DAR 1707; 9 Am. Disabilities Cas. (BNA) 80).

APPENDIX G

Percent prediction tables.

Appendix G: Percent prediction tables.

Question 27
Beginning Block Number 1. Method: Backward Stepwise (COND)

Variable(s) Entered on Step Number
1. Q19P3 Reason why institution denied requested accommodation: lack of documentation.
Q19P6 Reason why institution denied requested accommodation: sufficient current accommodation.

Estimation terminated at iteration number 4 because
Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood 84.011
Goodness of Fit 80.955

	Chi-Square	Df	Significance
Model Chi-Square	19.909	2	.0000
Improvement	19.909	2	.0000

Classification Table for Q27

	Predicted		
Observed	Yes	No	Percent Correct
Yes	47	8	85.45%
No	12	15	55.56%
	Overall 75.61%		

Question 31
Beginning Block Number 1. Method: Backward Stepwise (COND)

Variable(s) Entered on Step Number
1. Q18P1 Requested accommodation: Extended test time.
Q18P6 Requested accommodation: Course substitution.
Q18P15 Requested accommodation: Reader service.

Estimation terminated at iteration number 4 because
Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood 72.451
Goodness of Fit 80.332

	Chi-Square	Df	Significance
Model Chi-Square	19.682	2	.0002
Improvement	19.682	2	.0002

Appendix G: Percent prediction tables.

Classification Table for Q31

	Predicted		
Observed	Yes	No	Percent Correct
Yes	9	13	40.91%
No	3	52	94.55%
	Overall 79.22%		

APPENDIX H

Open code list.

Appendix H: Open code list.

REPORT HEADER

This Report is on the following codes:

- Altering Benefiting education
- Altering prg or class
- Assessment for disability
- Attempts to reverse
- Average he committ
- Burden of proof
- Career goal
- Cited past cases
- Compared to peers
- Conclusion
- Costs
- Coverage of ada 504
- Current ra
- Decisions by professionals
- Definition
- Denial of ra
- Disability
- Filing code
- Final ruling
- Future laws
- Interpretation of law
- Majority rules
- Otherwise qualified
- Overturned decisions
- Past attempts wo ra
- Past failures
- Percieved disabled
- Percieved Disinfranchised
- Percieved overac
- Personnel suit
- Policy
- Professional expert
- Proven academic record
- Reasonable accommodation
- Rebuttal
- Regulatory agencies
- Request Reason accomm
- Requirements
- So ordered
- Strengths
- Timing of request
- University countersuit
- University HE action
- Violation 504

(End list of codes)

END OF HEADER

APPENDIX I

Axial code sample text.

Appendix I: Axial code sample text.

Axial Coding for Category: Definition	
Open code	**Sample text data:**
Altering education	".... the Court required BU to propose and to implement a "deliberative procedure" for considering whether course substitutions for the foreign language requirement of BU's College of Arts and Sciences (the "College") would "fundamentally alter the nature" of BU's undergraduate liberal arts degree. Id. at 154-55. BU, using the College's existing Dean's Advisory Committee to consider the issue, decided that [**4] course substitutions would constitute such a fundamental alteration. " Guckenberger vs. BU
	"Plaintiff cautions that in determining whether an accommodation would allow the applicant to receive the benefit [of an education/program], the court should not rely solely on the stated benefits "because programs may attempt to define the benefit in a way the 'effectively denies otherwise qualified individuals the meaningful access to which they are entitled.'"." Maczazjk v NYU
Benefiting the student	"Second, the Committee had vigorous discussions of the "unique qualities" of the foreign language requirement and its importance tot the liberal arts curriculum. Its members rallied around an articulated defense. highlighted throughout the Reports, of the student benefit of the rigorous foreign language requirement of the College. In both the Minutes and the Report, the Committee mentioned technical educational gains from the learning of foreign languages, such as enhancing an ability to read foreign literature in its original form and laying a "foundation" for other areas of academic concentration." Guckenberger v. Boston
	"The plaintiff argues that the court must determine whether a reasonable accommodation could allow a handicapped person to receive the programs' essential benefits." Mazcaejk v. NYU
	"The plaintiff also cautions that in determining whether an accommodation would allow the applicant to receive the benefit, the court should not rely solely on the stated benefits "because programs may attempt to define the

Appendix I: Axial code sample text.

	benefit in a way the 'effectively denies otherwise handicapped individuals the meaningful access to which they are entitled" Mazceaj v. NYU
Comparing to peers	"In addition, administration officials also contend that having one student participate via telephone would impose a burden on the other students whose ability to debate and critique plaintiff's contributions would be limited due to the attenuated nature of telephone communication." Maczarak v NYU
Costs	
Current reasonable accommodation	
Denial of reasonable accommodation	"All three doctors offered opinions that a blind student could not satisfactorily complete the curriculum and qualify for a medical degree at CSRU. This testimony was based on the belief that there were no alternative methods of teaching that could be used which would enable a student to effectively understand pathology and functions of the various organ systems." Ohio v. CWRU

Axial code name: Student	
Open code	**Sample text data:**
Past attempts	
Timing of request	
Perceived disabled	
Perceived disenfranchised	"Dr. Bartlett, who has fought an uphill battle with a reading disorder throughout her education.... [Therefore] we conclude the record demonstrates the Dr. Bartlett suffers from a disability..." Bartlett v NY Law Examiners.
Perceived over-accommodated	
Proven academic record	
Strengths	

Axial code name: Higher Education	
Open code	**Sample text data:**
University Action	" The point is not whether a [university] is 'right' or 'wrong' in making program-related decisions. Such absolutes rarely apply in the context of subjective decisionmaking, particularly in a scholastic setting." Wynne II, 976 f. 2d at 795.
Policy	"... removing him from the program, rather than placing him on provisional student status, until he had increased his GPA or placing him on inactive status until he had re-registered,

Appendix I: Axial code sample text.

	pursuant to existing SUNY policies providing for or practices of doing such, constitute discriminatory and/or retaliatory treatment." Smith v. SUNY
Regulations	
Decisions by professionals	
Past attempts without reasonable accommodations	

Axial code name: Operations	
Open code	**Sample text data:**
Citing cases	"BU implemented a deliberative procedure by which it considered in a timely manner both the importance of the foreign language requirement to this College and the feasibility of alternatives. Plaintiffs' argument that the procedure should have been more extensive and inclusive—does not have any support in the Wynne opinions." Guckenberger v. Boston
	"The Supreme court has repeatedly instructed that although applicable educational institutions are required to make reasonable accommodations in the nature of their programs to accommodate the handicapped, they are not required to make fundamental or substantial modification. Davis. Alexander v. Choate." Maczacjak v. NYU
Burden of Proof	"By placing the burden of the plaintiffs' "to produce specific facts" of pretext, the Report is rationally premised on the Committee's conclusion that the liberal arts degree is "in no sense a technical or vocational degree" like other degrees and that, in its view, the foreign language requirement "has a primarily intellectual, non-utilitarian purpose." Guckenberger v. BU
Conclusion	
Coverage of ADA/504	
Definition	
Disability	
Future laws	
Interpretation of law	
Otherwise qualified	
Reasonable accommodation	"[A] disability should be assessed without regard to the availability of mitigating measures, such as reasonable accommodations or auxiliary aids." Bartlett v NY Law Exam.
	"Given that there is no genuine dispute over the question that plaintiff is disabled, that his

Appendix I: Axial code sample text.

	disability would prevent him from physically attending the residency, or that defendants are covered under the provisions of the ADA, the only remaining issue in dispute is whether plaintiff's requested accommodation to attend the residency via speaker telephone is reasonable or would constitute fundamental modification or substantial modification of the program." Maczajk v. NYU
	"The plaintiff argues that the court must determine whether a reasonable accommodation could allow a handicapped person to receive the programs' essential benefits." Mazcaejk v. NYU
Requesting reasonable accommodation	
Requirements	
Violation 504	