

Arkansas Department of Education
Combined Research Report
Of
Business Leaders and College Professors
on
Preparedness of High School Graduates

January 2007

Business Leaders and Educators See a Crisis In the Preparedness of High School Graduates

Across the United States, business leaders and educators agree that too many high school students are graduating without the skills they need to succeed in the workplace or in higher education. This lack of preparation leads to problems in meeting the needs of the economy, and it means remedial classes for college freshmen.

According to national studies, U.S. high school graduation rates have dropped from 74% in 1983 to about 67% in 2000. Nationally, only 34% of ninth grade students who graduate from high school on time are college ready. In addition, the U.S. ranks 16th worldwide in high school graduation rates behind countries like Denmark, Norway, Germany and Japan.

Studies among Arkansas business leaders and college professors echo the perceived crisis facing the nation.

Seventy-six percent (76%) of employers in Arkansas state that less than half of the recent high school graduates who apply for jobs in their companies lack the necessary quality writing skills and the ability to do basic math. More than sixty percent (60%) of the employers are not satisfied with the ability of recent high school graduates to read and understand written instructions and materials.

Soft skills – which are defined as everyday life/social skills and include work ethic, verbal and nonverbal communication, attendance, interview abilities and attitude – dominated the complaints of business leaders. As one employer said, “We want somebody who shows up on time, somebody who works hard and someone who’s trainable.”

College professors (N=315) “graded” the overall academic quality of the Arkansas public high schools in preparing students for college with mostly Ds (50.2%) and Cs (38.6%). One in 10 college professors gave public high schools an F (9.6%) in overall academic quality.

Included in this combined report are the results from two studies conducted by the Arkansas Department of Education. One study covers business leaders’ opinions on the preparedness of high school graduates entering the workforce. The second study focuses on college professors’ assessment of the preparedness of high school graduates for post-secondary school.

Arkansas Department of Education
Business Leader Research
on
Preparedness of High School Graduates Entering the
Workforce

May 2006

Background

In May of 2006, two focus groups were conducted for the Arkansas Department of Education. The goal of this research was to explore the needs of Arkansas business leaders with regards to hiring Arkansas high school graduates. Some of the themes explored in the research were: skills perceived to be lacking in the graduates, strong suits of recent high school graduates, current workforce needs, and overall perceptions of recent high school graduates.

Methodology

Two focus groups were conducted. The first group of 10 participants was conducted in Little Rock, and the second group of 12 participants was conducted in El Dorado. Participants were human resource and business leaders from the respective communities. Participants came from both large and small businesses, as well as privately owned and government organizations. Additionally, a few participants were engaged in educational efforts and/or workforce development.

Participants were instructed to complete a survey provided by the Arkansas Department of Education. After survey completion, participants were guided in a focus group conducted by a moderator.

Results

Overview

The skills that employers are looking for can be broken down into two categories: hard skills and soft skills. For the purpose of this research, hard skills are defined as specific skills sets useful for specific job types. In this report the hard skills discussed are: writing, math, science, computer skills and reading comprehension. Soft skills are defined as everyday life/social skills and will include work ethic, verbal and nonverbal communication, attendance, interview abilities and attitude, amongst others.

The complaints of the business leaders were dominated by soft skills. Though employers touched on certain hard skills that could be improved, the majority of their complaints revolved around soft skills. As one employer said, "We want somebody who shows up on time, somebody who works hard and someone who's trainable."

Participants Job Titles/Business Types

More than 85% of the participants were directly involved in handling hiring and personnel decisions at the workplace. The various participant positions/job titles represented at the focus group included: Chief Operating Officer, Coordinator of Services, Director of HR, Director of Workforce Development, HR Manager, Personnel Manager, Human Resources Manager, Programs Coordinator, Senior VP / Director of Community Development, Staffing Manager, Vice President and others.

Perception of High School Graduate Preparedness

- 55.5% of respondents stated that recent American public high school graduates with no further education or formal training are either “not too well prepared” or “not well prepared at all” to enter the workforce.
- 66.7% of respondents stated that recent American public high school graduates with no formal education or formal training are either “not too well prepared” or “not well prepared at all” to advance within their company.
- 47.4% of respondents stated that they are somewhat dissatisfied with the job that American public high schools are doing in preparing their graduates for work.

Hard Skills

Hard Skills: Writing

76.3% of respondents stated that less than half of the recent high school graduates who apply for jobs in their company have quality writing skills.

The ability to express one’s self on paper came up time and time again in the focus groups. Many of the focus group participants expressed dissatisfaction with recent high school applicants’ ability to express thoughts and communicate in written form. In fact, 10 out of the 10 Little Rock focus group participants agreed that the ability to read and write is a major problem with recent high school graduates. Some of the verbatim comments regarding concern for recent high school graduates’ abilities to write include:

- “[There are problems with graduates] being able to express themselves on paper. Like if they had a workers’ comp claim and had to write down what happened to them.”
- “[They lack] just basic writing skills.”
- “I guess the biggest factor I can see in preventing me from keeping these kids is they just can’t flat read and write.”
- “On the data entry-level ... our entry level positions are customer-service oriented, so they [graduates] actually have to log the conversation ... some it’s amazing the grammatical errors ... it’s almost scary.”
- “Some of the more consistent deficiencies I’ve noted have to do with the general ability to communicate thoughts in writing.”

Hard Skills: Math

76.3% of respondents stated that less than half of the recent high school graduates who apply for jobs in their company have the ability to do math.

Particularly with those employers coming from industry and the technology sector, the employers sought stronger math skills. In particular, many of the participants suggested that graduates need more skills in applying math to real world situations.

Some of the verbatim comments include:

- “Look at my workforce in general. The majority of my workforce are hourly and fall within operations, maintenance and laboratory ... [the skills needed] are algebra, chemistry, science and math.”
- “Math skills, the kids need to learn how to apply that [math skills] in real life situations.”
- “[They lack] basic math skills.”
- “Conversions from fractions to decimals... that kind of thing.”
- “On a workforce side, you’re going to have to [know] your basic mathematics.”

Hard Skills: Science

47.3% of respondents stated that they were somewhat dissatisfied or very dissatisfied with recent high school graduates science skills.

Science skills did not come up as frequently as reading, writing and math. Though many employers acknowledged its importance, they also noted that many of the applicable science skills could be taught on the job. Those employers who focused more on the importance of science skills were those coming from technology sectors. For example, a HR manager from a chemical company stated, “[entry level employees] need to know the theory of chemistry. They need to know why they are mixing this to get this.”

Hard Skills: Reading Comprehension

63.2% of respondents stated that they are either somewhat dissatisfied or very dissatisfied with recent high school graduate's preparedness in the area of reading and understanding complicated materials.

Reading comprehension came up in the focus group as an important skill that is perceived inadequate in many of the recent high school graduates. Though this was mentioned as an important skill, it did take somewhat of a back seat to writing skills. Several of the respondents cited concerns that graduates are not able to comprehend necessary written documents including: technical manuals and codes of conduct. One employer noted, "All of our tech manuals are now written for the 11th grade and higher. If you can't read and comprehend, you are going to struggle advancing ...if you can't read it and understand ... you are limiting your career."

Hard Skills: Computer Literacy

79% of participants stated that they are either very satisfied or somewhat satisfied with recent high school graduates' preparedness in the area of computer skills.

All of the participants were undeniably pleased with recent high school graduates' level of computer literacy. Many of the participants expressed that the recent graduates' computer skills often exceeded their older colleagues. Some verbatim comments include:

- "These kids coming out of high school, they know computers."
- "We have seen kids coming in, young people coming in, they're not afraid of the keyboard ... they can excel because they are already comfortable with doing that [keyboarding]."

Additional Hard Skills/Themes

In addition to the above areas, the participants suggested the following hard skills or themes as potential areas of improvement for high school education:

- **Tuition Reimbursement:** Many employers expressed dismay at entry-level employees not taking advantage of substantial tuition reimbursement plans.

Employers see these plans as ways to better their own workforce, as well as ways to better the individual. One employer stated, “They [entry level employees] have an opportunity, financially, to get assistance they need to go wherever they want, but it’s the ones who have already experienced it [higher education] that take more advantage of it than people who first come in ... I think it’s a problem.”

- **Listening and Communication Skills:** 79.9% of survey respondents stated that they were either somewhat or very dissatisfied with students’ preparedness in the area of oral communications and public speaking.
- **Development of Mechanical Aptitude**
- **Problem Solving/Analytical Thinking:** 63.6% of the survey respondents stated that they are somewhat dissatisfied or very dissatisfied with high school graduates’ ability to think analytically.
- **Emerging Technology**

Soft Skills

In both focus groups, the complaints and concerns were dominated by soft skills. Many participants expressed extreme frustration with entry-level employees’ lack of soft skills. Additionally, many participants expressed the willingness to train employees in whatever hard skills necessary, if only the graduates would exhibit most of the soft skills listed below. For example, when participants were asked, “Which is more often the cause when a recent high school graduate is struggling with work?” 57% of participants responded that the employee, “lacks motivation/has distractions/not applying themselves,” in comparison to only 10.5% who responded that the graduate, “lacks skills/was not adequately prepared.” This theme of poor soft skills, elucidated in the responses to the above question, essentially set the tone for the focus group discussion.

Soft Skills: Attendance

Attendance was the number one soft skill brought up in the focus groups. Participants expressed great frustration with getting employees to show up to work on time or to

even show up to work at all. Some verbatim comments reflection this frustration include:

- “They can’t get to work on time, they won’t pick up the phone and call their supervisor ... I would say that 95% of the people who either terminate themselves or get terminated, it’s because of attendance.”
- “They need to impress me with ... punctuality.”
- “[There are problems with] showing up to work on time or just flat out showing up for work.”
- “Attendance is a huge issue that we tend to face hiring at that [entry] level.”
- “[I want] to get an indication of their punctuality.”
- “I think a lot of the issues we are dealing with ... [involve] showing up on time.”
- “We want somebody who shows up on time, somebody who works hard, someone who’s trainable.”
- “They’ve [entry level employees] got a real thing about not showing up.”
- “The attendance policy is something that is abused quite often at this level of individual.”

Soft Skills: Decorum/Demeanor/Personal Presentation

Many of the participants were baffled at the behavior and lack of professionalism in entry-level employees (including but not excluded to appropriate workplace behavior and interview techniques). This was a frequent theme in the focus groups. Some verbatim comments include:

- “The biggest problem that we [employers] see ... we shouldn’t be teaching attitude. And when we see a lot of young people coming in, we just try to teach them to be nice. And you know, that’s a challenge.”
- “Speaking skills just aren’t there. They don’t know how to present themselves professionally in speech or dress. And that’s a big problem for us now.”
- “I’ve talked to so many of my managers; and they feel like they are parents, parenting kids, trying to reprimand them, discipline them. If you are a supervisor, you spend a lot of time doing that, instead of teaching them their job or helping them advance their skills.”

- “Typically what they lack is just really lack of professional demeanor and understanding of how to present themselves, how to interview, how to write resumes.”
- “Let’s have a whole semester in, ‘This is How You’re Going to Act at Work; You’re Going to Act This Way at School.’”
- “Start teaching these kids some life skills ... figure out ways to implement life skills so they’ll know how to act around adults.”
- “People who come in for a job interview, and they will be wearing jeans, shirts with their midriff showing, wearing flip flops. They will bring their friends on interview with them.”

Soft Skills: Work Ethic/Habits

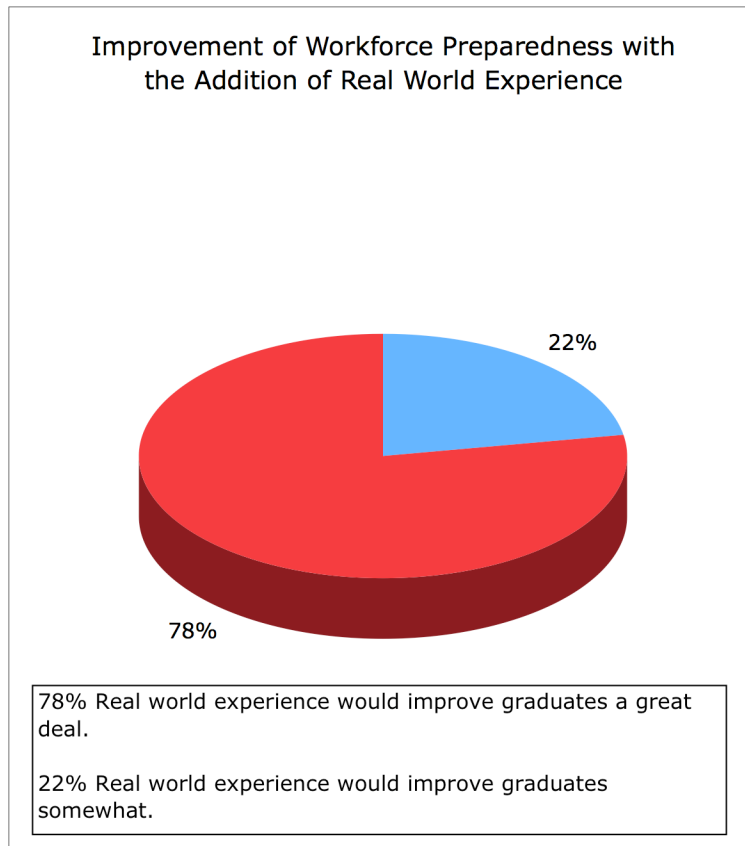
- *78% of respondents stated that they are either somewhat dissatisfied or very dissatisfied with the job that high schools are doing in preparing students in the area of work habits.”*
- *76.4% of respondents stated that less than half of the recent high school graduates who apply for jobs in their company have good work habits.*

Work ethic was also an extremely common theme at both of the focus groups. Some verbatim comments include:

- “A lot of the problems we have focus on general work ethic ... staying focused and staying on task.”
- “They don’t come motivated. They want you to hand it to them on a silver platter and not ask them to do a heck of a lot for it.”
- “Maybe there is some basic high school business ethics that you could teach at the high school level.”
- “There are unreal expectations about what you are going to earn in salary.”
- “These kids just don’t know what it’s like to work, to be successful at work. They just don’t have a clue.”
- “If you [entry level employees] have that work ethic, you have that basic skill, if you are trainable, I can do something with you. I want you.”

Real World Experience

When asked if providing real world experiences, such as internships and service learning, would encourage students to work harder and be better prepared for life after high school, 100% of the respondents stated that this would greatly improve or somewhat improve students' workforce performance.

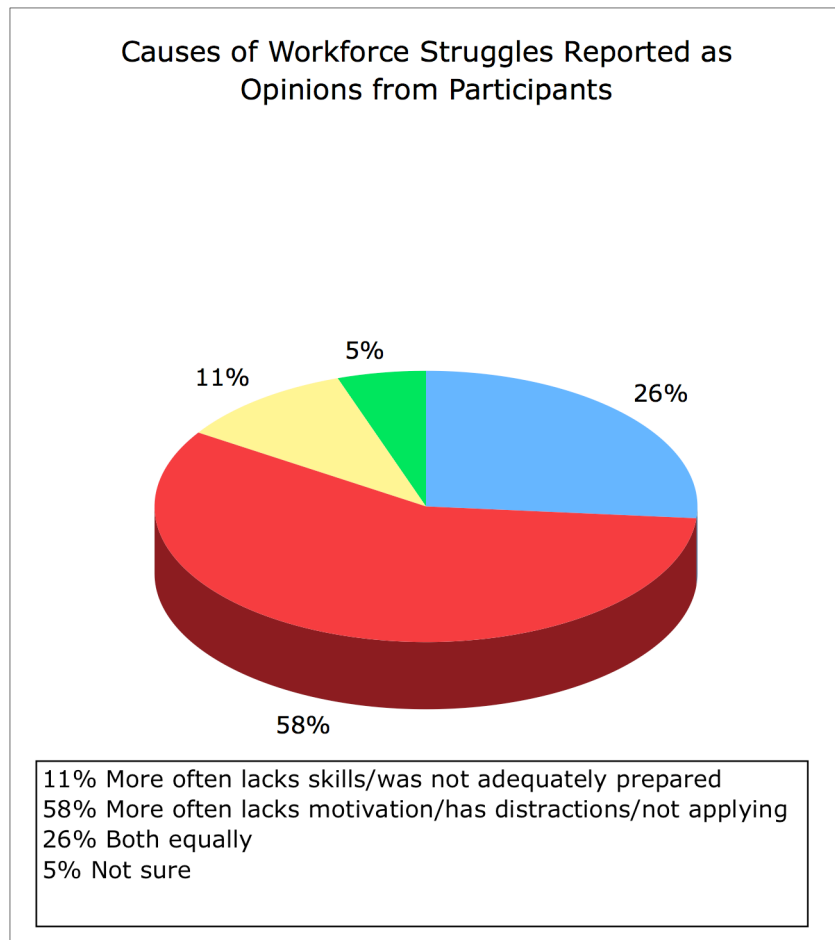


Conclusions:

Though the participants expressed a good deal of frustration at the lack of soft skills in entry-level employees, they expressed even more frustration at the difficulty of trying to teach these skills in a school environment. As one participant put it, "this is home training." Many other participants expressed the opinion that the problems with recent high school graduates are not skills that could even be taught in school.

However, one solution offered by many of the participants is early exposure to the work environment. Many thought that mentoring or engaging young people in the professional world help to teach some of these soft skills. In fact, 100% of respondents stated that providing opportunities for more real-world learning, through internships or other opportunities would improve entry-level employees.

Additionally, these real world experiences may promote growth in the area of some of the hard skills. Participants suggested that reading comprehension, applied math and listening and communication skills could all be improved by the early exposure to the work environment.



1.0 Executive Summary

Substantial research and studies demonstrate that high school graduates are not being prepared to succeed. There are gaps between the education received in high school and the overall skills, abilities and work habits needed for the demands of post-secondary education and the workforce. Currently, as many as 39 percent of recent graduates now enrolled in college and 46 percent in the workforce say there were significant gaps in their preparation.

Moreover, 76 percent of employers in Arkansas state that less than half of the recent high school graduates who apply for jobs in their company lack the necessary quality writing skills and the ability to do basic math. More than 60 percent of the employers are not satisfied with the ability of recent high school graduates to read and understand written instructions and materials.

Raising academic standards and graduation requirements, building a stronger curriculum and measurement systems are just some of the needed steps to assist the present capabilities of high school programs.

In light of this objective and as part of the Arkansas Department of Education's plan to redesign public high schools in Arkansas, thirty-three colleges and universities were invited to participate in an Internet survey seeking opinions from professors who teach freshman-level courses about preparedness of high school graduates for college.

Professors were asked to rate the Arkansas public high school system and the freshman level students on a number of performance-based levels. Respondents were anonymous; however, information was collected about their position, tenure, number of years teaching, and size of the college or university.

The responses of three hundred fifteen (N=315) college instructors who completed the survey have been critical and reveal that they are clearly unsatisfied with the job that high schools are doing in preparing students, particularly in mathematics, writing and study habits. Their responses have been thoroughly analyzed and the details are presented in the following pages.

2.0 Summary of Findings

According to national studies, U.S. high school graduation rates have dropped from 74% in 1983 to about 67% in 2000. Nationally only 34% of ninth grade students who graduate from high school on time are college ready. In addition the U.S. ranks 16th worldwide in high school graduation rates behind countries like Denmark, Norway, Germany and Japan.

These shocking numbers have aroused a need to redesign the high school system across the country. Arkansas is not an exception and, hopefully, the following study will contribute to this significant cause.

This study is a heuristic study, a helping or learning study, and the results are not representative of all freshman-level professors but only those who completed the Internet survey.

From the 315 college professors who recorded teaching freshman-level courses, 51% are male and 49% are female. From this population, 35% have been teaching for more than 20 years; 50% of them are within the arts and humanities area of expertise, and 38% are within the sciences area of expertise.

It is interesting to note that 55% of the professors surveyed hold a master's degree and 38% possess a doctorate degree. The majority of the professors surveyed teach at schools with a student body of 1,001 to 5,000 students.

College professors "graded" the overall academic quality of the public high schools in preparing students for college with mostly Ds (50.2%) and Cs (38.6%). One in 10 college professors "graded" the public high schools F (9.6%) in overall academic quality.

At the same time, the majority of the professors consider the level of admissions not to be very competitive at all within their schools. The professors expressed concerns that the level of admission standards was not very competitive at their college or university. Twenty-eight percent (28%) of the professors (n=87) said admission standards were not very competitive. Fifty-four percent (54%) of the professors (n=171) said admission standards were not competitive at all.

About 40% (n=128) of the professors are somewhat satisfied with the job Arkansas public high schools are doing in preparing students for college. However, almost 49% of the professors (n=176) are not satisfied with the job being done by Arkansas public high schools.

When asked about the level of preparedness of high school graduates to take their freshman-level courses, 50% of the professors (n=156) said they were "somewhat prepared." Another 110 professors said the seniors were "not very prepared."

The professors readily provided recommendations on areas of improvement for better preparing high school students for college. All of the verbatim comments are included at the end of the report.

Professors recommend high school graduates need to improve in:

- Math
- Critical thinking
- English
- Study Habits
- Discipline
- Work ethic
- Independent thinking
- Literacy
- Communication
- Report writing

Sixty-six percent (66%) of all professors believe that remedial or development courses are needed by more than half of the freshman-level students they teach.

Half of the college professors teach at four-year colleges or universities and half of the college professors teach at two-year colleges.

3.0 Methodology

In September 2006, Cranford Johnson Robinson Woods conducted a study for the Arkansas Department of Education to determine the preparedness of high school seniors for college from the perspective of college professors who teach freshman-level courses. Thirty-three colleges and universities, both four-year and two-year institutions, were invited to participate. The study respondents were anonymous and not identified individually or by the name of the institution where they teach.

The study was conducted using the Internet. A survey Web site was created and a survey code login was provided to the respondents. Only one survey per person who logged in was permitted. The survey Web site was live for the month of September 2006. Three hundred sixty-three (363) college professors went to www.SurveyInfoUSA.com during that time period.

Forty-eight (48) professors recorded that they did not teach freshman-level courses and did not complete the survey.

Three hundred fifteen (315) college professors recorded that they did teach freshman-level courses and took the survey. Not all questions had responses, as the tables will show in the report of findings.

4.0 Conclusions

This study has measured the perception of college professors towards high school students and the level of preparedness that they are bringing into college.

For research purposes, we have divided the different high school graduates' skills into two categories – hard skills and soft skills. The hard skills discussed in this report are writing, math, science, computer skills and reading comprehension. Soft skills refer to social skills such as leadership skills, ability to work in a group, etc.

In relationship to the hard skills, the survey has found a large dissatisfaction with the current level of writing skills, global awareness, mathematics, natural science and technology. Therefore, the following solutions are offered in order to improve and strengthen those particular areas:

- There is a need for a stricter curriculum and stricter supervision. Not only is it significant to provide students with a defined competitive academic load, but also is also extremely important to provide the students with the necessary supervision so that better results can be obtained. Supervision will be obtained from the direct relationship between teachers, parents and students.
- On the other hand, 55% of the college professors consider the level of admission standards of their college to be “not competitive at all.” This also projects a different insight into high school graduates ... if it is not too hard to get into college, then there is no need for greater efforts throughout high school. Therefore, high school education should focus on building a stronger academic base for college, and colleges should focus on raising the level of admissions standards.

As far as soft skills are concerned, the majority of the professors gave the high school graduates better ratings in the following areas – ability to work in a group and leadership skills. However, they still obtained lower ratings for the following: ethics and social responsibility; analytical thinking; oral communication/public speaking; study and work habits; and, ability to solve problems.

Soft skills are a combination of education at home, education in school and personality traits. In order to provide assistance to the students in these particular areas, there must be:

- A mentoring program where students can engage themselves to aspire in education and a professional career, if desired.
- A wider exposure to the “real world.” Through learning experiences, internships and seminars, students need to be strengthened in the foundations of their personality so they can participate in an active, creative and conscious way in the development of the community.

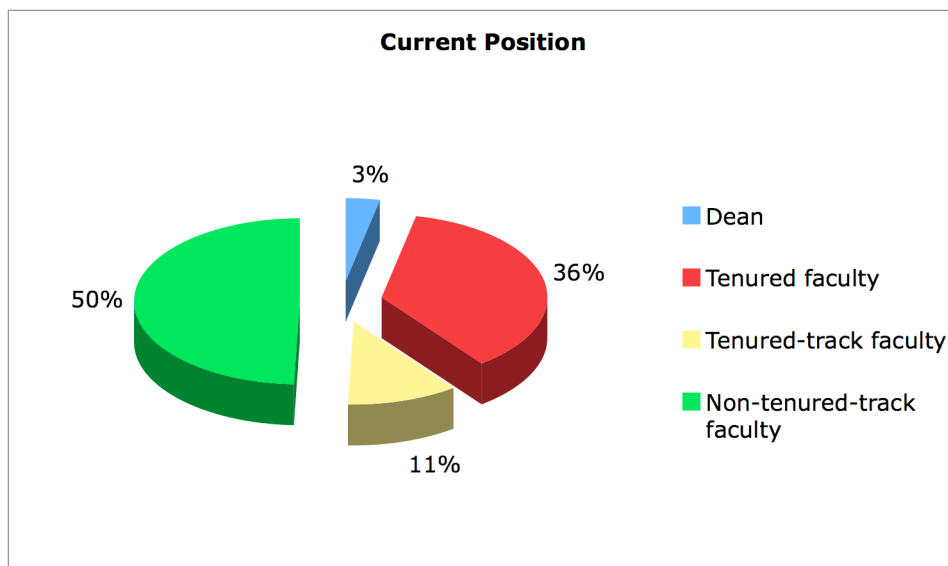
5.0 Analysis by Demographics

The following frequencies will report the different data captured from college professors' demographics:

5.1 Current Position

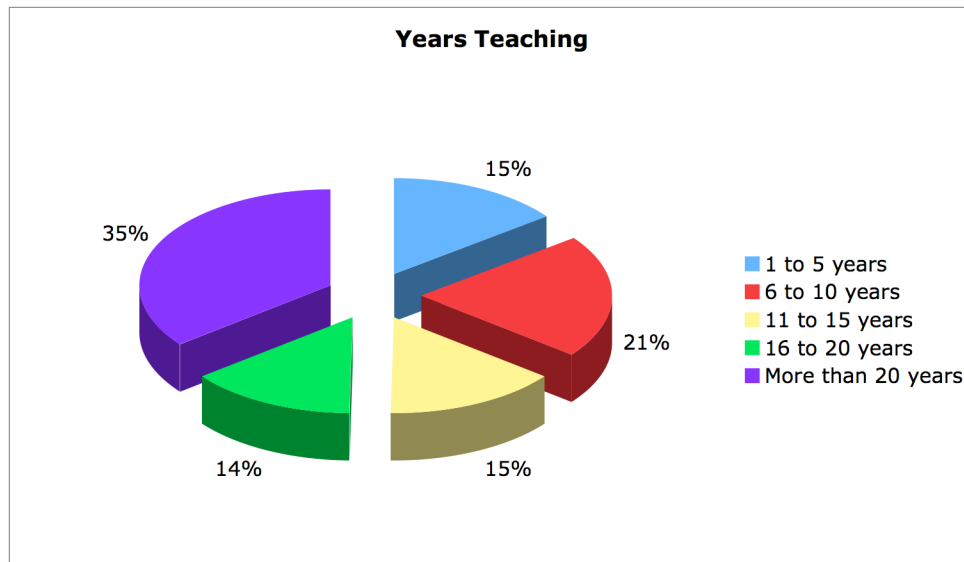
College professors were equally divided between teaching at a four-year college or a two-year college.

Respondents reported their current position at the college or university. Fifty percent (50%) of the college professors (n=147) in the study are non-tenured-track faculty compared to thirty-six percent (36%) who are tenured faculty (n=108). Ten deans took the study (3% of all respondents). Eleven percent (11%) of the respondents (n=32) are tenured-track faculty. Eighteen professors who took the survey did not respond to this question.



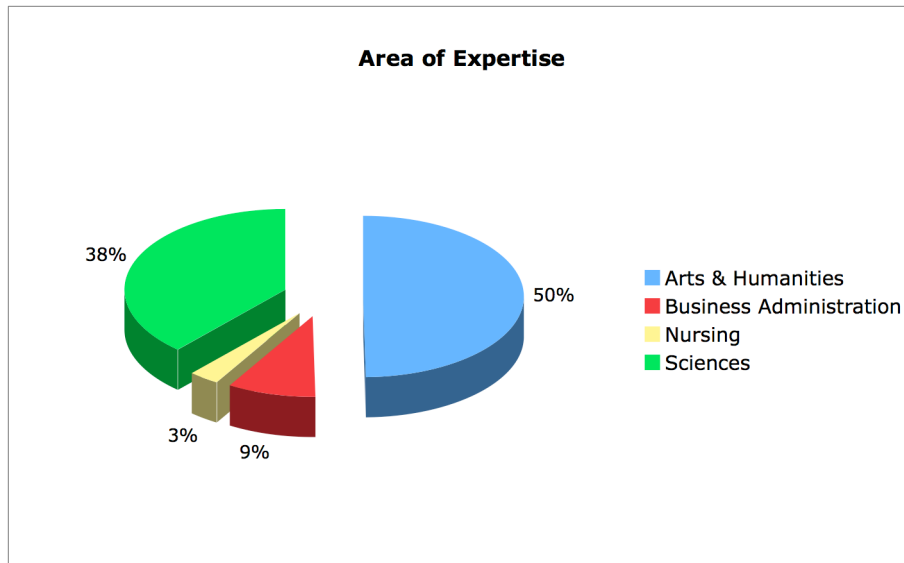
5.2 Years of Teaching Experience

Of the college professors (n=315), the most representative group (n= 109) is those professors with more than 20 years' experience in teaching. They represent 35% of the population surveyed. Fifteen percent (15%) of the college professors (n=45) have been teaching one to five years.



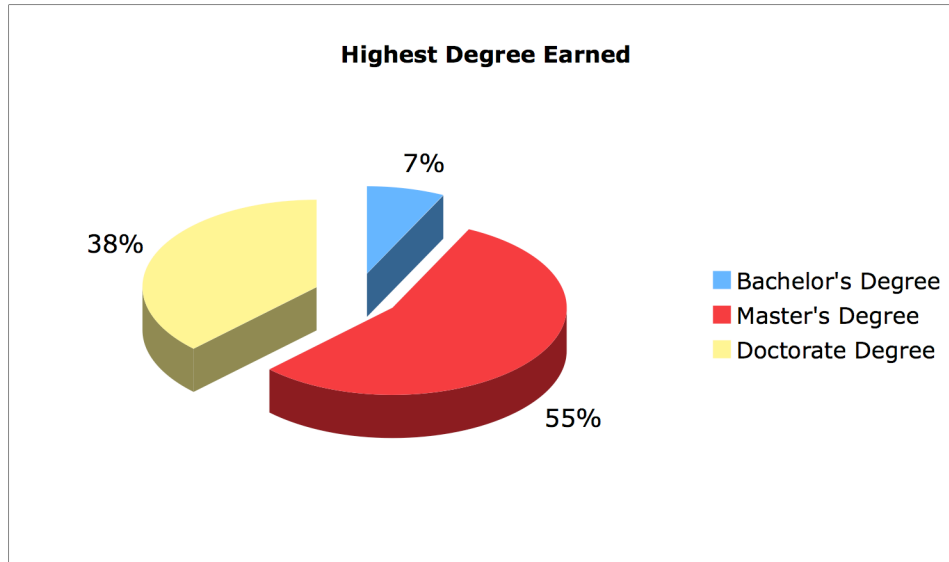
5.3 Teaching Expertise

In order to understand the background of the surveyed college professors, a question was included as to what area of expertise they represented. The Arts & Humanities professors (n=130) comprise the majority (50%) of all respondents. One hundred (n=100) professors represent the sciences, or 38% of all respondents, and 9% was represented by business administration professors.



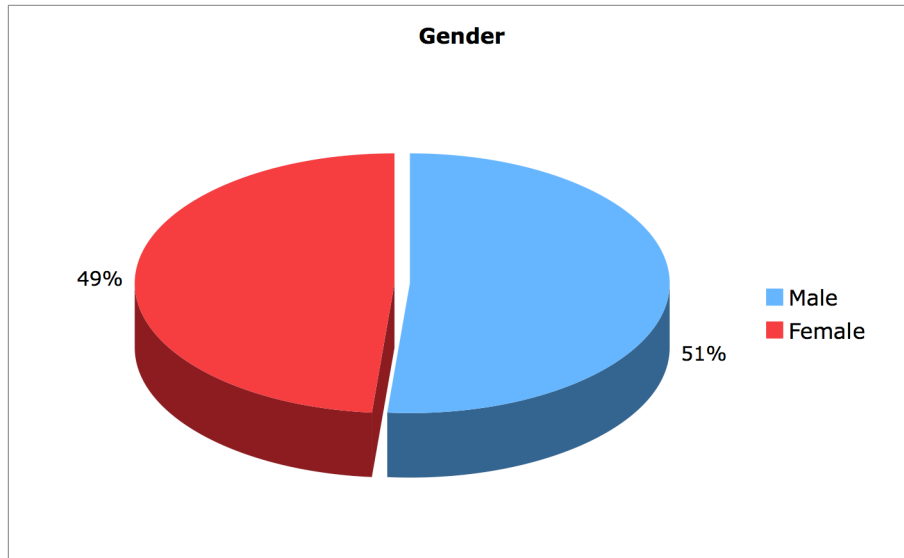
5.4 Highest Degree Earned

Ninety-three percent (n=293) of the college professors have advanced degrees. Thirty-eight percent (n= 114) of the college professors have earned their doctorate degree.



5.5 Gender

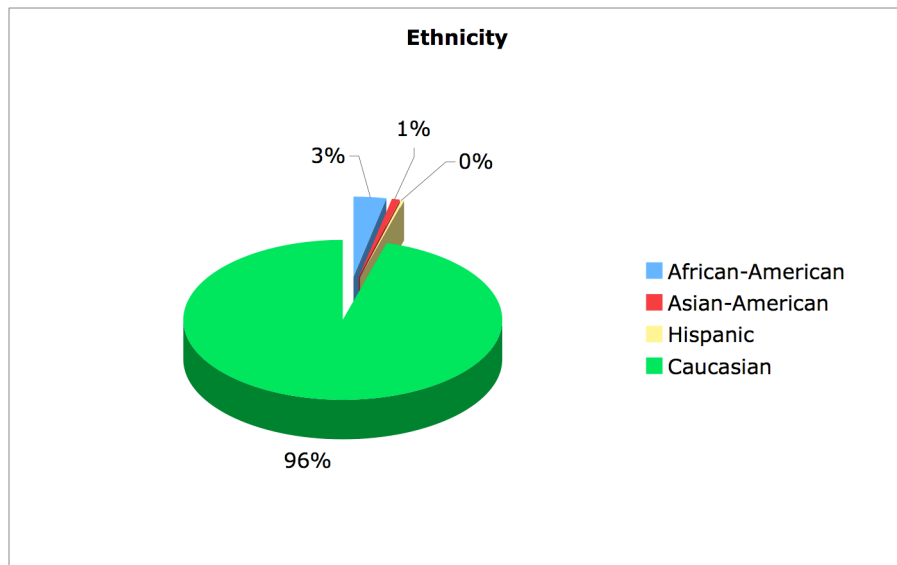
By gender, 51% of the professors are male and 49% of the professors are female.



5.6 Ethnicity

It is very important for a college student to be able to have a wide worldview and they can obtain that through education and by looking into a variety of perspectives. Therefore, professors' points of view play a key role in the formation of college graduates.

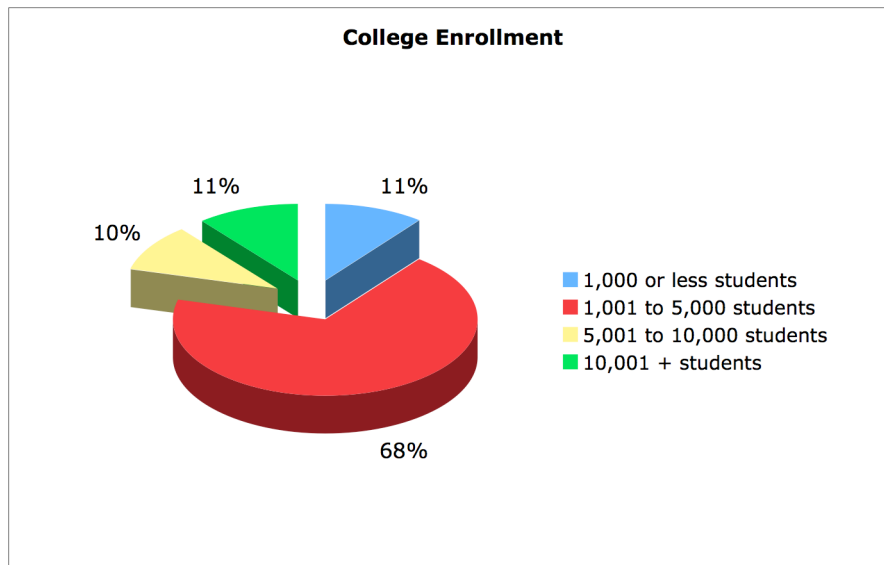
The survey shows that the majority of college professors who reported their ethnic group membership are 96% Caucasian (n=280). Other ethnic groups represented in the study are: African-American (n=10), Asian-American (n=2), and Hispanic (n=1). Twenty college professors did not report their ethnicity.



5.7 College Enrollment

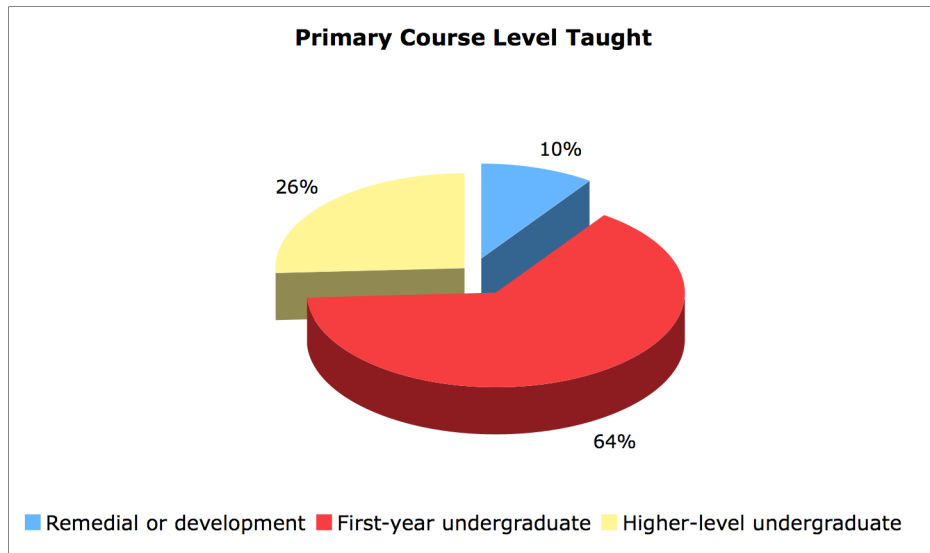
College enrollment as reported by the college professors was recorded in four groups: schools with 1,000 students or less; schools with 1,001 to 5,000 students; schools with 5,001 to 10,000 students, and schools with a student body larger than 10,001.

Most of the respondents come from a school with an approximate of 1,001 to 5,000 students.



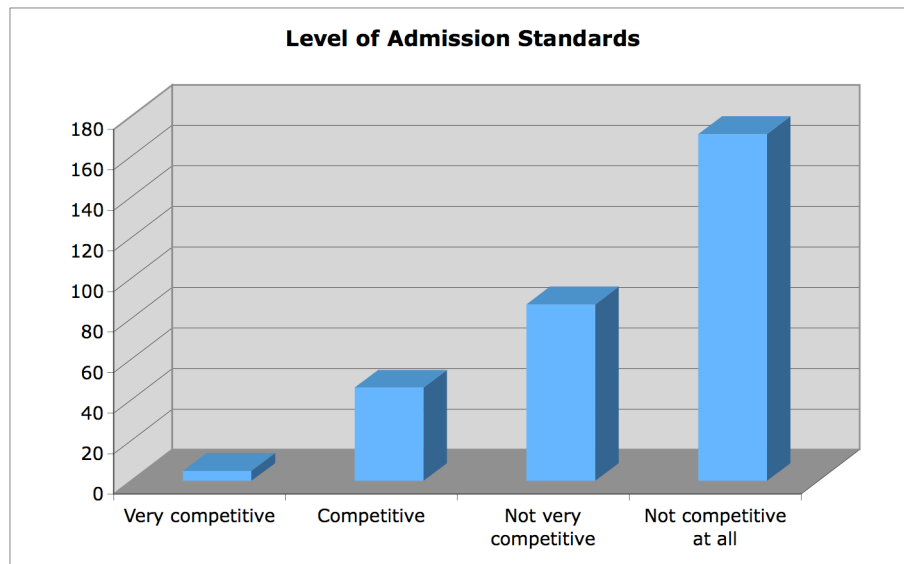
5.8 Primary Course Level Taught

The survey determined that 64% (n=199) of the professors teach first-year undergraduate courses, 26% (n=80) teach higher-level undergraduate courses, and 10% (n=80) teach remedial courses.



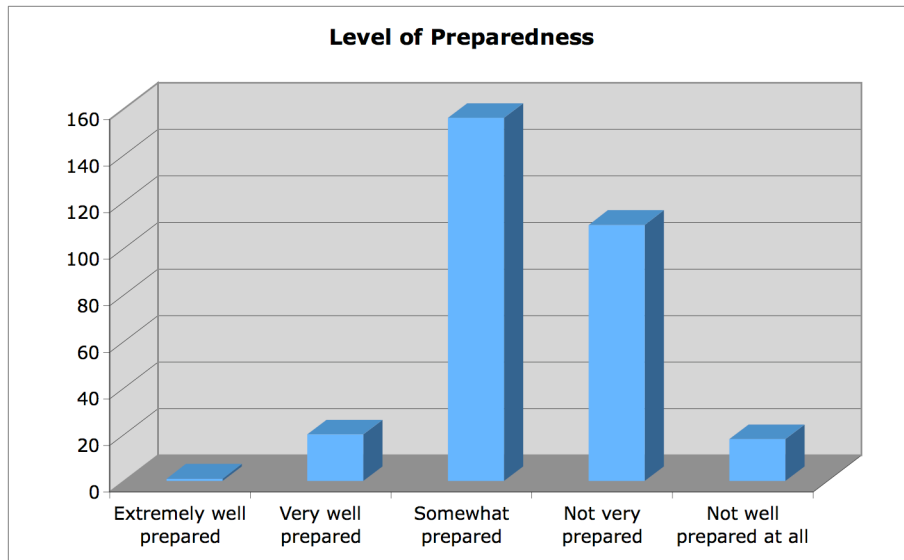
5.9 Level of Admission Standards

Fifty-five percent of the college professors (n=171) consider the level of admissions not to be very competitive at all within their schools, 28% (n=87) consider it not to be competitive at all, and only 15% (n=46) consider it to be competitive, with 2% (n=5) rating it as “very competitive.”



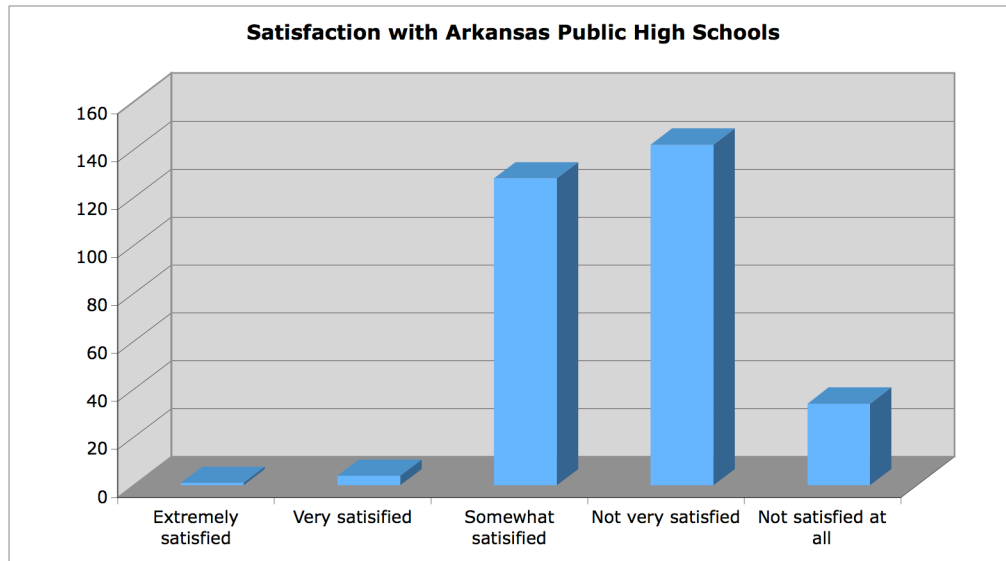
5.10 Level of Preparedness

College professors (n=156) said that high school seniors are somewhat prepared to take freshman-level courses, while other professors (n=110) said that high school seniors are not very prepared. A smaller group of professors (n=18) said that high school graduates are not well prepared at all for college courses.



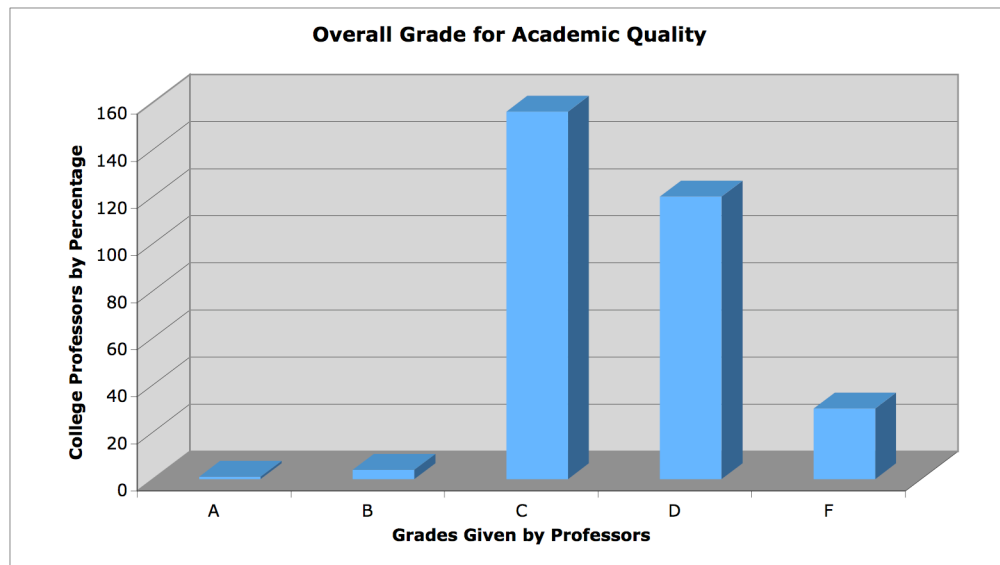
5.11 Satisfaction with Arkansas Public High Schools

College professors (n=128) are somewhat satisfied with the job Arkansas public high schools are doing in preparing students for college. However, almost 49% (n= 176) are not satisfied with the job being done by the Arkansas public high schools. One hundred forty-two college professors say they are not very satisfied and 34 college professors say they are not satisfied at all.



5.12 Overall Grade for Academic Quality

When asked what grade they would give for “overall academic quality of the public high schools” in preparing students for college, the college professors barely gave (51.8%) more passing grades (A, B, C) than Ds and Fs (48.2%).



5.13 Recommended Areas that Need Improvement

When asked to mention any three areas that college professors would recommend public high schools do a better job at, a variety of answers were received. In order to better understand the opinions of college professors, it was necessary to give them the opportunity for areas of recommendation.

Repeated areas that needed improvement were “mathematics, reading, communication, study habits, English and science.” The most recurring category for college professors was undoubtedly mathematics.

Verbatim responses from college professors were somewhat similar like math, English and communication. Here are a few of the verbatim comments. See the rest of the comments in appendices section.

“Critical Thinking”

“Desire to Excel”

“Discipline”

“Earth Science”

“Encourage Good Work Ethic and Discipline”

“Encourage Independent Thinking”

“Less Grade Inflation”

“Library Skills as a Whole”

“Listening”

“Literacy”

“Literature”

“Math”

“Problem-solving Skills”

“Process Information”

“Professionalism”

“Reasoning, Logic”

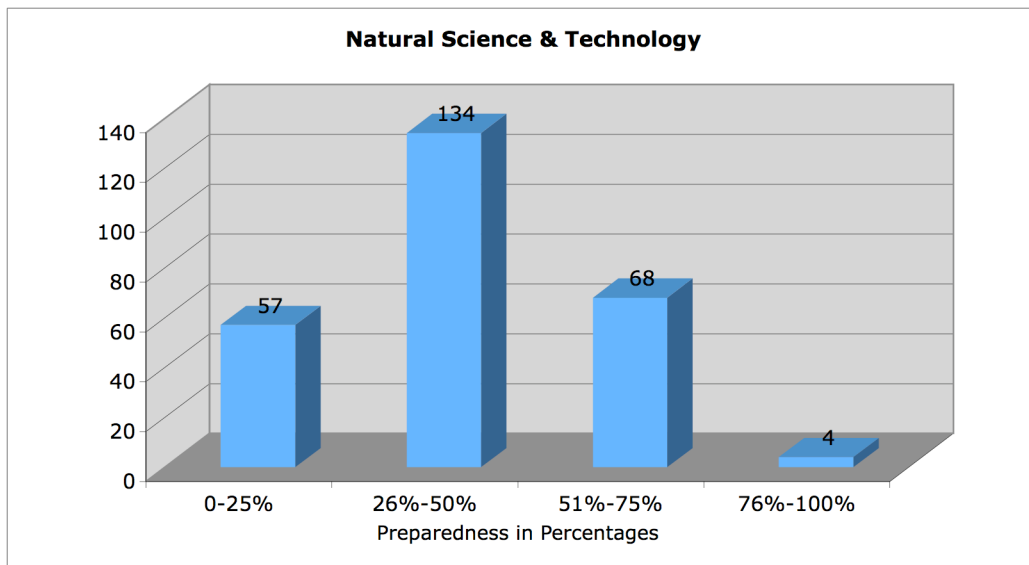
5.14 Preparedness of High School Graduates

High school graduates were measured on the following general education categories:

- Natural Science and Technology
- Computer Literacy
- Writing Skills
- Global Awareness
- Ethics and Social Responsibility
- Cultural and Artistic Literacy
- Mathematics

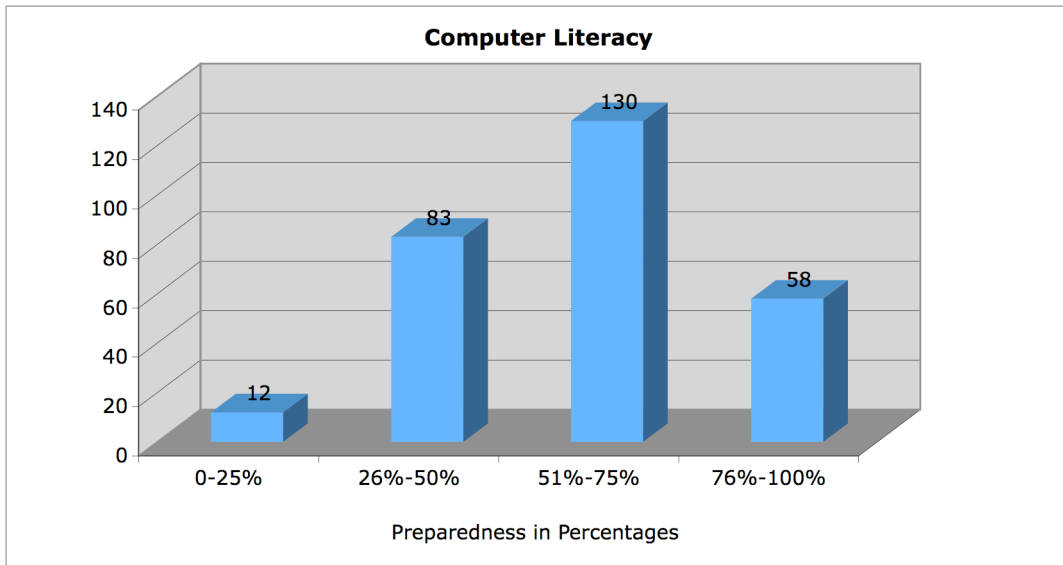
5.14.1 Natural Science and Technology

Thirty-seven percent (n=134) of college professors consider that high school graduates are only 26-50% prepared for natural science and technology. On the other hand, 19% (n=68) said that high school graduates are only 51-75% prepared.



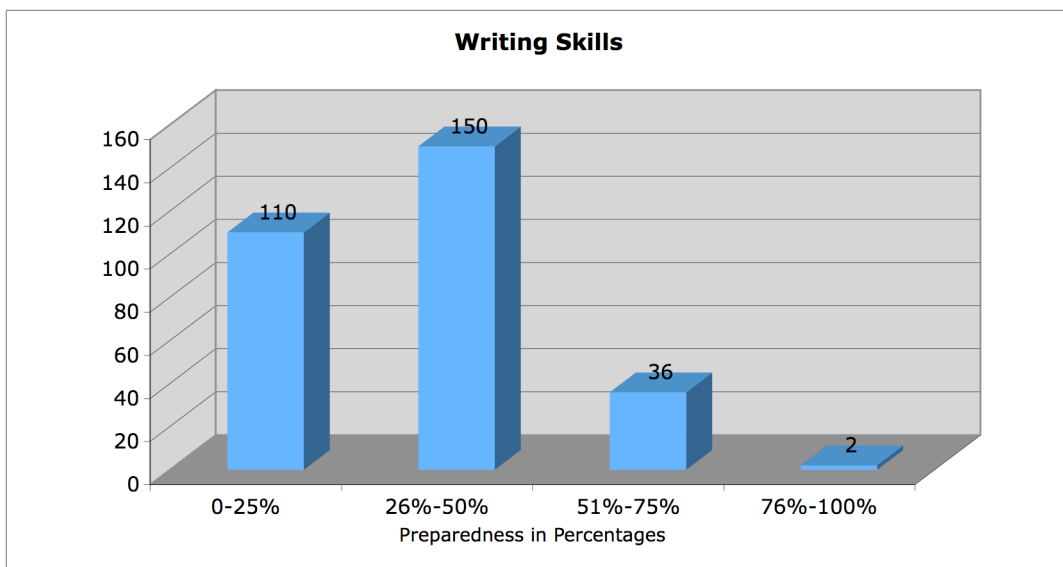
5.14.2 Computer Literacy

Forty-six percent of the respondents consider high school graduates to be 51-75% prepared in computer literacy. Twenty-nine percent consider them to be 26-50% prepared. This category was perhaps the only one with the highest ratings due to teenagers' daily use of computers and other electronic devices outside from school.



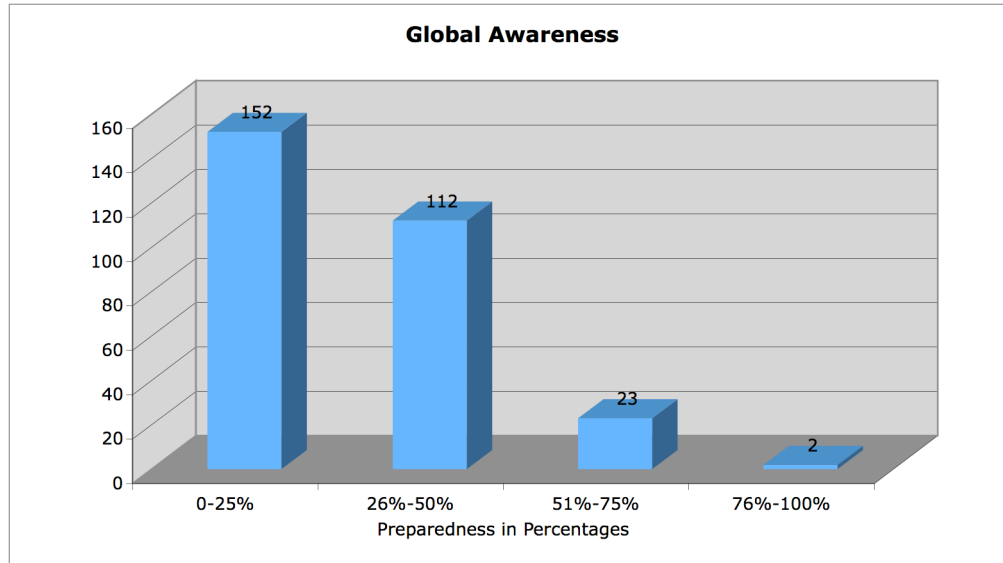
5.14.3 Writing Skills

Fifty percent (n=150) of the respondents consider high school graduates to be 26-50% prepared in writing skills. Following, 37% (n=110) of the respondents consider high school graduates to be 0-25% prepared in writing skills. Only 12% (n=36) consider them to be 51-75% prepared.



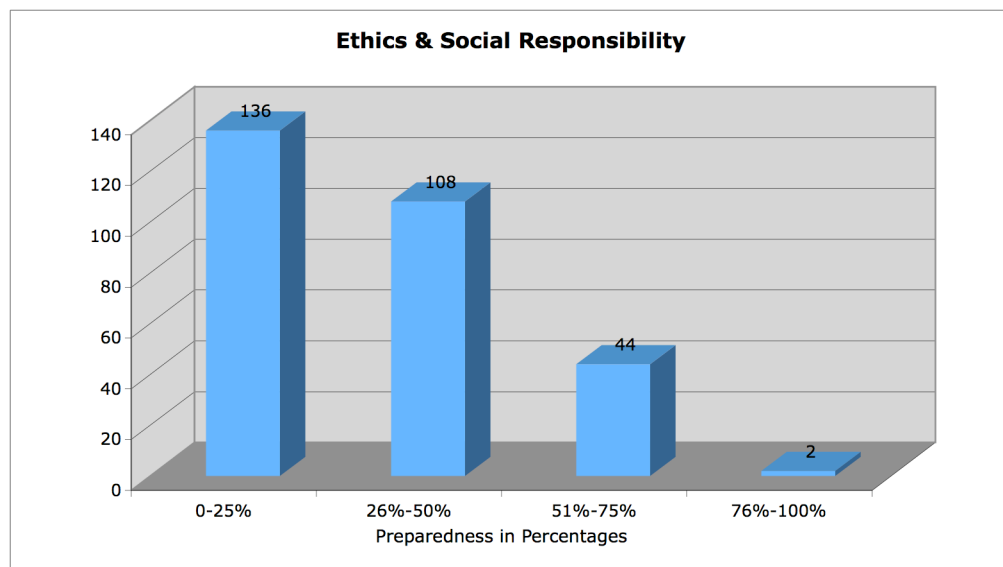
5.14.4 Global Awareness

An area that needs further development is that of global awareness. Most of the professors (53%) consider that high school students are only 0-25% prepared in this area and 39% of them consider high school students to be 25-50% prepared. A low 1% rated the high school graduates with a 76-100% preparation in global awareness.



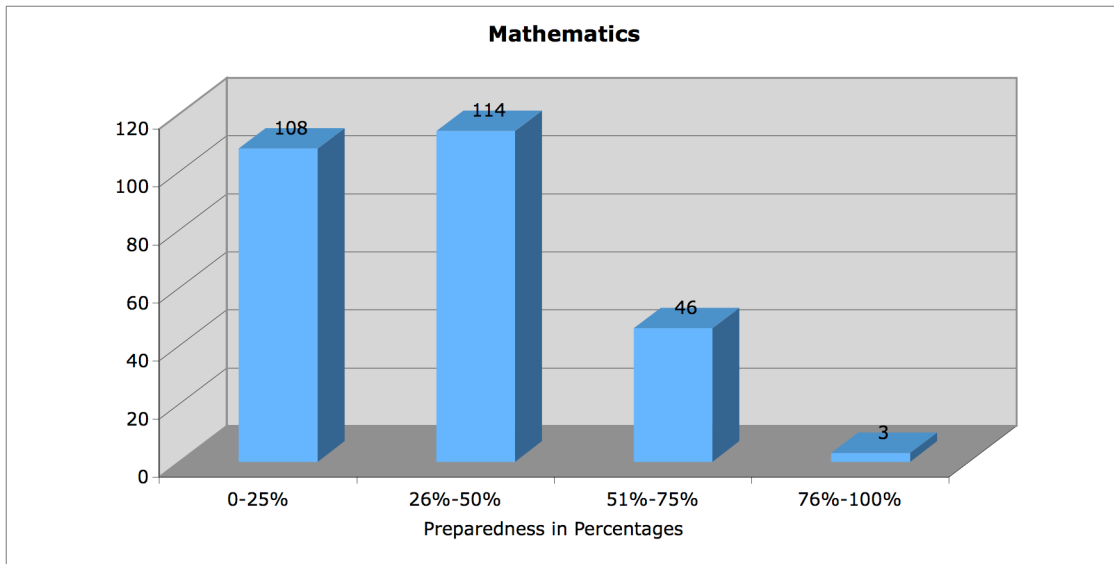
5.14.5 Ethics and Social Responsibility

Ethics and social responsibility is a category with low rating numbers. Forty-seven percent (n=136) of the respondents rate high school students to be 0-25% prepared in ethics and social responsibility. Following, 37% (n=108) rate high school students to be 26-50% prepared.



5.14.6 Mathematics

Forty-two percent of the college professors consider high school graduates to be 26-50% prepared in mathematics and 40% consider them to be 0-25% prepared in mathematics. Altogether, 82% of the college professors consider high school graduates to be less than 50% prepared in mathematics.

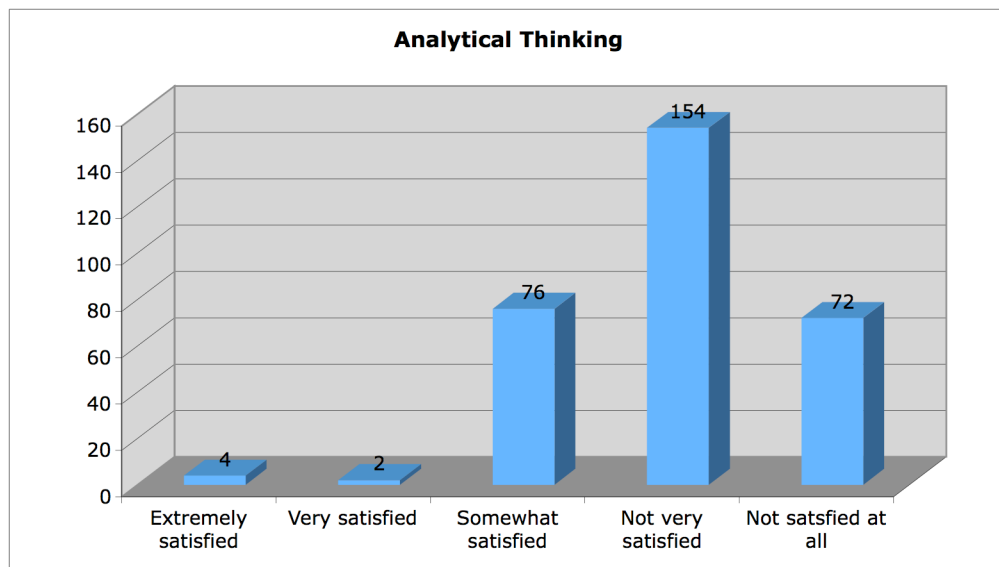


5.15 Satisfaction with High School Graduates in the Following Areas:

Analytical Thinking, Oral Communication/Public Speaking, Study and Work Habits, Ability to Solve Problems, Ability to Work in a Group and Leadership Skills.

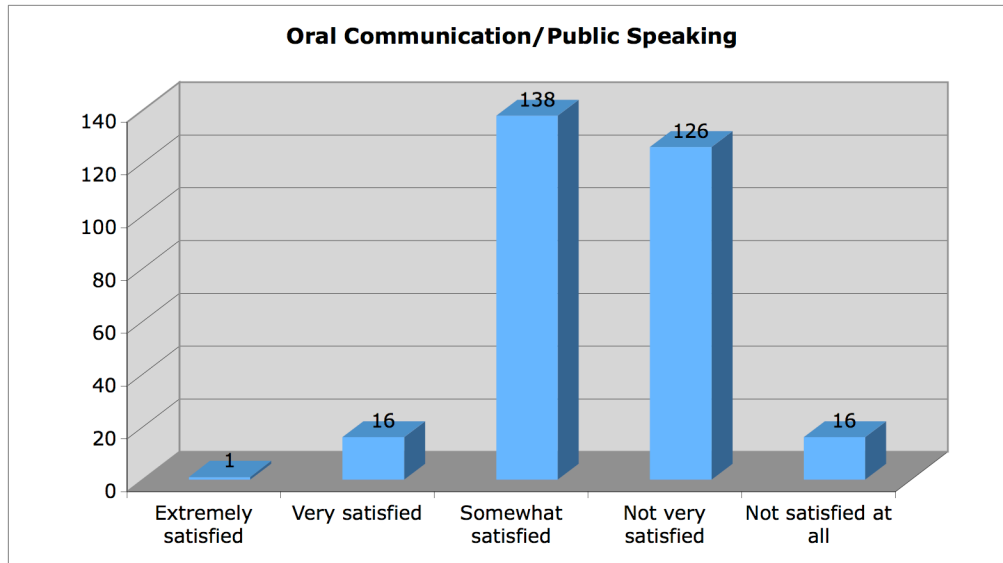
5.15.1 Analytical Thinking

Fifty percent of the professors (n=154) are “not very satisfied” with the analytical thinking process from high school graduates. Only 1% said they were “very satisfied” and another 1% said they were “extremely satisfied.”



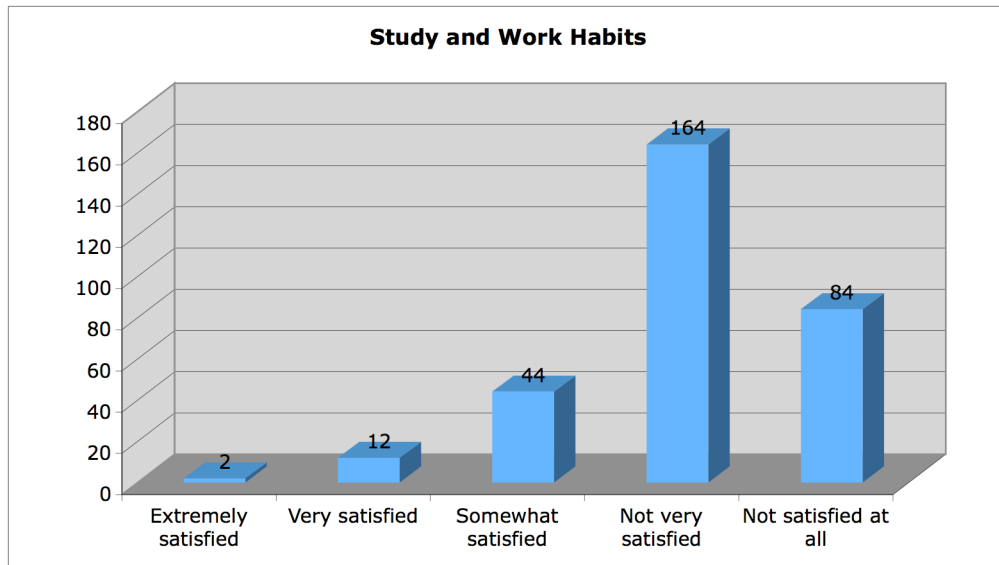
5.15.2 Oral Communication/Public Speaking

Forty-six percent (n=138) of the respondents are “somewhat satisfied with high school graduates’ oral communication/ public speaking skills” and 42% (n=126) stated to be “not very satisfied” with the high school graduates’ oral communication and public speaking ability.



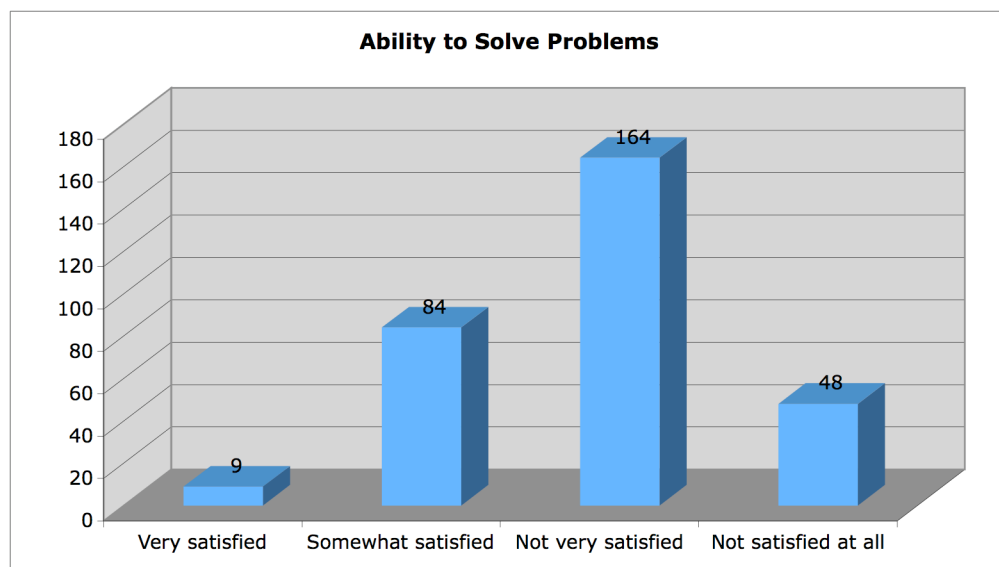
5.15.3 Study and Work Habits

Fifty-four percent (n=164) of the college professors are “not very satisfied” with high school graduates’ study and work habits, 27% (n=84) are “not satisfied at all” with their study and work habits, and a small 1% is “extremely satisfied.”



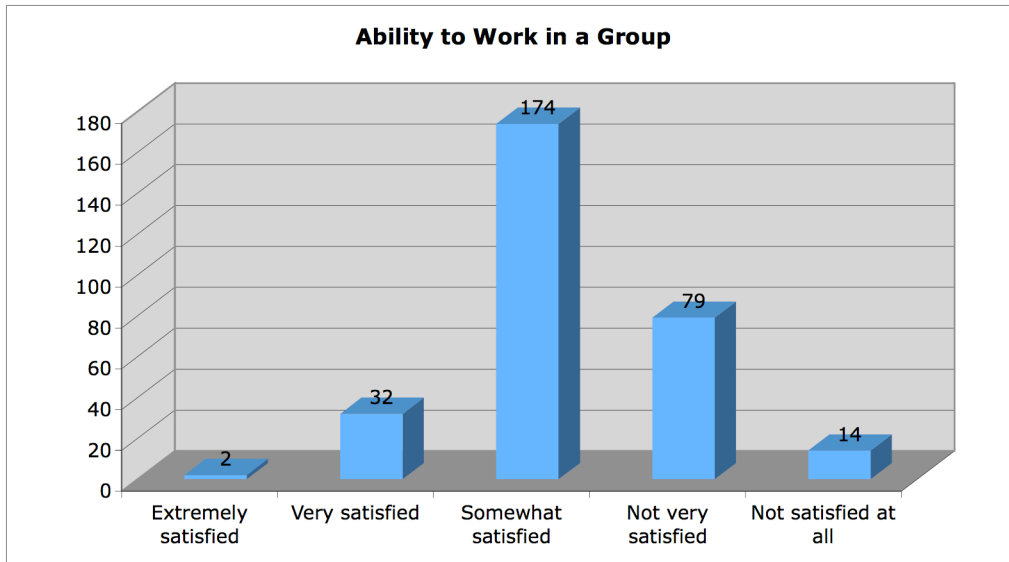
5.15.4 Ability to Solve Problems

High school graduates are having a hard time solving problems. However, this category obtained higher ratings than the previous ones. Fifty-four percent (n=164) of the respondents are “not very satisfied” with high school graduates’ ability to solve problems, and 28% (n=84) were “somewhat satisfied.”



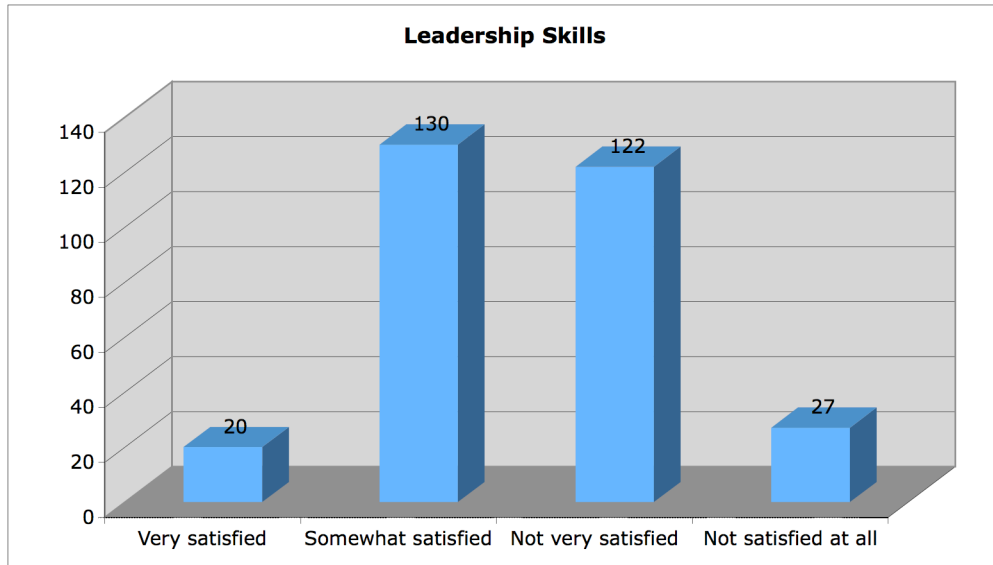
5.15.5 Ability to Work in a Group

Along with leadership skills, this is perhaps one of the categories that obtained the highest ratings. Fifty-eight percent (n=174) of the college professors are “somewhat satisfied” with the students’ ability to work in a group, 26% are “not very satisfied,” and 11% are very satisfied.



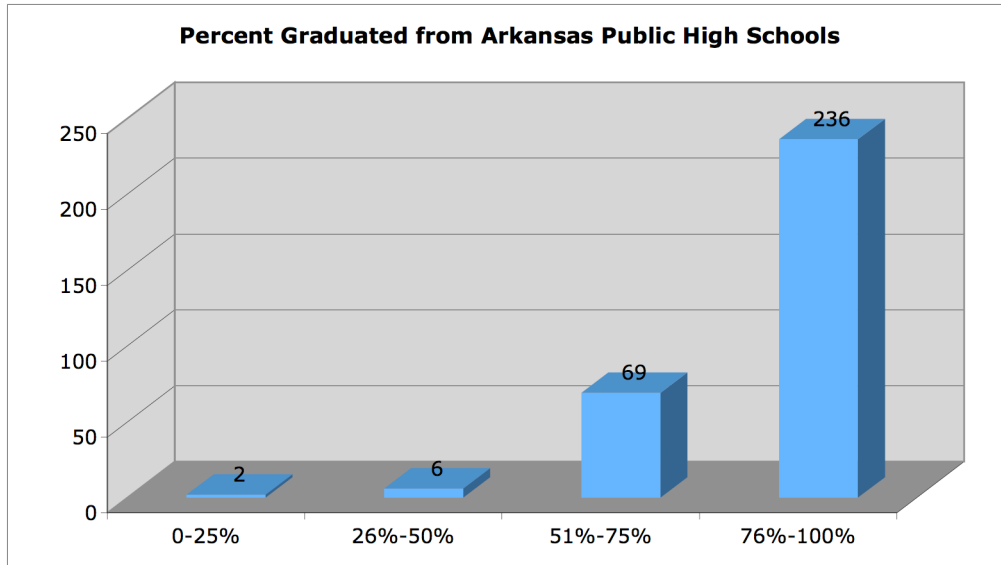
5.15.6 Leadership Skills

Even though these are still low numbers, the survey provided higher ratings for students' leadership skills. This is perhaps due to their ability to relate and communicate to their peers and is not dependent on their academic skills or abilities. According to the study, 43% (n=130) of the college professors are "somewhat satisfied," and 41% (n=122) are "not very satisfied."



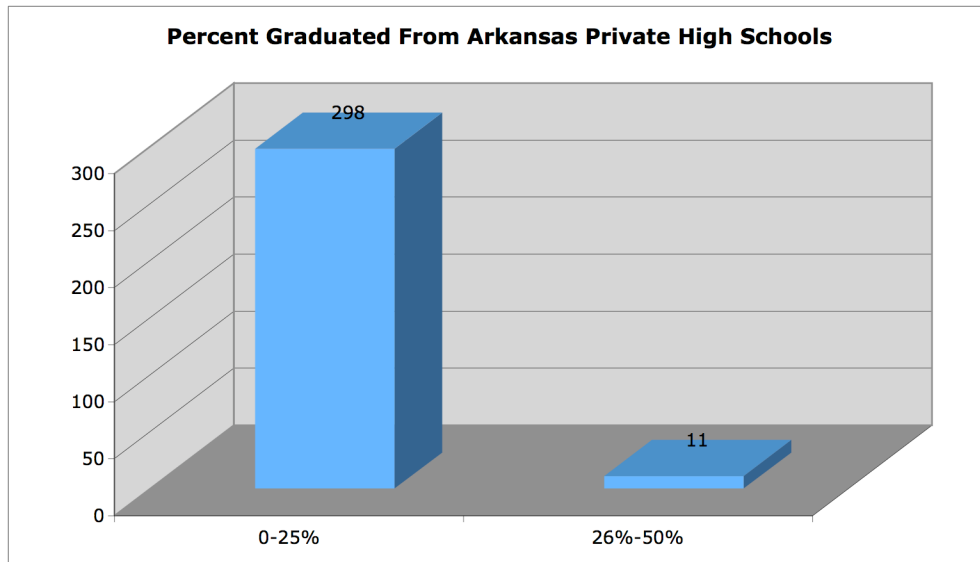
5.16 Estimate of Students Who have Graduated from a Public School in Arkansas

The responses from the college professors show that the majority of college students in Arkansas come from a public school in the state; 79% of the professors said that 76-100% of the high school graduates come from a public school in the state.



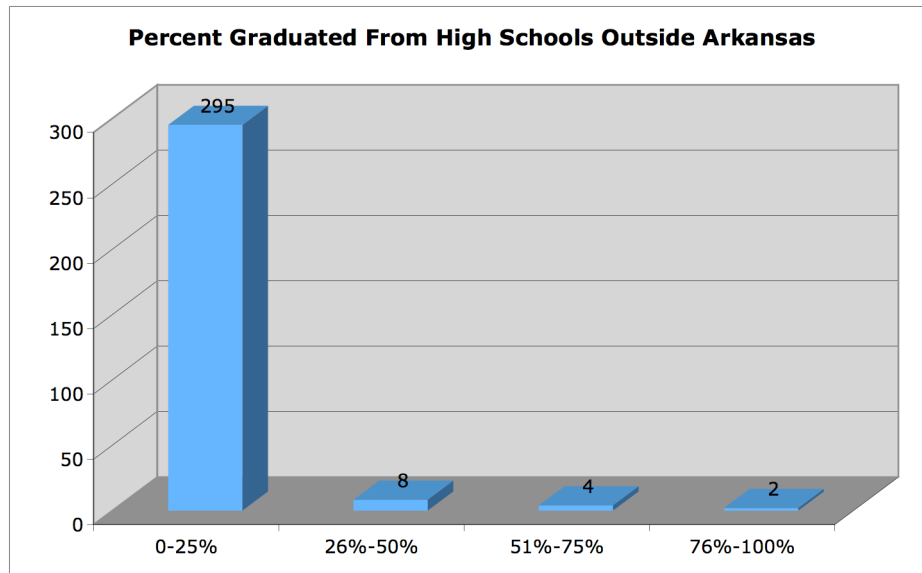
5.17 Estimate of Students Who are Graduates of a Private School in Arkansas

According to 96% (n=298) of the college professors, only 0-25% of the freshman student body has graduated from a private school in Arkansas.



5.18 Estimate of Students Who are Graduates of a High School Outside Arkansas

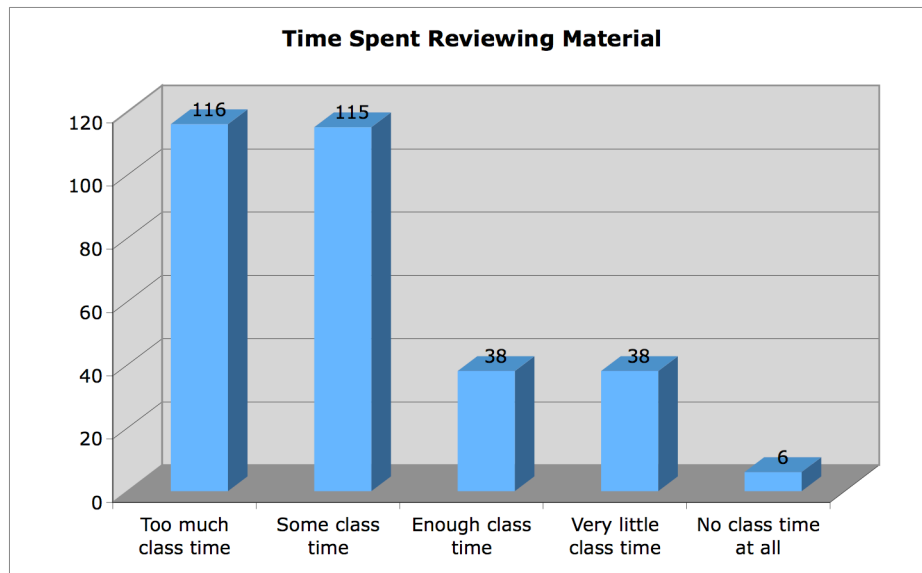
Ninety-five percent of the college professors said that 0-25% of the freshman student body has graduated from a high school outside Arkansas.



5.19 Time Spent Reviewing Material

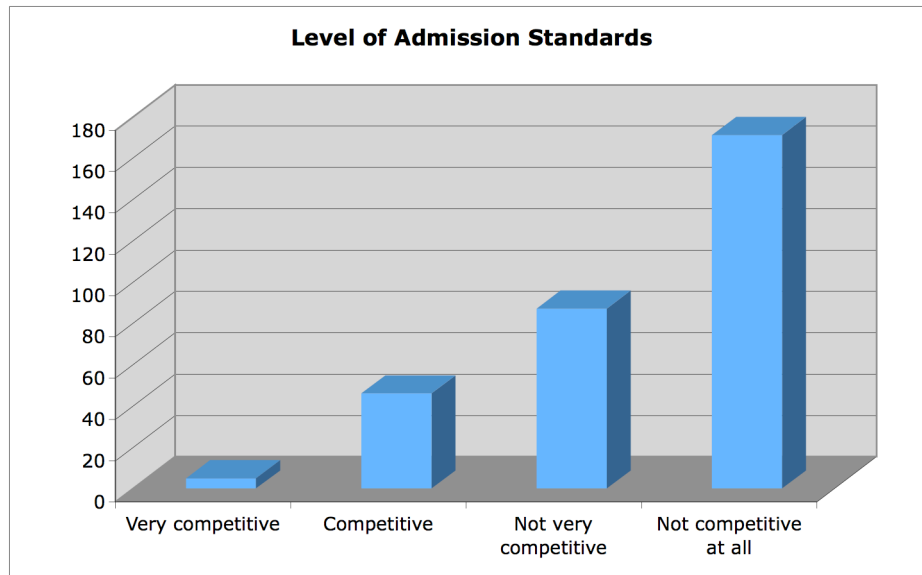
Reviewing material can be very time consuming and slow down the flow of classes. Therefore, it is critical for high school graduates to be sufficiently prepared for their college classes.

According to 37% (n=116) of the college professors, they spend “too much class time” in reviewing material and addressing skills that they think should have been taught in high school.



5.20 Level of Admission Standards

For 55% (n=171) of the college professors, the level of admission at their school is “not competitive at all.” Following, 28% of the professors consider their level of admission to be “not very competitive.”



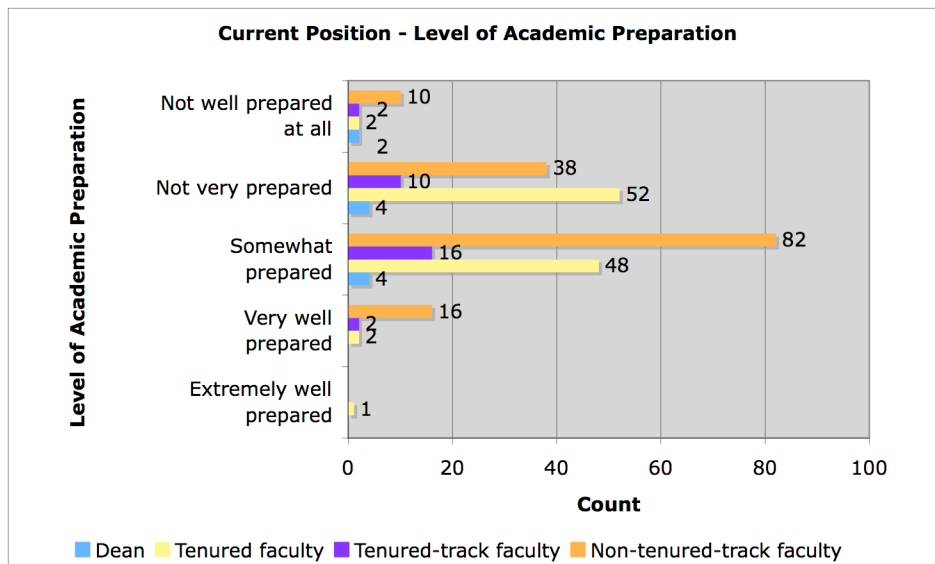
6.0 Cross Tabs

In order to represent a brighter picture of the college professors' perceptions towards high school graduates, the survey responses were further analyzed by key demographics including current position at the college or university, years of teaching, school size, gender and whether they teach at a four-year or two-year college.

6.1 Level of Academic Preparation

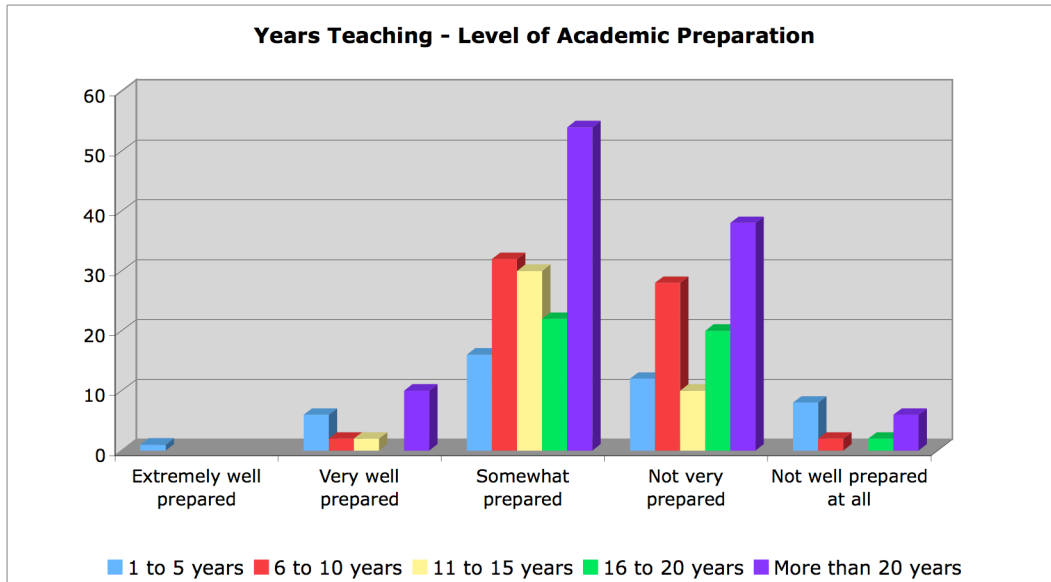
a.) Current Position

The following graph represents how the professors rated the students' level of academic preparation based on the professor's college position (dean, tenured faculty, tenured-track faculty and non-tenured-track faculty).



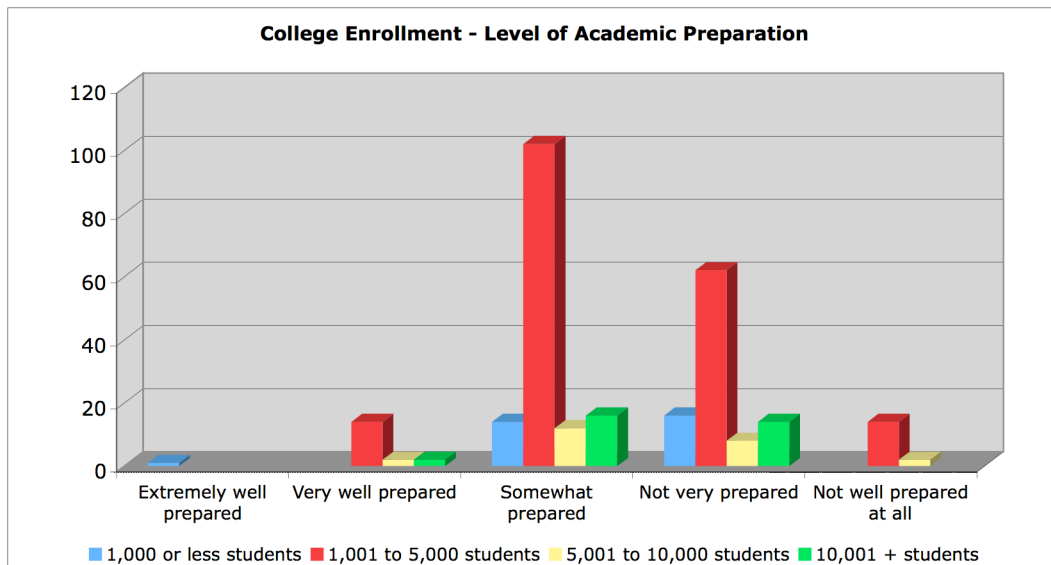
Only 7% of all professors said that high school graduates are very well or extremely well prepared for college. This 7% is mainly represented by non-tenured-track faculty. Tenured faculty and non-tenured-track faculty are in agreement that high school graduates are generally somewhat to not very prepared for college courses.

b.) Years Teaching



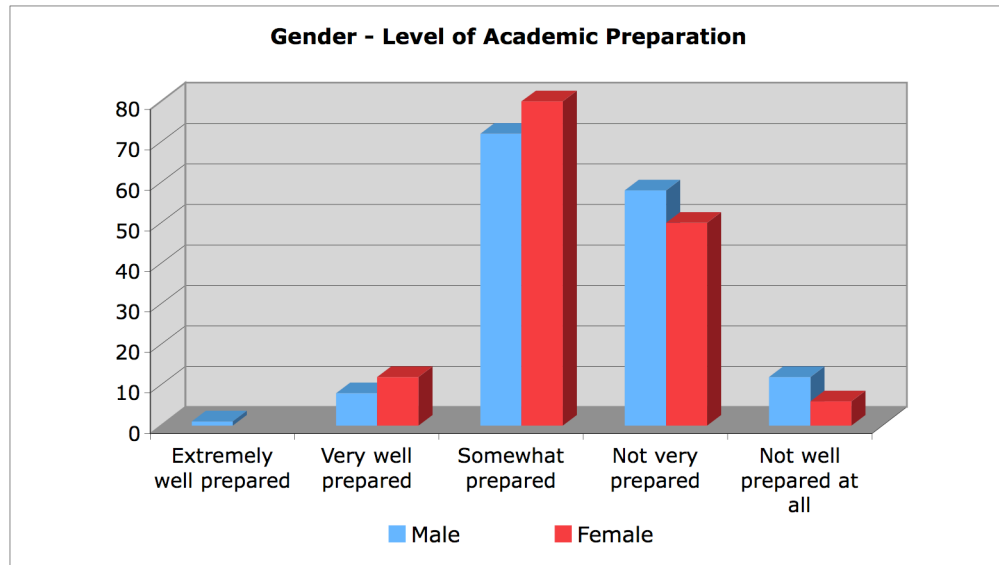
c.) College Enrollment

Fifty-two percent (52%) of professors from all colleges said high school graduates were somewhat prepared for freshman courses. Of college professors who said that high school graduates are not very prepared, more (n=62) were from colleges with enrollment of 1,001 to 5,000 students.



d.) Gender

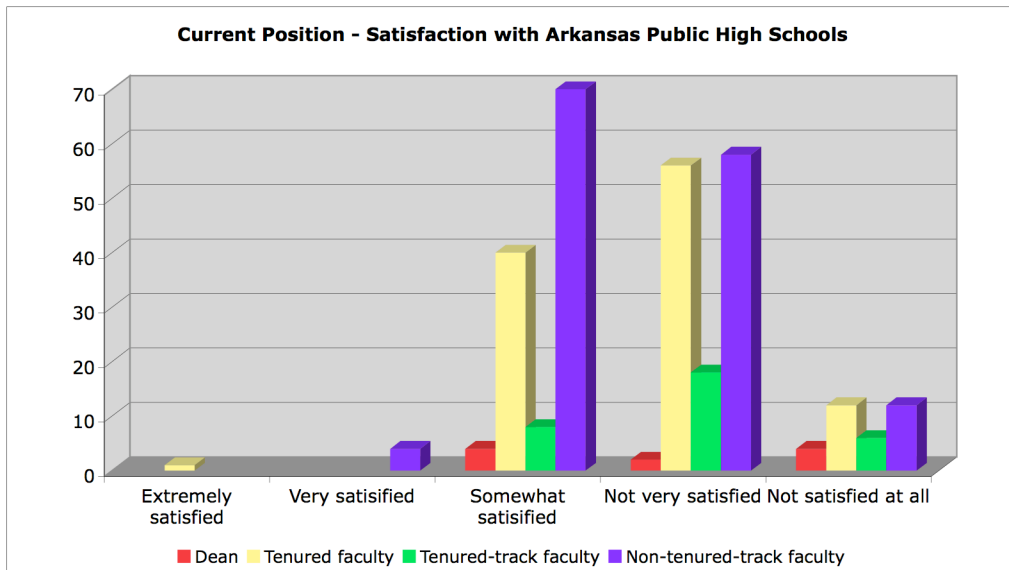
In this question, opinions of both male and female professors are close: 47% of the male college professors said that high school students are somewhat prepared. Fifty-three (53%) of the females said high school students are somewhat prepared for college.



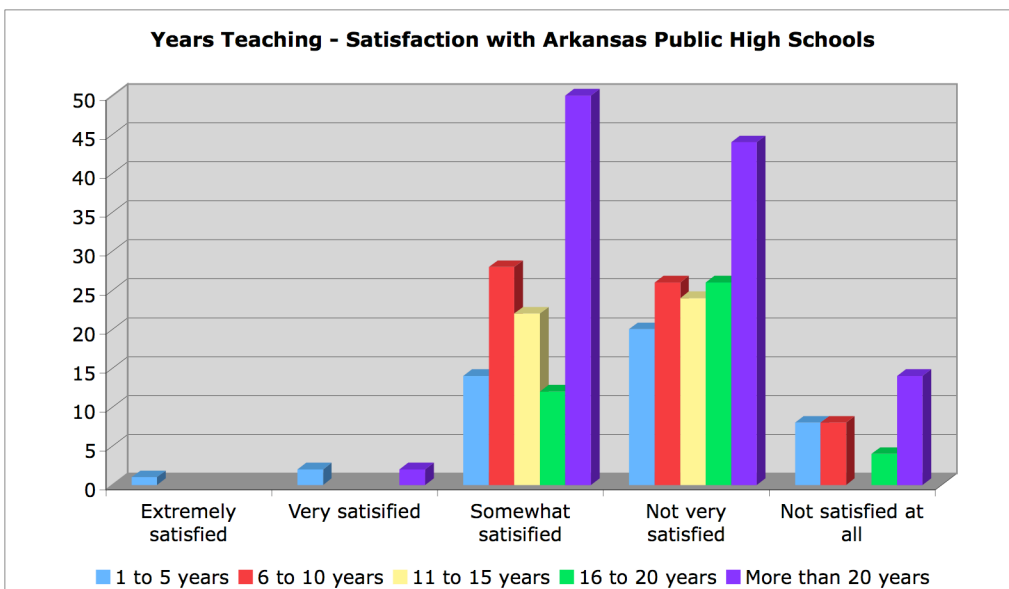
6.2 Satisfaction with Arkansas Public High Schools

a.) Current Position

Forty-one percent (41%) of all professors are somewhat satisfied with the job being done by the Arkansas public high schools while almost an equal number of professors (45%) are not very satisfied. Additionally, another 4% of the professors are not satisfied at all with the job the state's public high schools are doing.

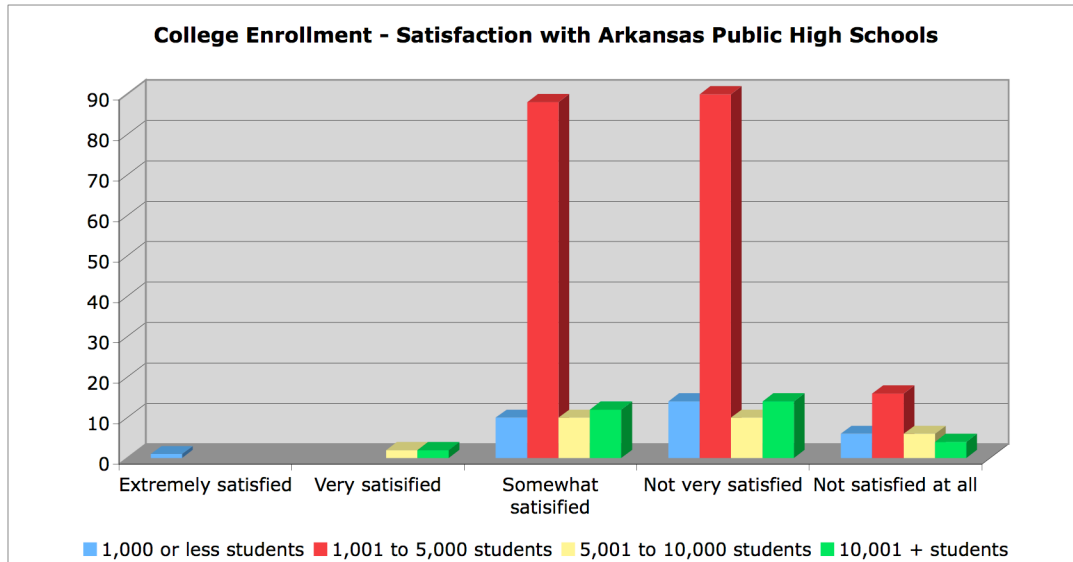


b.) Years Teaching



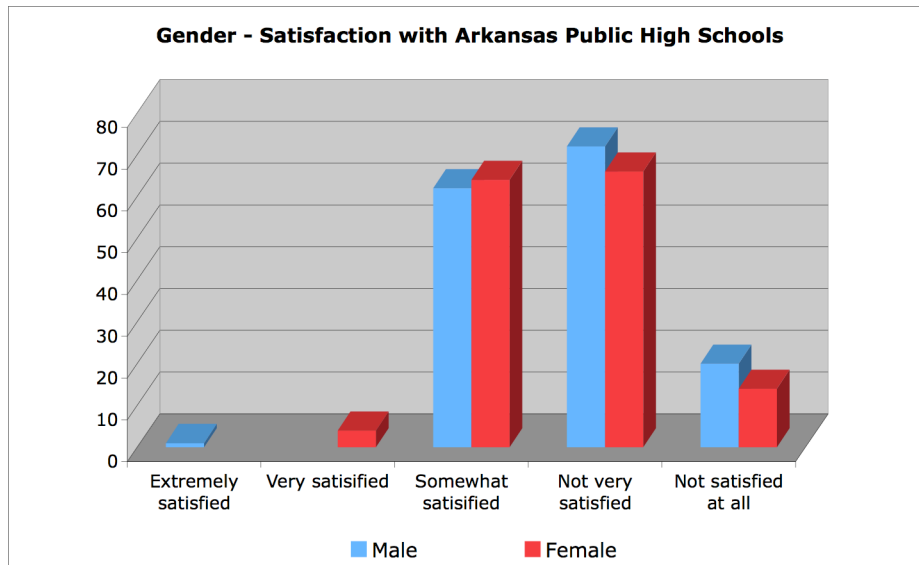
c.) College Enrollment

Forty-four percent (about four out of 10 professors) were somewhat satisfied to extremely satisfied with the job Arkansas public high schools are doing in preparing students for college. Colleges with 1,001 to 5,000 students had more representation among the 56% of professors who were not very satisfied or not satisfied at all with Arkansas' public high schools in getting students ready for college.



d.) Gender

The survey shows that male and female are equally satisfied / dissatisfied with Arkansas public high schools. Forty percent of the male professors are somewhat satisfied and 43% are not very satisfied with Arkansas public high schools. On the other hand, 46% of the female professors are somewhat satisfied, and 45% are not very satisfied with the public high schools in Arkansas.

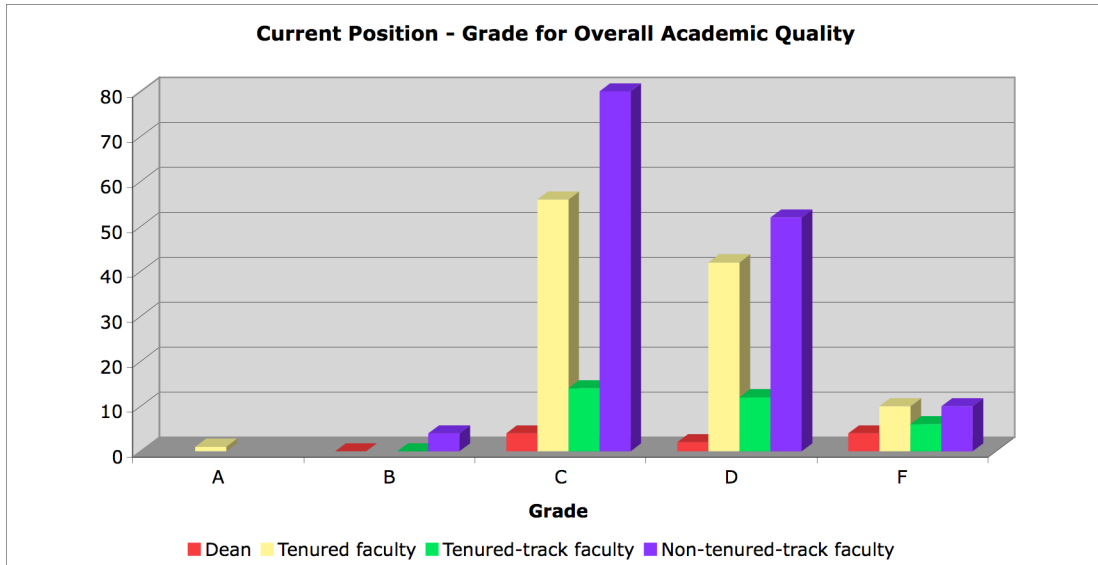


6.3 Grade for the Overall Academic Quality of the Public High Schools

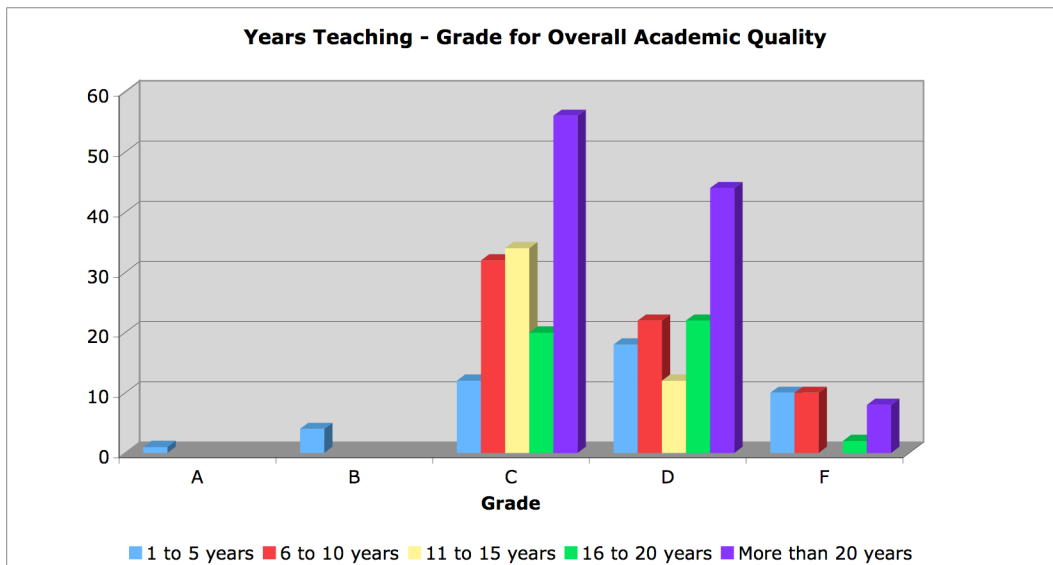
a.) Current Position

The professors did not grade the overall academic quality of the public high schools very highly. Mostly Cs (52%) and Ds (36%) were reported.

Thirty (or 10%) of the 297 professors who answered the question gave the state's public high schools an F for overall academic quality.

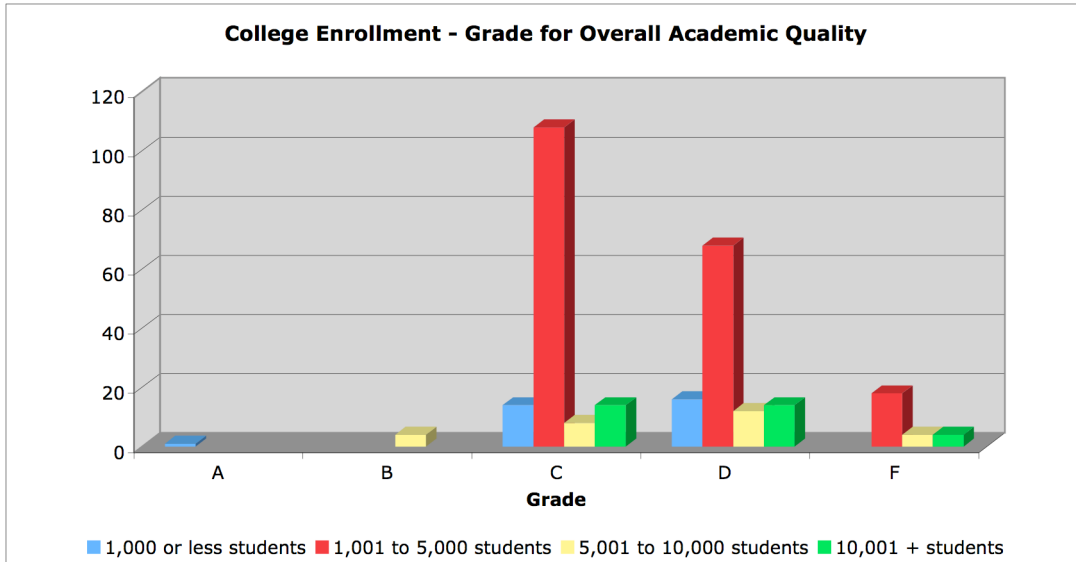


b.) Years Teaching



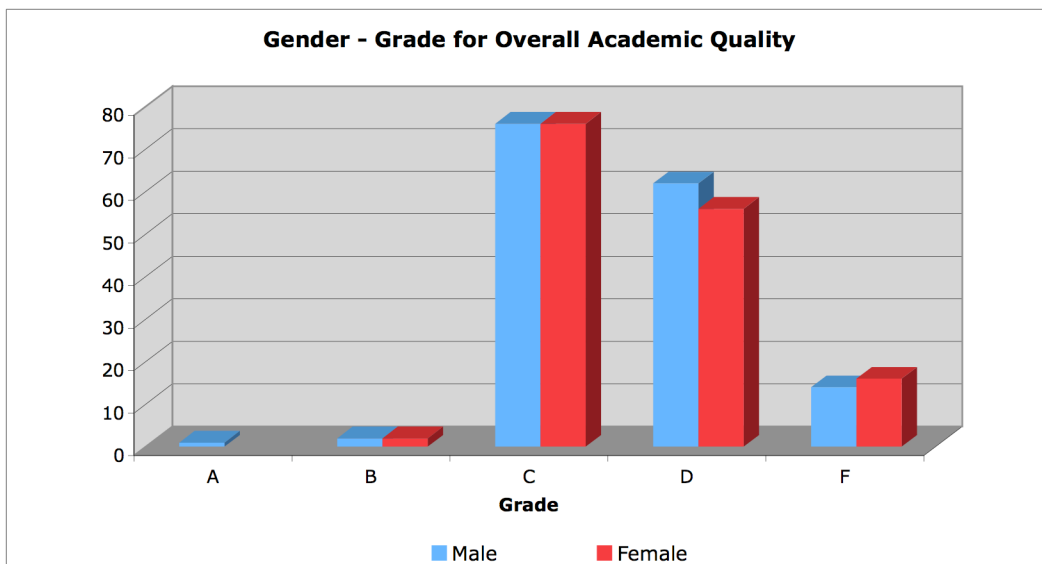
c.) College Enrollment

Grades of C and D were most often recorded by professors from all colleges regardless of the size of student enrollment.



d.) Gender

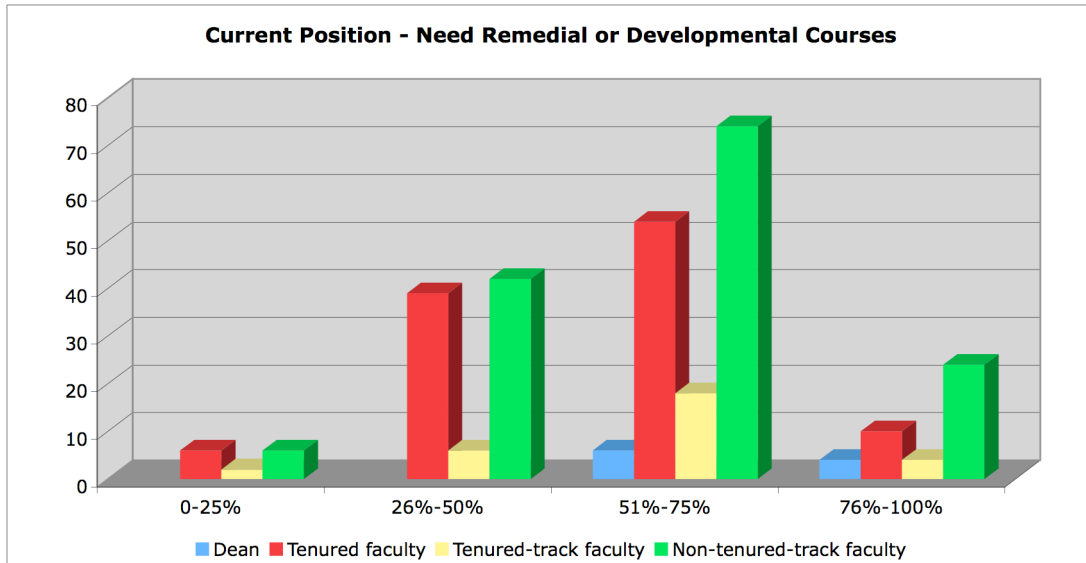
Most of the professors gave a C or a D to the overall academic quality of the public high schools. Forty-nine percent of the male professors and 51% of the female professors gave a C to the public high schools. On the other hand, 40% of the male professors and 37% of the female professors gave a D to the overall academic quality of the public high schools.



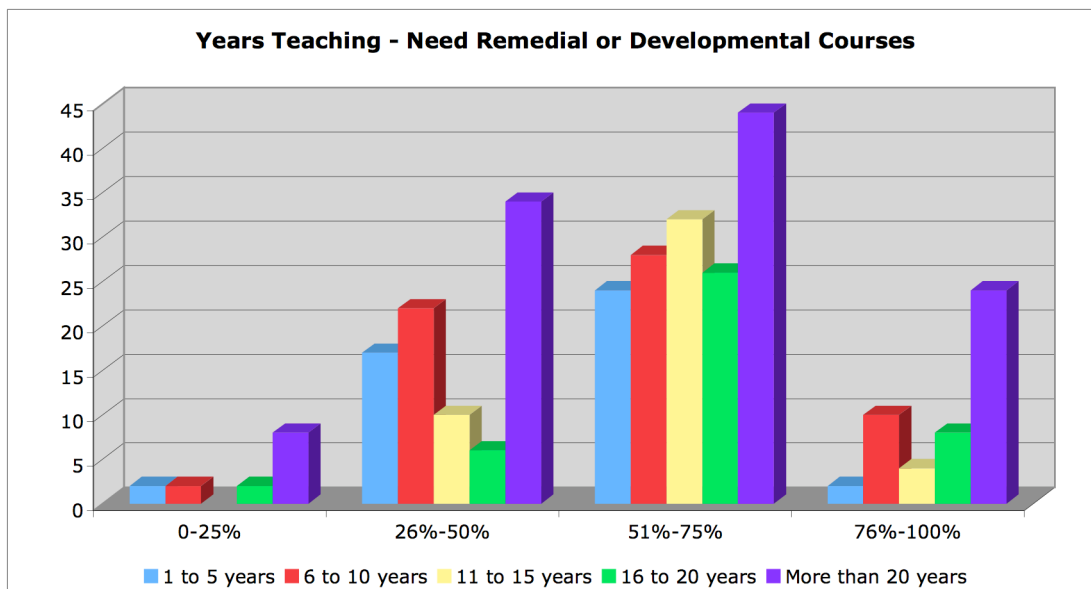
6.4 Need for Remedial or Developmental Courses

a.) Current Position

Two-thirds (n=204) of all professors (n=315) say that from 51% to 100% of incoming public high school graduates need to take remedial or developmental courses in a least one subject.

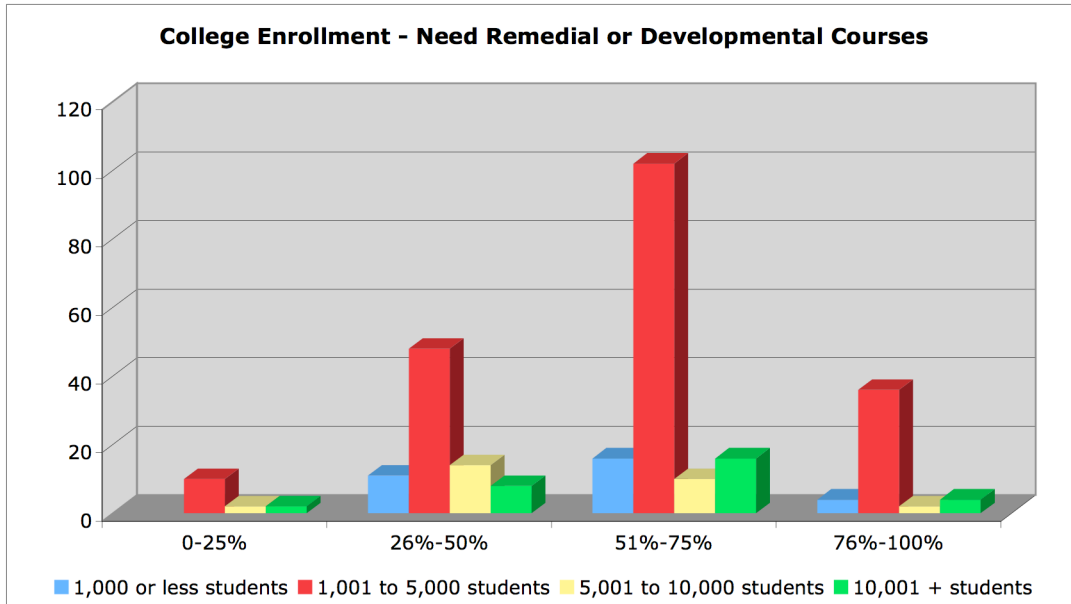


b.) Years Teaching



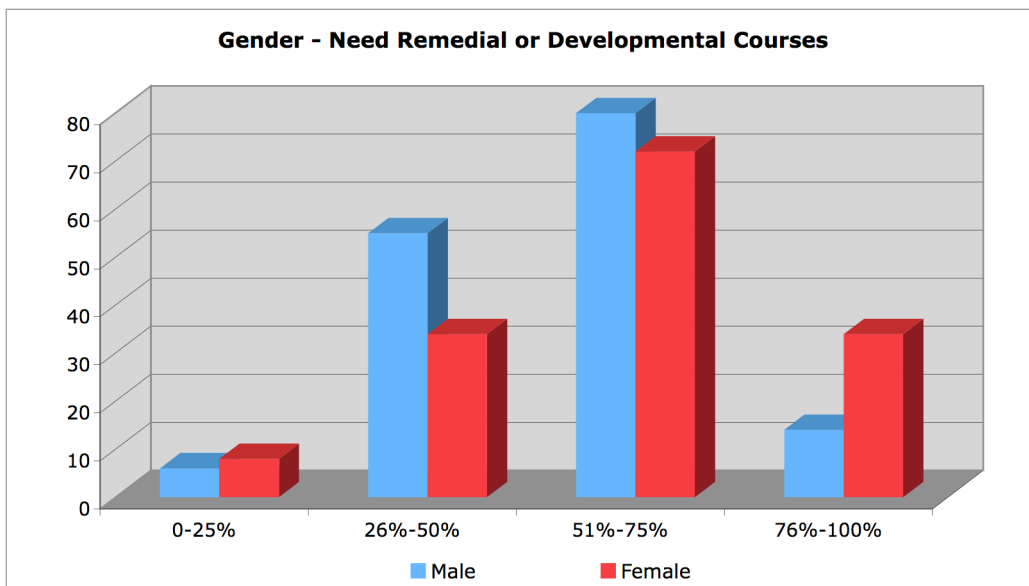
c.) College Enrollment

Sixty-seven percent (n= 190) of the professors report that they estimate 51% to 100% of freshman students need remedial or developmental courses. There was no significance between the size of the college and the opinions on remedial training.



d.) Gender

Fifty-two percent of the male professors said that 51 to 75% of incoming high school graduates need to take remedial or developmental courses in at least one subject, compared to 49% of the female professors who share the same opinion.

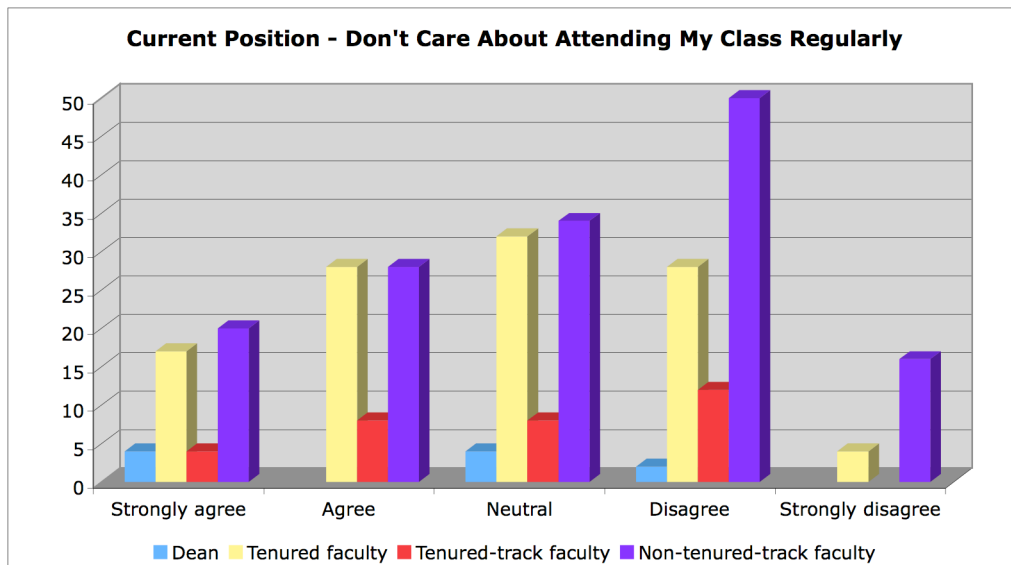


6.5 “Most Freshman Students Don’t Care about Attending My Class on a Regular Basis.”

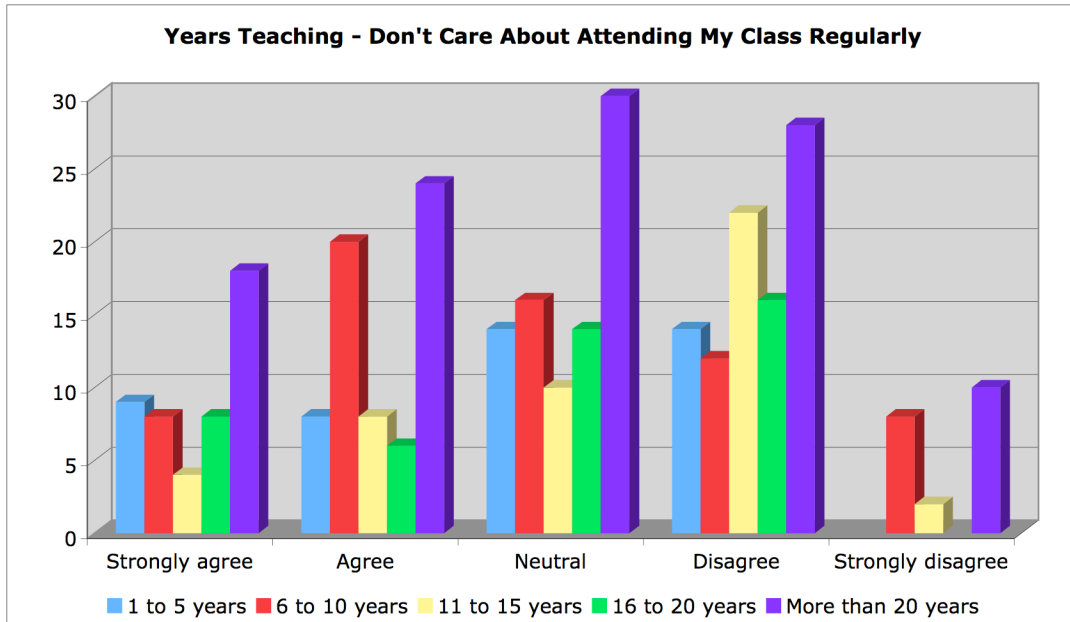
a.) Current Position

One hundred twelve (n=112) disagree or strongly disagreed that the freshman students did not care about attending their classes on a regular basis. Those professors who did agree or strongly agree with the statement were mostly tenured faculty and non-tenured-track faculty.

Eighty-six professors (28%) of the 311 who answered the question were “neutral.”



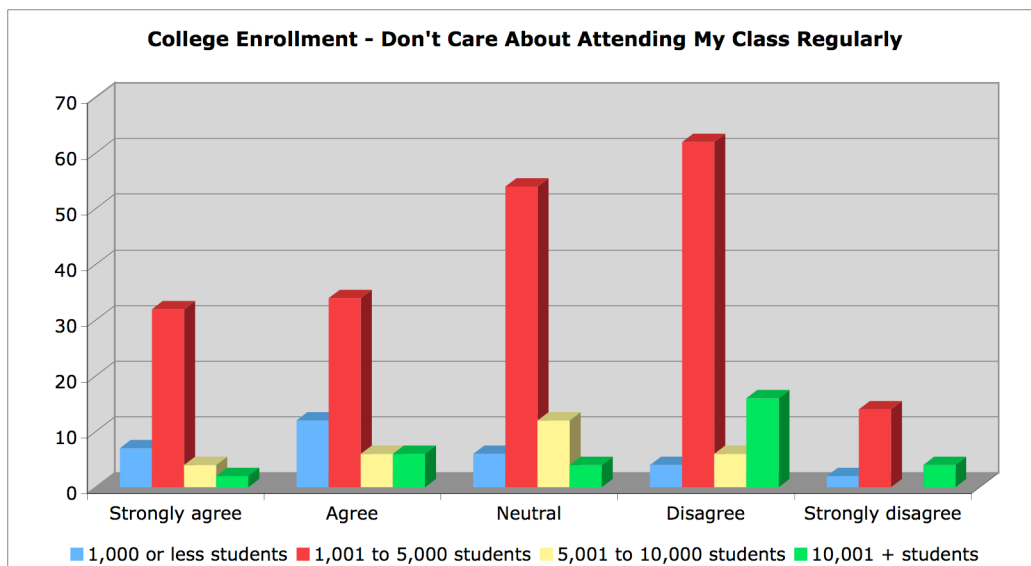
b.) Years Teaching



c.) College Enrollment

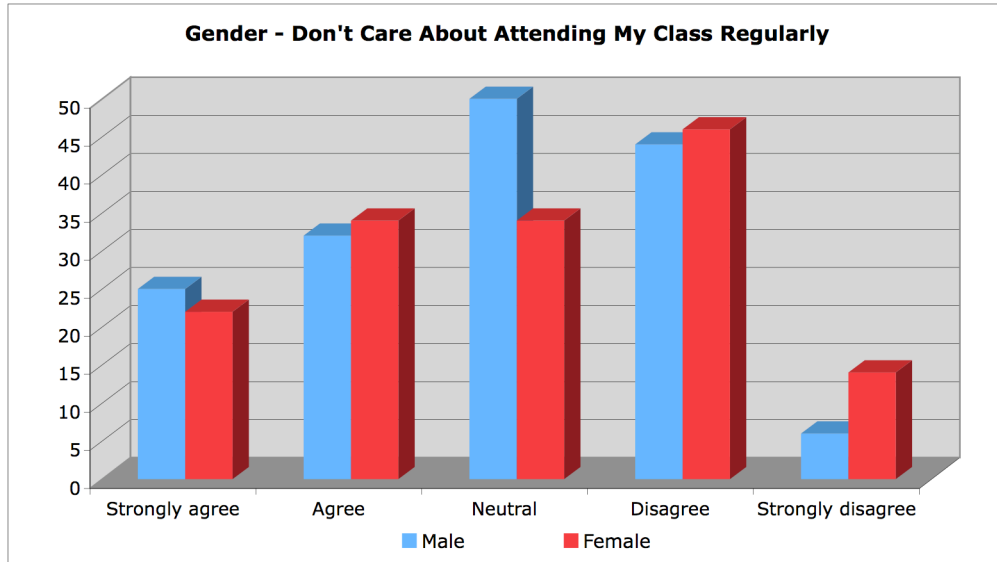
Significant differences were found by the size of the college and those professors strongly agreeing that students did not care about attending class regularly.

Professors from larger colleges (10,001 + students) agreed (6%) that students did not care about attending their classes while professors at colleges with 10,000 or fewer students agreed that students did not care about attending their classes on average 15% of the time.



d.) Gender

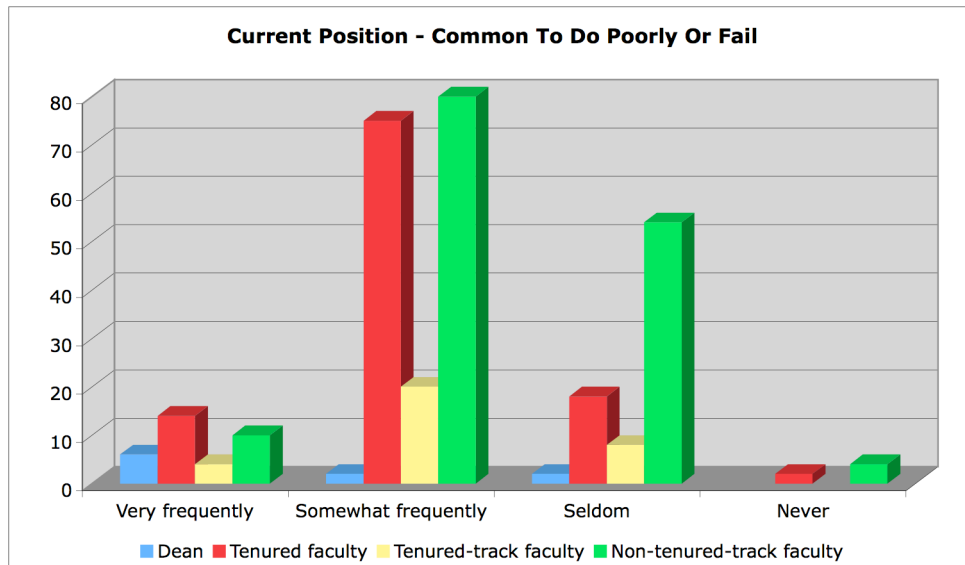
The responses for this question varied among females and males. For the most part, 32% of the male professors share a neutral opinion on this question, and 31% of the female professors disagree with the statement.



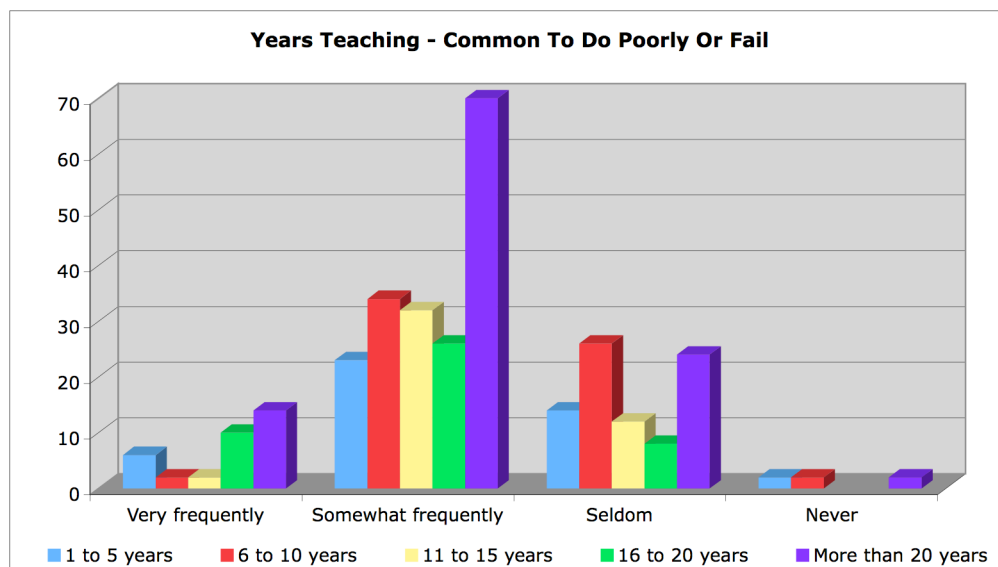
6.6 Likelihood for Freshman Students to do Poorly or Fail their First-year Classes

a.) Current Position

According to 71% (n=222) of the professors, freshman students somewhat frequently or very frequently do poorly or fail their first-year classes.

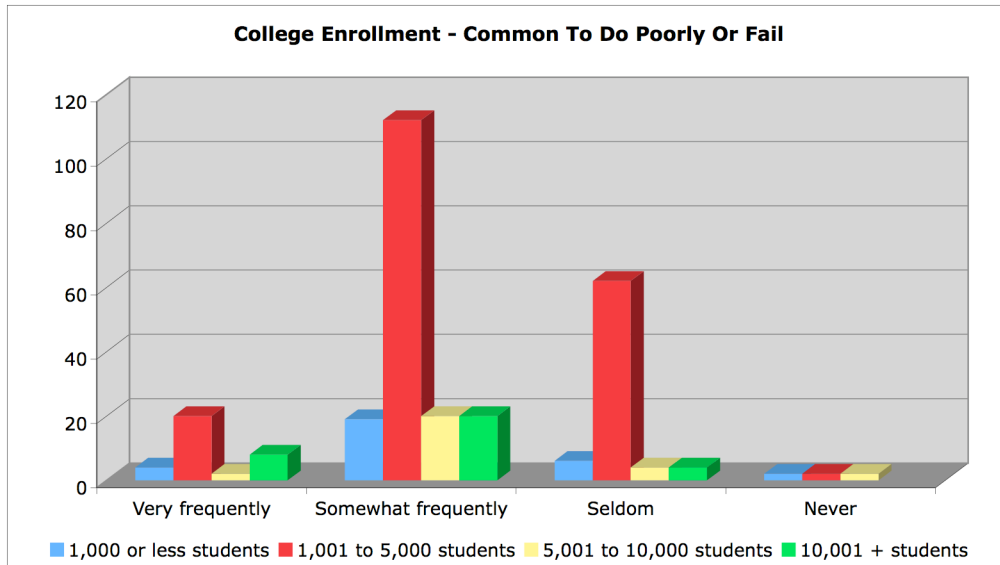


b.) Years Teaching



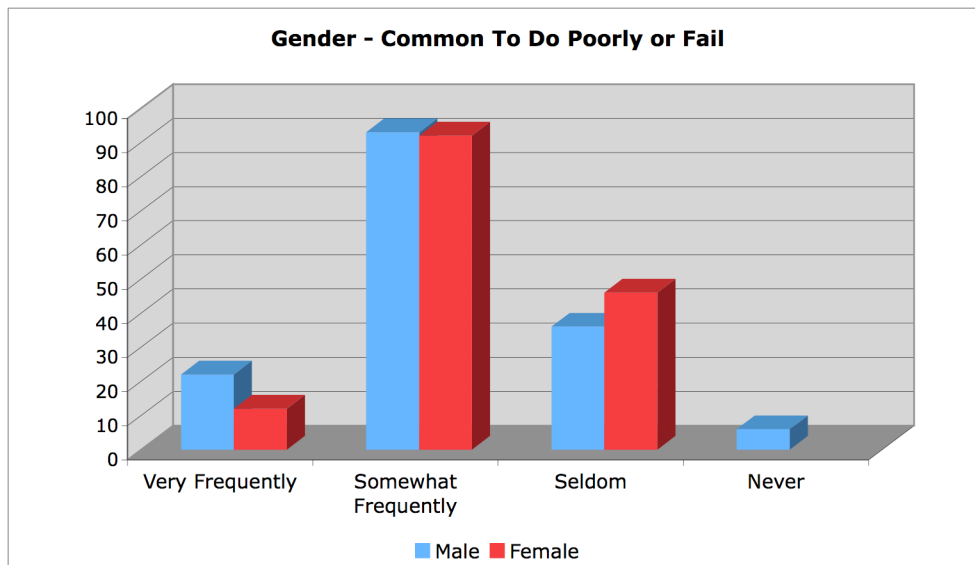
c.) College Enrollment

Six out of 10 (60%) college freshman students somewhat frequently do poorly or fail courses taught by the professors. For colleges with enrollment of 5,001 to 10,000, professors reported seven out of 10 (70%) college freshman students frequently do poorly or fail in their classes.



d.) Gender

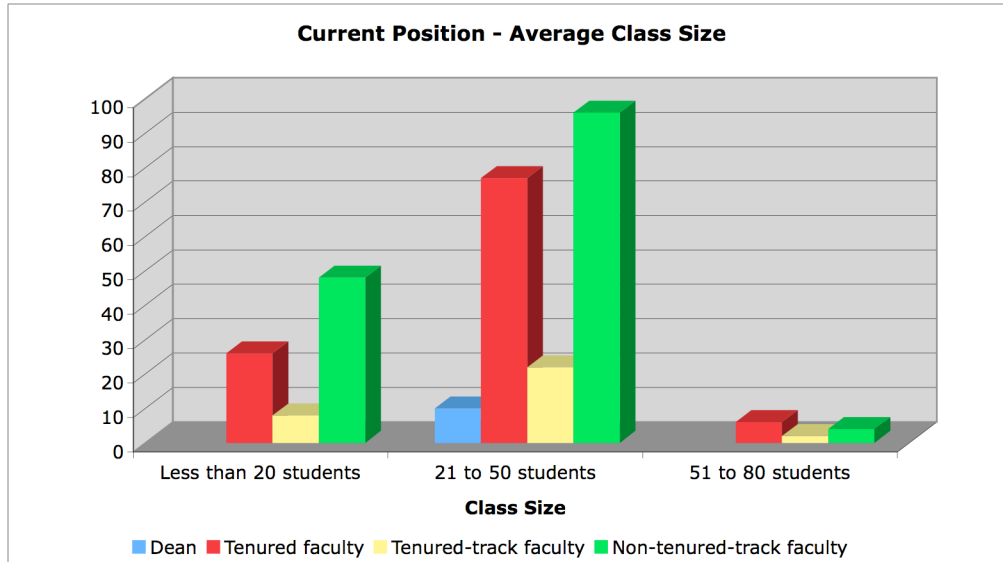
The majority of professors, 59% of the males and 61% of the females surveyed said that freshman students somewhat frequently do poorly or fail their first-year classes.



6.7 Size of the Typical Freshman Class

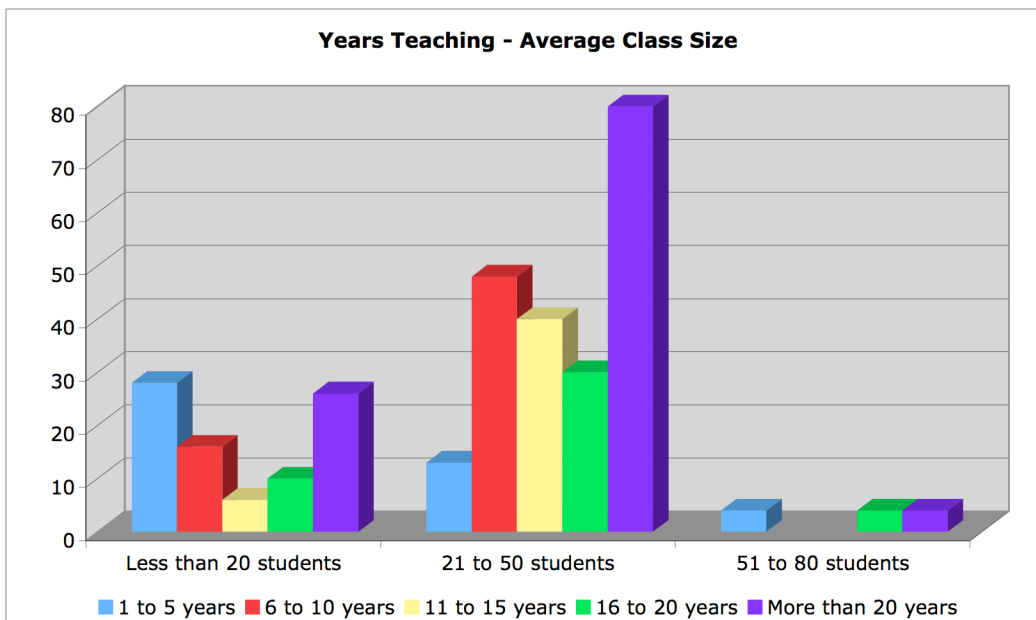
a.) Current Position

Average class size is predominately in the 21-to-50-student range. Only 12 professors reported they teach classes as large as 51 to 80 students.



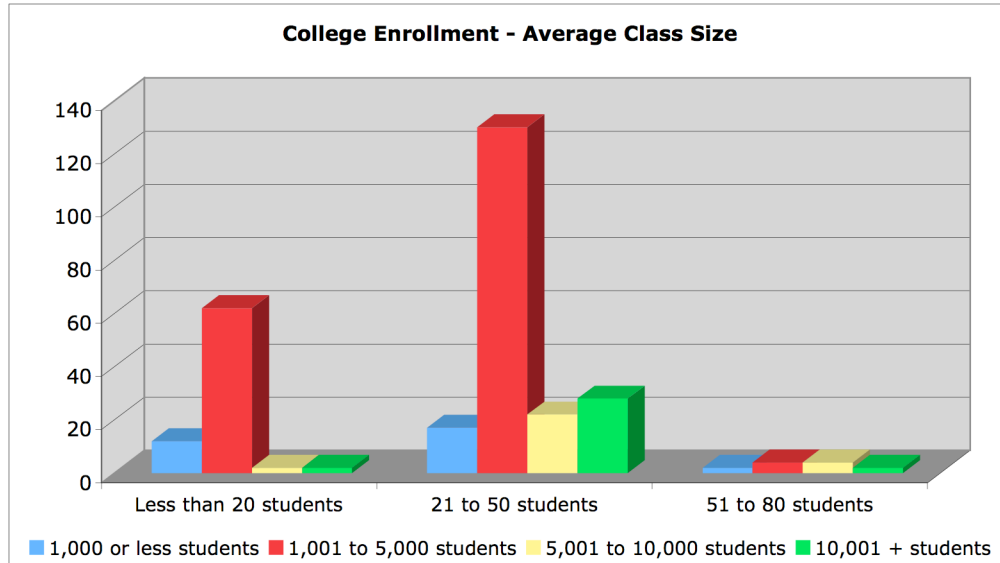
b.) Years Teaching

Seventy-three percent (n=80) of the professors who have been teaching for more than 20 years estimate to have an average freshman class size of 21 to 50 students.



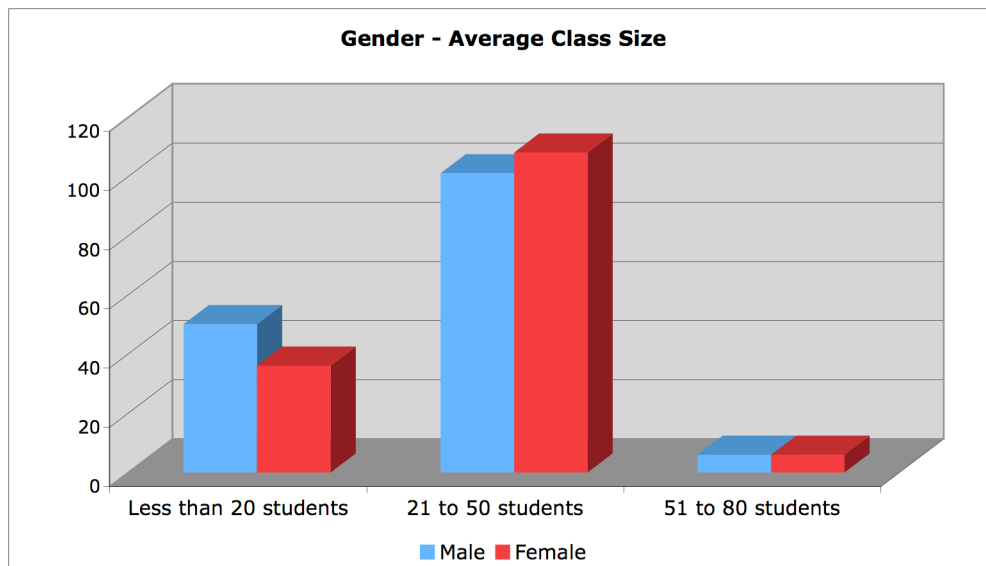
c.) College Enrollment

One hundred and thirty professors who belong to schools with 1,001 to 5,000 students teach classes with an average of 21 to 50 students. Only 32% percent of them teach classes with an average of less than 20 students.



d.) Gender

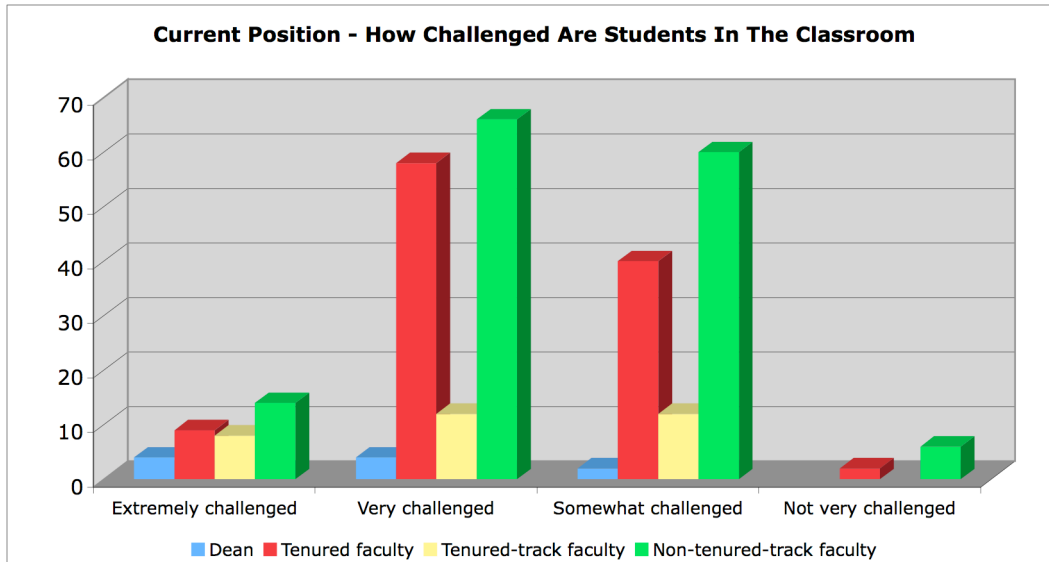
The majority of males and females (68%) teach an average class size of 21 to 50 students, specifically 101 males and 108 females. Only 4% of male professors and 4% of female professors teach a class as large as 51 to 80 students.



6.8 How Challenged are Students in the Classroom

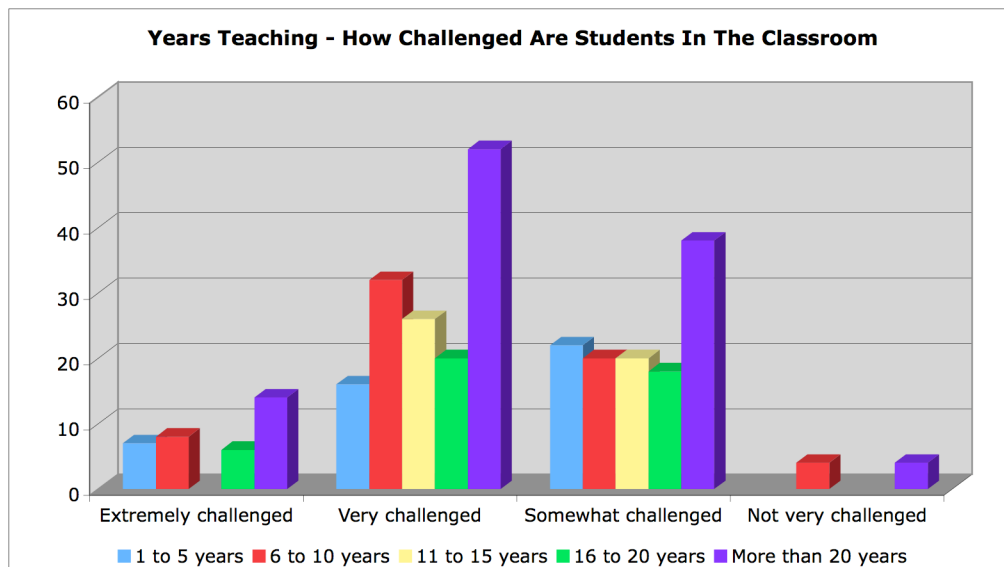
a.) Current Position

Not only is it important for students to be provided with a quality education, but it is also important for them to be challenged in class. When asked, 47% of the professors consider their students to be “very challenged” and 38% consider them to be “somewhat challenged.”



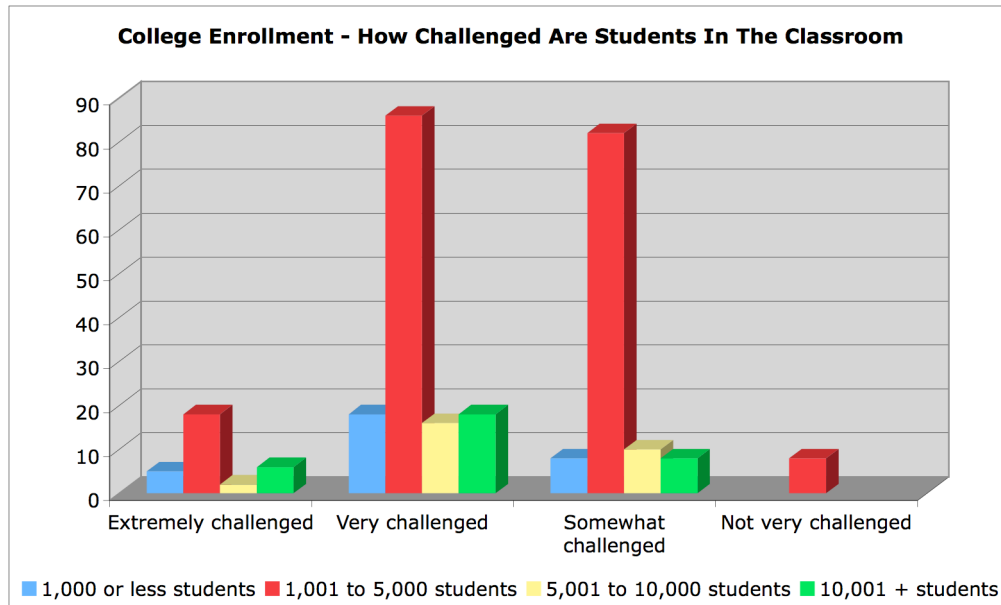
b.) Years Teaching

Of those professors teaching for more than twenty years, 48% (n=52) consider that their students are “very challenged.”



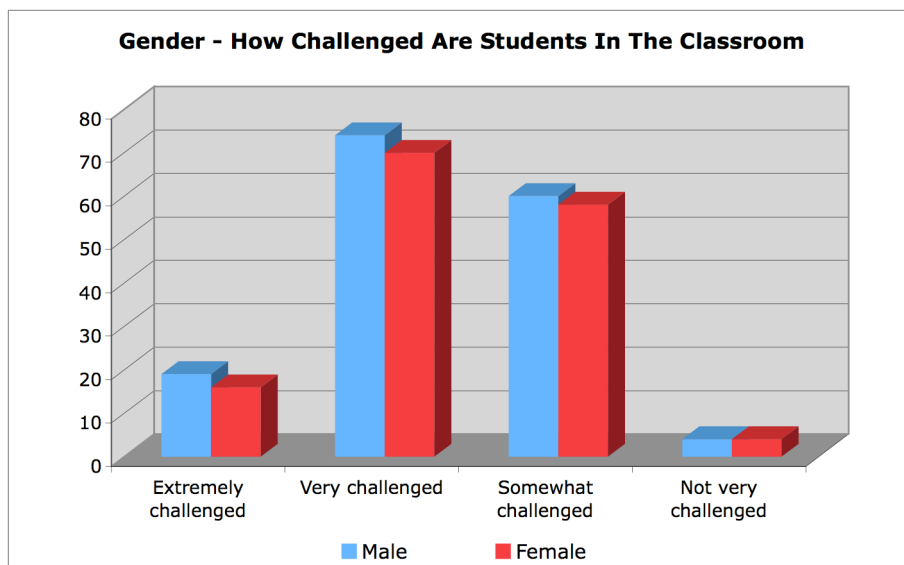
c.) College Enrollment

Most of the professors who come from schools with 1,000 to 5,000 students would categorize their students to be “very challenged” to “somewhat challenged.” Forty-four percent of professors who teach at schools size 1,001 to 5,000 students say their students are “very challenged” and 42% of professors from this same school size say their students are “somewhat challenged.”



d.) Gender

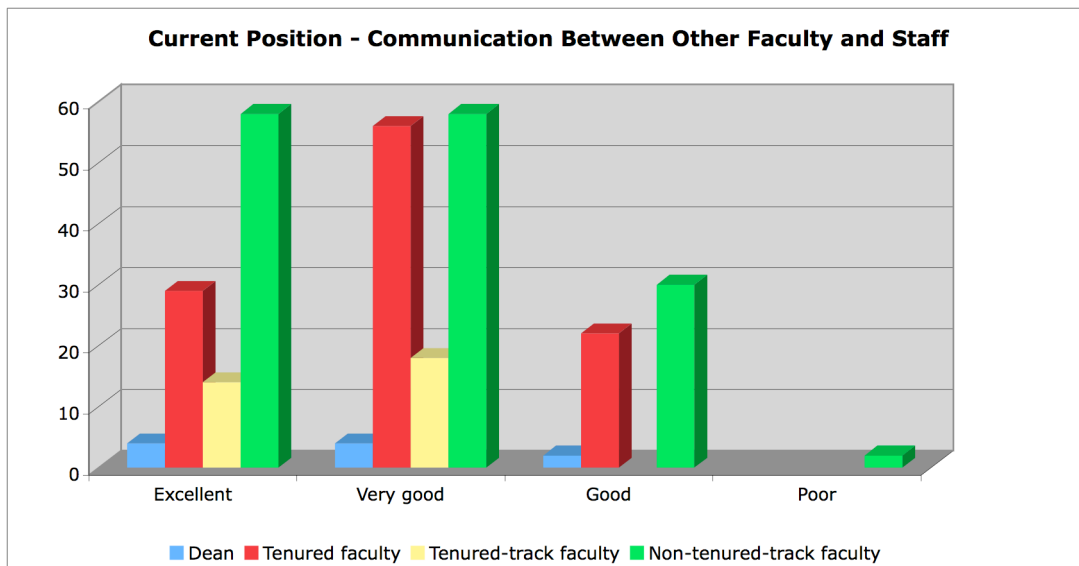
Males and females similarly agree on how challenged their students are in the classroom. For instance, 38% (n=60) of males and 39% (n=58) of females consider their students are “somewhat challenged.”



6.9 Communication Between Other Faculty and Staff

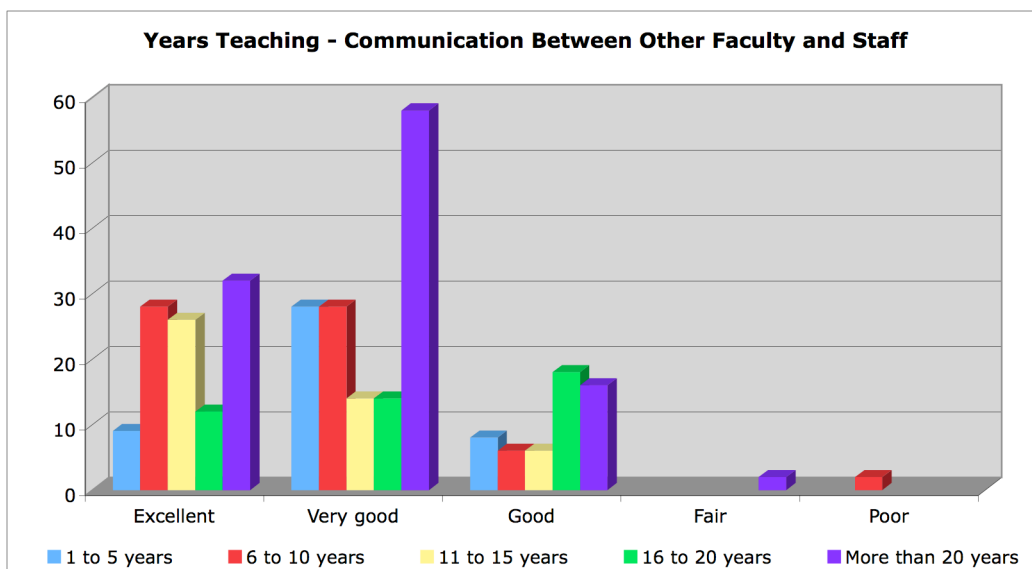
a.) Current Position

Forty-six percent of the professors describe their communication between other faculty and staff as “very good.” It is interesting to note the non-tenured-track faculty were the ones who rated their communication between other faculty and staff the highest: 39% (n=58) of them rated it as “very good” and another 39% rated it as “excellent.”



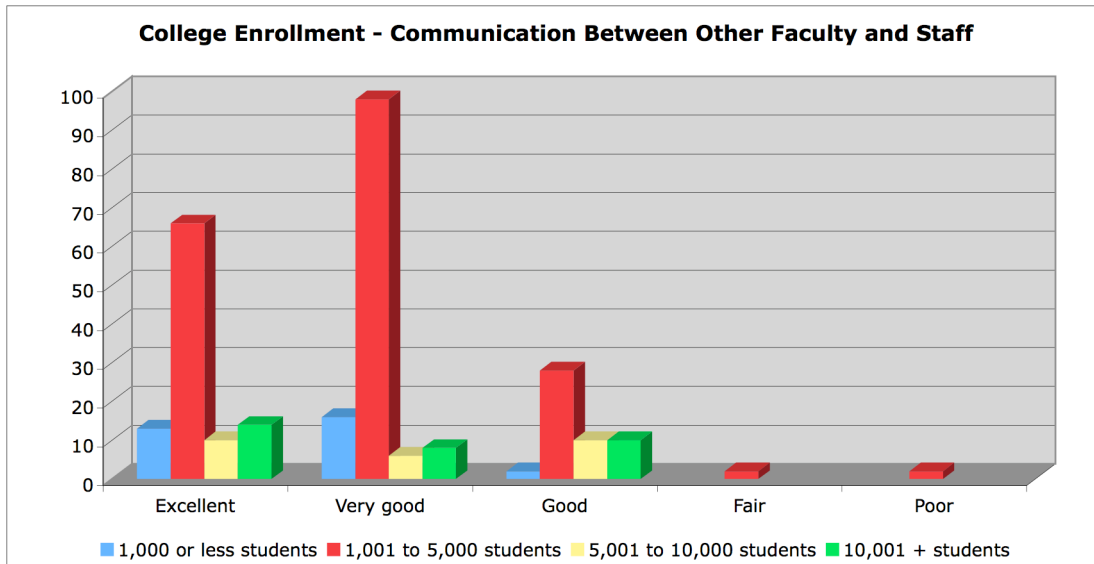
b.) Years Teaching

Those who have been teaching for more than 20 years had the highest ratings for their communication between other faculty and staff. Fifty-four percent rated it as “very good.”



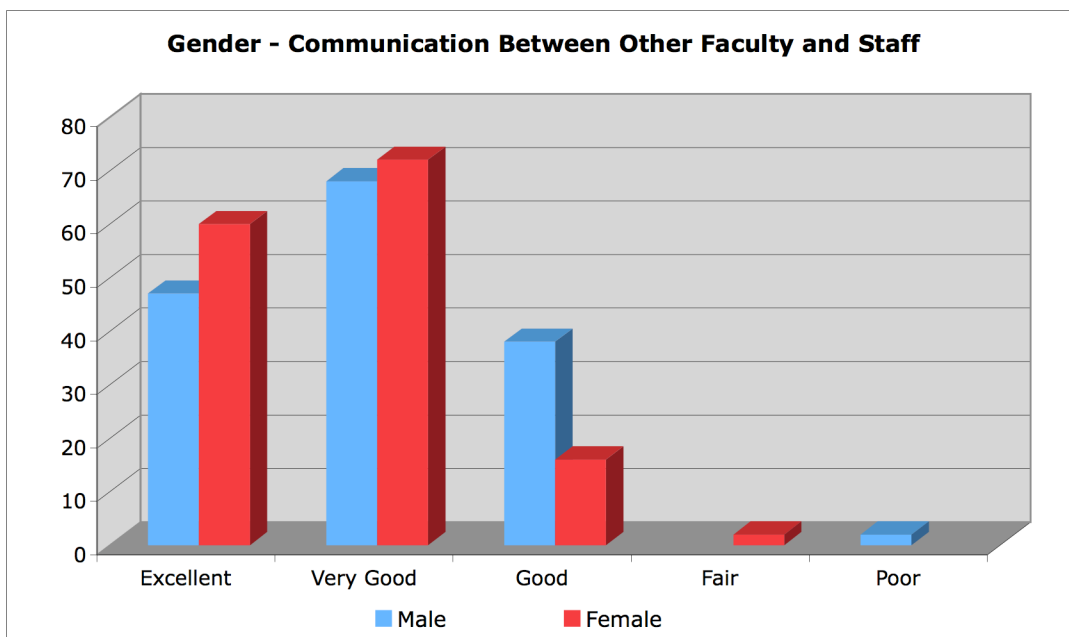
c.) *College Enrollment*

In this category, the schools with a student body between 1,001 to 5,000 gave the highest ratings: 50% (n=98) of them describe their communication between other faculty and staff as “very good” and 34% (n=66) describe it as “excellent.”



d.) *Gender*

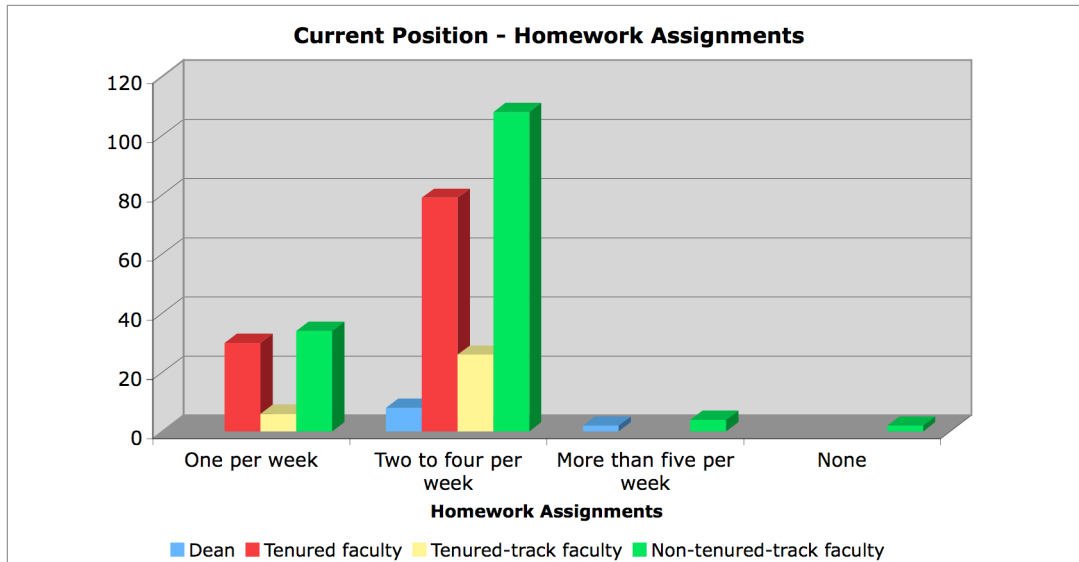
When it comes to gender, 48% (n=72) of the females rate their communication between other faculty and staff as “very good,” compared to 44% (n=68) of males. The rating of “excellent” was given by 40% (n=60) of the females and 30% (n=47) of the males.



6.10 Homework Assignments Per Week

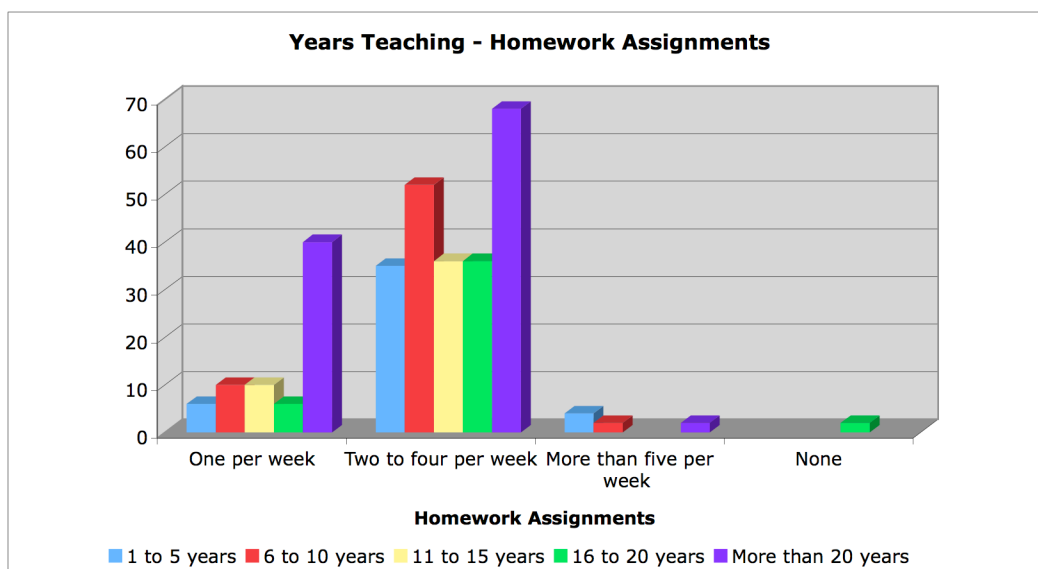
a.) Current Position

Throughout high school and college, homework assignments reinforce what has been taught in class. The survey shows that 74% (n=221) of the faculty assigns homework two to four times per week, 23% (n=70) assigns homework once per week, and a small 1% responded that they don't assign any homework.



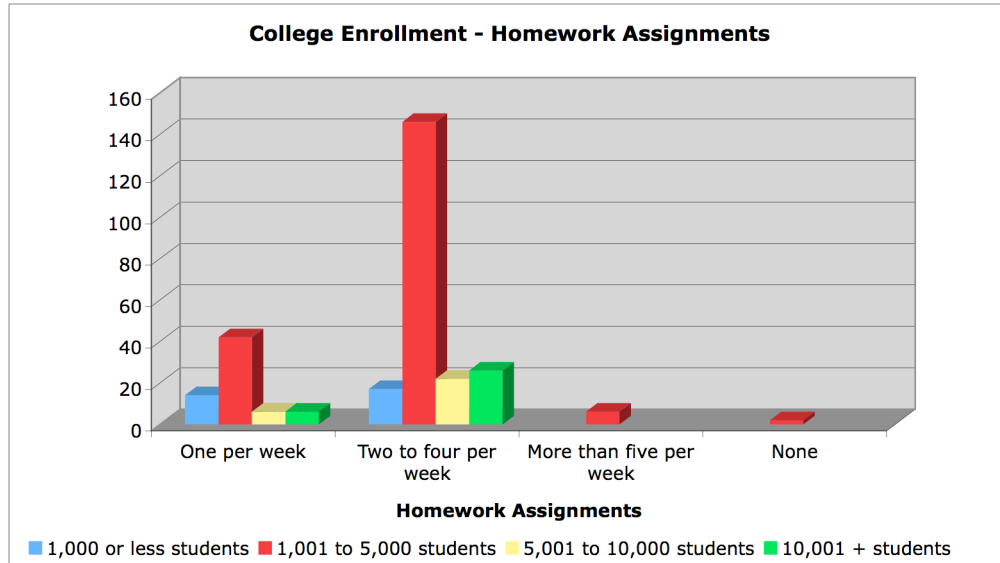
b.) Years Teaching

In this case, 62% (n=68) of the professors who have been teaching for more than 20 years distribute two to four homework assignments per week and 36% (n=40) of the same group give one homework assignment per week.



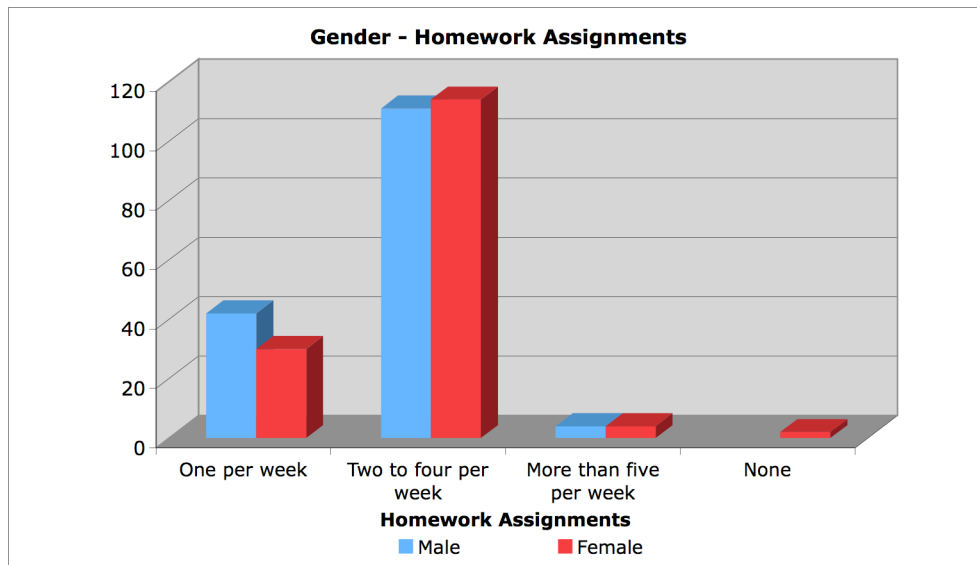
c.) *College Size*

Seventy-four percent of the professors who belong to the schools size 1,001 to 5,000 students distribute two to four assignments per week and 21% of this same group assign homework only once per week.



d.) *Gender*

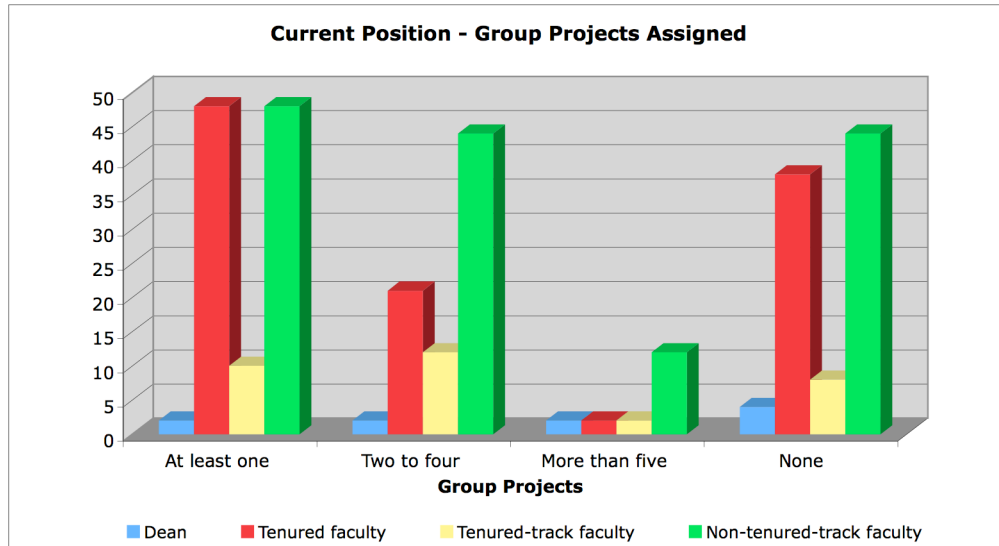
In terms of gender, males and females assign the same amount of homework. Seventy-six percent of the females and 71% of the males assign homework two to four times per week, and 27% of the males and 20% of the females make one homework assignment per week.



6.11 Group Projects Assigned

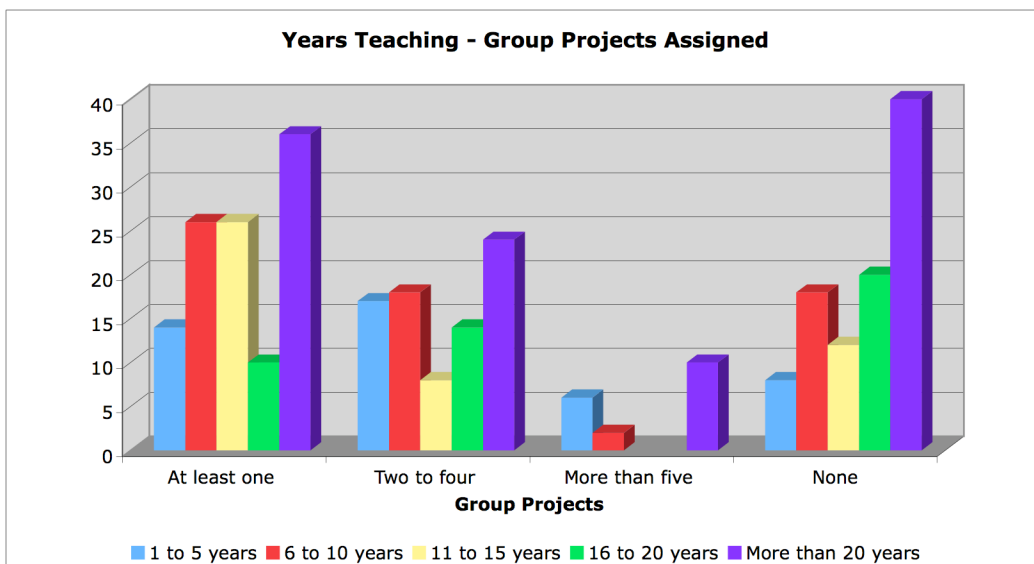
a.) Current Position

Group projects provide the student with the opportunity to work as a team and discover their capabilities within a group. At the same time, it prepares a student to experience what a work-scenario would be like; thus, the importance of teaching students to work in groups throughout high school and college. According to the survey, 36% of the faculty assign on average at least one group project each semester for their freshman class, and 31% of the faculty do not assign any group project throughout the semester.

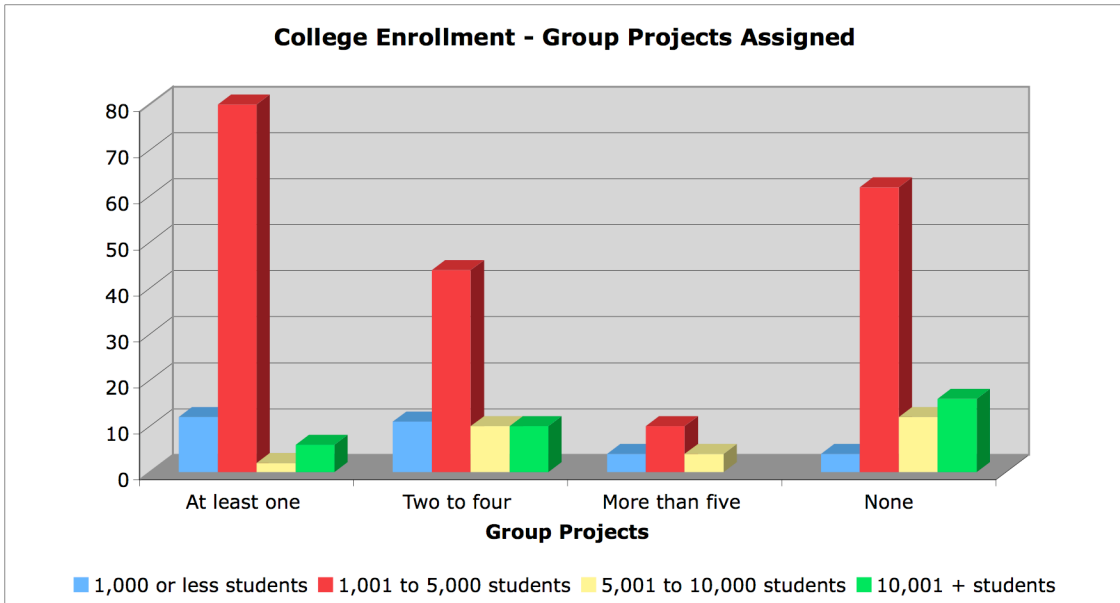


b.) Years Teaching

It is interesting to notice that 36% of those who have been teaching more than 20 years do not assign any group projects throughout the semester, and 33% of the ones who have been teaching more than 20 years only assign at least one project per semester.

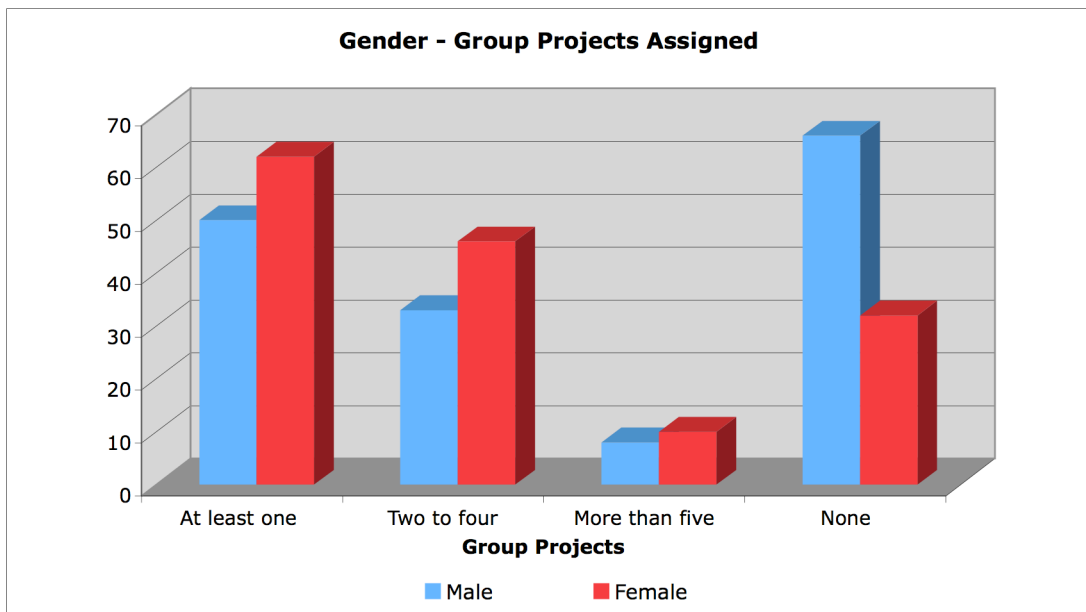


c.) College Enrollment



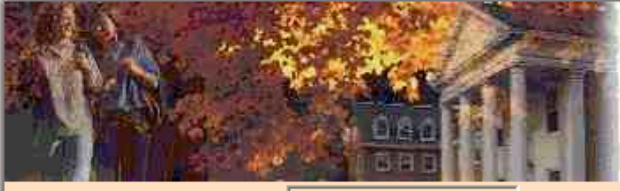
d.) Gender

Forty-one percent of the females assign at least one group project each semester compared to 32% of the males. On the other hand, 42% of the males don't assign any group projects each semester compared to 21% of the females.



7.0 Appendices

Appendix A. Survey Instrument



Arkansas Department of Education
College Professor Survey 2006

Enter your survey code

The Arkansas Department of Education is conducting the following survey with the initiative to redesign Arkansas' high schools. We appreciate your participation by answering a few questions about the preparedness of graduating high school students. This study will be conducted strictly for research purposes. The results will be kept confidential and will help the Department to design better educational programs for high school students.

1. Do you currently teach a freshman-level course or have you taught a freshman-level course within the past year? If Yes check and continue survey
 If No check and exit survey

2. If your answer was "YES," is your school a four-year college or two-year college?

Other

3. Overall, how would you characterize the level of academic preparation high school graduates bring to college?

4. Based on your experiences, how satisfied are you with the job that Arkansas public high schools are doing in preparing students for college?

5. If you had to grade the overall academic quality of the public high schools that your students attended using a grade scale of A to F, what grade would you give them?

6. Please mention three areas that you would recommend public high schools do a better job?

7. How prepared (on a percentage scale) are high school graduates for the following areas of General Education (Mark one box within the category you consider appropriate):

	0-25%	26-50%	51-75%	76-100%
Natural Science & Technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Computer Literacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Writing Skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Global Awareness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ethics & Social Responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cultural & Artistic Literacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mathematics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. How satisfied are you with the preparation of high school students for the following areas:

	Extremely Satisfied	Very Satisfied	Somewhat Satisfied	Not Very Satisfied	Not Satisfied at All
Analytical Thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oral Communication/Public Speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Study and Work Habits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to Solve Problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ability to Work in a Group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leadership Skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. What percentage of incoming public high school graduates would you estimate need to take remedial or developmental courses in AT LEAST one subject? (English, Grammar, Math, etc.)

10. How well do you agree with the following statement: "Most freshman students don't care about attending my class on a regular basis."

11. How common is it for freshman students to do poorly or fail your first-year classes?

12. On average, what is the size of the typical freshman class that you teach?

13. What percentage of your freshman student body do you estimate are graduates of PUBLIC HIGH SCHOOLS in Arkansas?

14. What percentage of your freshman student body do you estimate are graduates of PRIVATE HIGH SCHOOLS in Arkansas?

15. What percentage of your freshman student body do you estimate are graduates of HIGH SCHOOLS OUTSIDE Arkansas?

16. In your first-year classes, how much class time do you spend reviewing material and addressing skills that you think should have been taught in high school?

17. How challenged are students in your classroom?

18. How would you categorize your communication between other faculty and staff members?

19. How many homework assignments do you consider handing out on average each week? (This includes reading, doing research, writing a report, etc.)

20. How many group projects do you assign on average each semester for your freshman classes?

What is the approximate number of undergraduate students enrolled in your college or university?

Which of the following best describes your current position at your university?

Other

Is your position full time?

How many years have you been teaching?

Which of the following is your area of professional or occupational expertise?

Other

Highest Degree Earned

Gender

Are you:

Other

Thank you for participating in this important study. Please press "send" to submit your responses.