

INTERNATIONAL BACCALAUREATE DIPLOMA
PROGRAMS (IBDP) IN OKLAHOMA
A MIXED METHODS STUDY

By

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Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF EDUCATION
May, 2012

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CHAPTER I

INTRODUCTION

The cornerstone of any country is its past and future educational programs. Education is the foundation of any country. To maintain intellectual growth and security, the United States must continue to make educational programs for the youth and future leaders as its top priority. Throughout the nation's history, many educational leaders have strived to create collaborative learning communities to ensure that students at all education levels received equitable and quality education. (Hoyle, Kutka, 2008) Hill states that "the attention is now, more than ever, the need for a program that educates for a better world. National perspectives are still very important, but the interdependence of the world in technology, economics, ecology and natural resources, and politics is such that a national perspective must be complemented with an international perspective" (2008).

The state of Oklahoma is no different in that it too has recognized the urgency of maintaining equitable and quality educational programs. According to the Oklahoma Department of Commerce, Oklahoma is a state of industrial diversity. Its climate has made it ideal for agriculture, its mineral wealth in oil and gas is legendary, and now the state is becoming a leader in such growth industries of the future as aerospace, weather research, and bio- and nanotechnology. (2010)

Therefore, as Oklahoma grows in these technical markets the need for new Science, Technology, Engineering and Math (STEM) educated individuals will continue to increase. To meet these needs, Oklahoma's legislature has begun focusing on middle and high school STEM programs, creating partnering events with industry, and focusing on creating magnet and chartered schools and advanced academic programs.

Bailey and Karp state that "the debate continues about the ability of high schools to prepare students for college, to provide them with the counseling necessary to select and apply to colleges, or to give them the personal and academic skills needed to succeed in college (2003, 1). Advanced academics is the key area to assisting with this void. The most common programs covering advanced academics include Advanced Placement (AP) and International Baccalaureate (IB), both of which provide accelerated coursework and/or college credit for academically advanced students. Ironically, though, very few people have heard of the IB program. Most everyone in Oklahoma understands the Advanced Placement (AP) program. The IB diploma program is a rigorous college-preparatory curriculum specifically designed for academically advanced high school students ages 16 to 19 and is currently in place in approximately 1,500 schools worldwide. As summarized by the International Baccalaureate Organization (IBO), the program's goals include developing a globally conscious, content-knowledgeable, socially aware, service-oriented youth who are effective communicators (IBO, 2010).

Numerous issues have arisen around Oklahoma education and the different types of advanced placement programs. Oklahoma currently has only two International Baccalaureate (IB) Diploma Programs in the state: Oklahoma City host, Classen School of Advanced Studies; and Tulsa host, Booker T. Washington. Oklahoma recognizes the need

for Science, Technology, Engineering, and Math (STEM) in its Middle School and High School areas. The IB program has very rigorous standards especially in Math and Science, which are the two most focused areas of STEM. As such, the IB programs are valuable to the state in addressing its growing technological industries and the needs for STEM educated graduates.

Problem

Many Oklahoma universities are not recognizing the IB diploma and offering incentives for students to complete the program. Oklahoma universities voice their acceptance of the IB program; but in most cases, treat it the same as the AP program, which is based subject by subject, and not as an all-encompassing program. In addition, many of the universities in Oklahoma are only recognizing half of the IB program, offering at most nine hours credits. Surrounding states to Oklahoma have started to embrace the IB Diploma Program and their universities are offering up to 30 hours credit for students completing the IB Diploma.

According to Maslow, self-esteem and respect along with lack of prejudice and acceptance are at the top of his pyramid. (1987). As IB students start and complete this extremely challenging program, the acceptance and worth of their accomplishments are important not only to their academic development but their future personal career development. If educators are truly serious about implementing the STEM program and understanding the reasons why STEM programs need to be increased in the state, perceptions of programs like the IB diploma program need to be evaluated and explored from the

perspectives of the students, the schools and the universities. IB students need to be valued and rewarded to encourage future interests in the program.

Purpose

This study was designed to assess the International Baccalaureate Diploma Program in Oklahoma and evaluate the perceptions the students in IB have of the program. The study also examined the high school requirements and admission requirements to enter the program. In addition, the study examined the different criteria Oklahoma universities use for admission, the type of students being considered for admission, academic credit offered for different advanced academic programs, and how the IB program ranks within these standards.

This study explored the perceptions IB students had of the program and allowed an interface or connecting link between the perceptions of students, and principal educators and university admissions. The link between these three areas allows Oklahoma educators to evaluate the IB Diploma Program as a benefit for increasing STEM education in the state, and offers Oklahoma universities awareness of perceptions of how their admission status is viewed by IB students. In addition, this study allowed IB students an avenue to reach-out and voice why they have chosen to complete this painstaking program in an effort to become more challenged and educated.

Scope and Limitations

This study addressed the International Baccalaureate Diploma Program in Oklahoma. However, it could be valuable to other states as well as stimulate student interest in Oklahoma programs.

The purpose of this exploratory, sequential design was to discover the perceptions of IB students through a questionnaire and understand if these students were receiving the academic credit deserved from Oklahoma universities. The study was conducted in two separate phases. Phase I of the study was a triangulation mixed methods design consisting of two parts. Part 1 of Phase I consisted of data from questionnaires which were collected from IB students at Classen School of Advanced Studies in Oklahoma City through a 20 question Likert-type Scale survey. Part 2 of Phase I consisted of seven open-ended questions were asked at the end of the survey. This allowed students to comment on various areas that they were not offered during the first part of the survey. Phase II of the study was purely qualitative consisting of two parts. The first part was through interviews which were conducted with Oklahoma university admissions officials to understand what they look for in candidates. Part 2 of Phase II consisted of interviews which were conducted with high school principals in Oklahoma who host the IB program. Combining these phases together identifies what is referred to as exploratory, sequential design.

There were a few challenges related to this research design. The first hurdle was in obtaining permission from Oklahoma City Public Schools to allow for this research project to be conducted at one of their high schools. After two initial requests, consent was finally allowed for this study to be administered (Appendix B). The next hurdle was in obtaining

parental consent for all of the under age 18 students. Since there was little or no harm to the students completing the online survey, the IRB agreed to allow parental consent to be received through email correspondence. Next there was the issue of obtaining an adequate number of responses for a good sampling. To mitigate this risk, the questionnaires to the students were conducted within a required classroom environment during one of their required English classes. Consent to accomplish this testing had to be obtained from both the principal and two of the English teachers at Classen which taught the Freshman English and Senior English classes. There was a challenge working with post IB graduates in not knowing if the email addresses were correct and in getting the participants to respond. To overcome this challenge, a follow-up email was sent to all Group I participants one month after the original. In addition, the qualitative interviews took more time to make a contact connection and set-up than originally anticipated. Summarizing and analyzing the findings took longer than expected; however to facilitate the process, interviews were recorded and transcribed and short summary answers were written as the interview progressed.

Research Questions

The research questions included one overarching theme research question along with several sub questions, which helped to answer the primary question. The main question was:

Are Oklahoma high school students, who receive the International Baccalaureate (IB) Diploma receiving the academic credit deserved for the efforts put forth to complete the program?

Sub questions included:

- 1) What do Oklahoma students perceive as the benefits of the International Baccalaureate Diploma Programs?
- 2) What type of students do Oklahoma universities look for in their recruitment areas and what incentives do they offer?
- 3) Why do Oklahoma high schools want to offer the International Baccalaureate Diploma Program, and how do they recruit students?
- 4) What type of IB programs are currently offered in Oklahoma?

Philosophical Foundations and Theoretical Framework

The tactic taken in this study was one of a pragmatic approach. Pragmatism arises from the work of Pierce, James, Mead, and Dewey. Pragmatism is not committed to any one research philosophy or paradigm. For the many forms of pragmatism, knowledge claims arise out of situations, actions, and consequences, rather than from antecedent conditions (Bloomberg, Volpe, 2008).

Many researchers do not support the use of mixed methods or the thought that these methods could ever be combined together. The theory behind combining these two types within one study was aimed at finding the most probable outcome. By using only one or the other method, the full picture of analyzing the data would have been missed. Patton outlines

that the pragmatic approach has always been at the foundation of the social science approach to questions about how to connect “theory” and “methods” in our research, which he refers to as “paradigm of choices” (Creswell, Clark, 2008, 54).

CHAPTER II

LITERATURE REVIEW

Introduction

Education is a key element to both growth and success within a given community or state. As Oklahoma strives to grow, one of its main focuses is the economic stability of the state. In order to increase the number of jobs within the state, the legislature understands the need for more companies to become attracted to Oklahoma. As part of that enticement to get companies to move to Oklahoma, the Oklahoma legislature has passed numerous bills to offer tax incentives for companies operating out of Oklahoma. Thus, more jobs are created and talented resource pools are needed from Oklahoma universities. The state government also understands that science, technology, engineering, and mathematics (STEM) curriculum has to be incorporated into our middle and secondary schools.

Oklahoma STEM Program

According to the website of outgoing Lieutenant Governor Jeri Askins, the aerospace industry faced a critical shortage of engineers in 2010. Between 60,000 and 68,000 engineers in the U.S. aerospace industry were expected to retire by 2010 and only half of those would be replaced. With modest growth in the U.S. aerospace industry,

there would be a shortage of 40,000 to 85,000 engineers by 2010 and Oklahoma would face a shortage of at least 650 engineers by 2013 (2010). To assist with dealing with this problem, the Lieutenant Governor sponsored a program called Real World Design Challenge, which teamed companies with students to boost STEM education in Oklahoma. With this prediction of engineer shortages, it was critical that Oklahoma step up with its educational direction and develop young students to pursue challenging areas such as math and science. Oklahoma has taken steps to incorporate some incentives for high schools to incorporate the International Baccalaureate Program as outlined in Oklahoma House Bill 1717 (Miller 2007).

It has been anticipated over the next the ten years, the demand for scientists and engineers in the United States will increase at four times the rate for all other occupations. However, most high school students overall are not performing well in math and science, and fewer of them are pursuing degrees in technical fields. Test scores in areas of math and science are down significantly. According to the U.S. Department of State, both the International Baccalaureate (IB) and Advanced Placement (AP) programs give high school students an opportunity to pursue college-level studies while still in high school. Depending on the college they attend, these courses can lead to advanced placement (skipping entry-level courses) or sometimes even receiving college credit for the coursework completed under these programs. The AP courses are accepted at virtually all U.S. colleges and universities, while the IB program has more limited acceptance within the U.S.

The International Baccalaureate Diploma Program (IBDP)

The IB Diploma Program was designed as an academically challenging and balanced program of education with final examinations that prepares students, normally aged 16 to 19, for success at universities and life beyond. The program is normally taught over two years and has gained recognition and respect from the world's leading universities. The International Baccalaureate (IB) is a non-profit educational foundation, motivated by its mission, focused on the student. There are three programs for students aged 3 to 19 that assist in developing the intellectual, personal, emotional and social skills to live, learn and work in a rapidly globalizing world. Students who satisfy IBDP demonstrate a strong commitment to learning in terms of both mastery of subject matters and in development of the skills as well as discipline necessary for success in a competitive world.

Founded in 1968, the IBO currently works with 3,326 schools in 141 countries to develop and offer three challenging programs to over 990,000 students aged 3 to 19 years. There are 1,309 IB schools in the United States offering one or more of the three IB programs. 299 schools offer the Primary Years Program, 445 schools offer the Middle Years Program, and 754 schools offer the Diploma Program. Of all countries offering the IB programs, the United States has the highest number of IB schools followed by Canada and the United Kingdom (IBO, 2012).

The IB curriculum model consists of six different groups: language, humanities or social sciences, mathematics and computer science, sciences, a second language, and

art. In addition, extended essay, theory of knowledge, and creativity, action, service (CAS) are all added to the six groups to developing the well rounded, imaginative and compassionate individuals (Pound, 2006, xi). Normally, three of the six subjects are studied at higher level (courses representing 240 teaching hours), and the remaining three subjects are studied at standard level (courses representing 150 teaching hours). Subjects, other than language, may be taught and examined in French, English, Spanish, German, and Chinese (if offered). (IBO 2012).

As outlined by Thompson, Hayden, and Cambridge, research has suggested that a baccalaureate-style curriculum model would have the following characteristics:

- It is a curriculum or program of study for upper secondary education...
- It may be used as a qualification for admission to higher education, for entry into employment, and as a foundation for learning throughout life.
- It is a program of study which constitutes a broad and balanced curriculum
- It contains a compulsory core element offering learners a common experience, in addition to optional or elective elements. (Pound, 2006, p 26)

The IBDP offers students a breadth of study, independent research skills, rigorous academic standards, and recognition of achievement in extra-curricular activities.

While the IB was created, 40 years ago by a Geneva-based educational organization to provide a standardized, high-level curriculum for the children of diplomats – and while it can be found in 125 countries today – U.S. schools have become

the program's biggest consumers by far. (Schachter, 2008) According to the IBO, the IB mission statement is as follows:

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end, the organization works with schools, governments and international organizations to develop challenging programs of international education and rigorous assessment. These programs encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

(IBO 2012)

According to the IBO, by 2014, more than 1 million International Baccalaureate (IB) students will have participated in the IBDP, and more than 120,000 Diploma Program students will be entering universities each year (IBO 2012). As the concept of IB and the benefits the program offers students becomes better understood, the growth of the program will continue. The IB is not just about belonging to a school; it is about belonging to a world network of like-minded people who have a common experience and the capacity to change the world for the better (Mathews, 2005, xviii)

Advanced Placement

The College Board which sponsors the Advanced Placement (AP) Program is a not for profit membership organization committed to excellence and equity in education.

Their mission is to connect students to college success and opportunity. The organization serves over seven million students each year. AP is a rigorous academic program built on the commitment, passion and hard work of students and educators from secondary schools and higher education. With 34 courses in a wide variety of subject areas, AP provides willing and academically prepared high school students with the opportunity to study and learn at the college level. Through AP courses, talented and dedicated AP teachers help students develop and apply the skills, abilities and content knowledge they will need later in college. Each AP course is modeled upon a comparable college course, and college and university faculty play a vital role in ensuring that AP courses align with college-level standards (College Board 2012) According to the U.S. Department of State, the AP program began in the U.S. to offer more challenging courses to capable high school students. An introductory college level course is offered each year followed by an examination in May (2012). AP is a well developed program in the U.S. according to the College Board, offering more than 34 courses and exams each year, with more than 18,000 schools worldwide participating in the program. Roughly 30.2% of the U.S. public high schools students took AP exams in 2010 (2012).

Since its inception in 1955 – 1956, the Advanced Placement program has expanded significantly. In 1955 – 1956, 1,229 students participated in AP courses; in 2004, there were 1,081,102 students from the United States were enrolled in AP courses. Similarly, the IB program has grown since it was first introduced in the United States in 1970; currently, approximately 31,000 students participate in the IB Program. (Hertberg-Davis, Callahan, 2008, p 199). Poelzer and Feldhusen (1996) found that students

studying in IB courses in the science disciplines for either 1 year or 2 years outperformed AP students in the equivalent discipline (Hertberg-Davis et al, 2008, p 200).

Oklahoma's International Baccalaureate Schools

There are currently two schools in Oklahoma who are associated with the International Baccalaureate Diploma Program. These schools include Classen School of Advanced Studies in Oklahoma City, and Booker T Washington in Tulsa. Both schools accept students based on academic standards instead of geographical location.

Classen School of Advanced Studies (CSAS) is a magnet school in the Oklahoma City Public School System and one of eleven high schools within the Oklahoma City School district. The school is housed in a building originally constructed in 1919, however, the facility has endured numerous enlargements and renovations over the years including current updates as part of the OKC MAPS project. Classen opened as CSAS in 1994 offering grades six through twelve a rare and dynamic educational opportunity. The school offers two complementary and challenging college preparatory plans of study: International Baccalaureate Diploma Program and the nationally recognized Visual and Performing Arts Program (VPA). The VPA majors offered include visual art, dance, vocal music, piano, guitar, band, strings, and theatre arts. Concurrent enrollment with several local colleges and universities is also available. CSAS is accredited by the North Central Association of Schools and Trans-Regional Accreditation as an international school and adheres to a college preparatory curriculum. CSAS maintains very high test scores and each year for the past seven or more years has ranked in the top 100 high

schools in the United States according to Newsweek. Several of those years CSAS has ranked in the top 20 high schools. The school is currently home to over 1,050 students in grades six through twelve (CSAS 2012).

Booker T. Washington (BTW) is a magnet school located in the Tulsa Public School System. The school was named after the African-American education pioneer Booker T. Washington. BTW is one of nine high schools within the Tulsa Public Schools. The school offers four different program options to students including the International Baccalaureate Diploma Program, Advanced Placement, Visual and Performing Arts Program, and regular high school program. BTW began offering the IB program in 1983. In 2003, the school marked the 90th anniversary of Booker T Washington the dedication of a new \$25 million dollar, 250,000square foot facility. BTW is a ninth through twelfth grade school BTW has also ranked in the top 100 high schools in the United States over the past several years (BTW 2012).

Stress Levels of IB Students

Stress is common among any high impact event, job, or study. Schoolwork is no different. This is especially true in environments of high pressure such as academic advanced programs such as the IB program. In a study done at the University of South Florida by Suldo, Shaunessy, Michalowski, and Shaffer, “Students who are enrolled in academically challenging curricula face a multitude of stressors related to increased academic demands in addition to the developmental and biological challenges that are normative to adolescence. These intense academic requirements of college-preparatory

programs may induce additional stress during the already tumultuous time of adolescence (Suldo, Shaunessy, Mischalowski, Shaffer, 2008, p 960). When one reviews the additional requirements of the IB diploma program to that of a base high school diploma, it becomes easy to see why a student might become stressed due to the never-ending rigorous program of IB. The program demands on time, energies, intellect, and skills expected of students in the IB program are external stimuli that likely contribute to stress. The findings of this study concluded that IB students did have higher stress levels compared to their peers in regular high school, but these IB students were able to adjust to psychosocial adjustments better than their peers were. Specifically, IB students had more positive perceptions of school climate, more academic self-efficacy, better attendance, fewer in-school behavior problems, and higher GPAs (Suldo et al, 2008, p 962).

CHAPTER III

METHODOLOGY

This chapter outlines the research design for this study. The purpose of this study was to assess the International Baccalaureate Diploma Program in Oklahoma and evaluate the perceptions the students in IB have of the program. The study examined the different criteria Oklahoma universities have for admissions and the type of students being considered for admission; the criteria Oklahoma IB high schools have for admissions and the types of students they consider for admission; the programs offered within Oklahoma IB high schools; and the academic credit offered at Oklahoma universities for completing the IBDP.

This study focused on one main research question and four sub-questions as detailed below:

Main Question:

Are Oklahoma high school students, who complete the International Baccalaureate Diploma Program (IBDP) receiving the academic credit deserved for the efforts put forth to complete the program?

Sub-questions:

1. What do Oklahoma students perceive as the benefits of the International Baccalaureate Diploma Programs?
2. What type of students do Oklahoma universities look for in their recruitment areas and what incentives do they offer?
3. Why do Oklahoma high schools want to offer the International Baccalaureate Diploma Program, and how do they recruit students?
4. What type of IB programs are currently offered in Oklahoma?

Research Design

A mixed-method study integrates both quantitative and qualitative research methods (Gay & Airasian, 2006). A given study can be accomplished in numerous ways; however, one usually wants to look at only one type of study or questions to assist in identifying the method needed to complete the research. Much debate has occurred since the 1960s on the usefulness of combining qualitative and quantitative research methodologies in the same study (Creswell, 2003; Curlette, 2006, Taskakkori & Teddlie, 1998; Thomas, 2003). Creswell and van Manen described methods as techniques of data collection and analysis, such as a quantitative standardized instrument or a qualitative theme analysis of text data (Creswell, Clark, 2007, 4). Elliot states that to call mixed methods research a “method” is clean and concise and resonates with many

researchers (5). Creswell further goes on to describe what he defines as mixed method research:

Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone (5)

One benefit of using a mixed-method study according to Frechtling, Sharp, Westat (1997) is that combining the two approaches sharpens our understanding of the research findings. For example, rejecting a quantitative null hypothesis can be clarified by using some of the comments made by students in open-ended qualitative responses. According to Hanson, Creswell, Plano-Clark, Petska, and Creswell (2005), these authors perceived “using both forms of data allow researchers to simultaneously generalize results from a sample to a population and to gain a deeper understanding of the phenomena of interest” (p. 224). Utilizing this method, a researcher can make generalizations analyzing a sample to a population which is usually performed through quantitative researchers. Then these generalizations can be further analyzed and enhanced through open-ended descriptive questions of some aspects of the data, which is usually a method conducted through qualitative researchers.

Of course, mixed method research designs do come with some disadvantages. According to Creswell (2003), the mixed-method researcher has to be knowledgeable in both qualitative and quantitative designs. Usually a mixed method requires more time and effort on the part of the researcher. Leahey (2007) states another concern with mixed-method research, the confidentiality of human research subjects. According to Collins, Onwuegbuzie, and Jiano (2006), a third concern to mixed-method research is sampling size. In quantitative research, the larger the sample size is, the more reliable the findings. In qualitative studies, it is not always possible to work with a large number of subjects as the researcher needs to be able to analyze the data with more depth. Even though there are disadvantages with a mixed method study, this researcher believes this is still the best approach at answering the research questions and finding the best overall conclusion to the main question.

Types of Mixed Design

This study had a combination of mixed designs. Phase I of this study was a triangulation mixed methods design. Here quantitative and qualitative data are equally weighted and are collected concurrently through the same study. The main advantage of this method is that the strengths of the qualitative data offset the weaknesses of the quantitative data and the strengths of the quantitative data offset the weaknesses of the qualitative data (Gay, Mills, Airasian (2009).

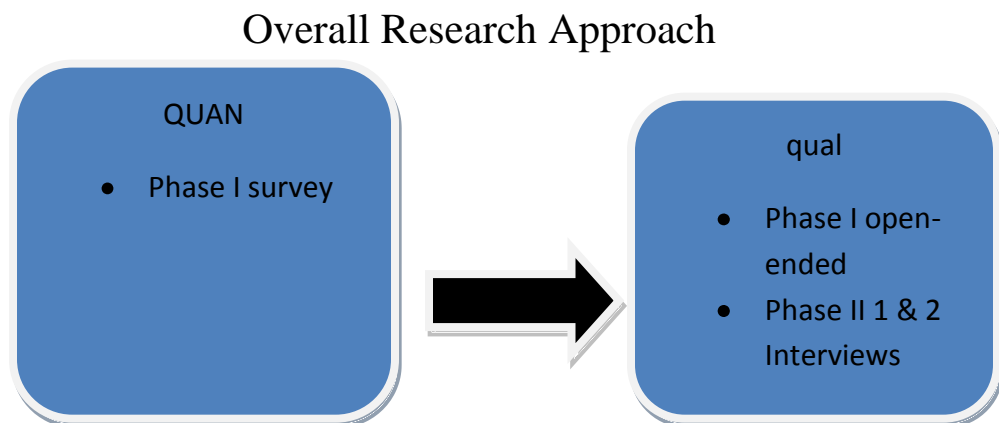
Phase II of this study was pure qualitative. The purpose of phase II was to understand the knowledge and perception of the universities admissions representatives

and the high school principals. The data collected provided insight using a phenomenological approach by dividing the procedures into statements, then transforming them into meanings, and finally tying the results together, making a general description of the experience (Moustakas, 1994). In this phase, research questions were developed to specifically explore the meaning of their experiences (Creswell, 1998).

The combination of these two phases' fits best into what is referred to as explanatory mixed method design where sequential quantitative and qualitative sections (QUAN → qual) are utilized (Figure 1). Also called a two-phased method, Creswell (2007, 72) stated that this method consist first of collecting quantitative data then collecting qualitative data to explain or elaborate on the quantitative results. For this study, pre-developed instruments were not available.

Figure 1

Explanatory Sequential Design



Participants

Phase I of the study contained students at Classen School of Advanced Studies (CSAS) which were selected through purposive sampling. Three groups of students were studied within this research area. Post IB students, graduates from 2009 who graduated two years prior, were referred to as Group I. Contact with this group was through email correspondence utilizing an online link which would then allow the students to take the survey. Groups II consisted of senior IB majors, who would be graduating in 2011; and Group III were the pre-IB majors, those graduating in 2014, which was two years before entering the program. Both Groups II and III were surveyed via classroom utilizing the same online questionnaires as Group I. Informed consent forms were obtained for the parents of Groups II and III through email approval (Appendix D). Assent forms were also obtained from the actual participants in Groups II and III prior to allowing them to complete the survey (Appendix E). The script that was presented to Group II and III is outlined in Appendix F. Consent was built into Group I emails stating that by clicking on the online link and submitting the survey, they were giving their consent (Appendix C). Informed consent means the knowing consent of individuals to participate as an exercise of their choice, free from any element of fraud, deceit, duress, or similar unfair inducement or manipulation (Berg 2009).

Phase II consisted of two parts. Part 1 contained interviews with the admissions offices at four Oklahoma universities. These four universities represented a purposeful grouping of two state universities, University of Oklahoma and Oklahoma State University, and two privately funded universities, which recognize the IB program, Tulsa

University, and Oklahoma City University. Informed consents were obtained from this group of participants prior to each interview (Appendix H).

Part 2 of Phase II included the principals from the two IB high schools in Oklahoma, Classen School of Advanced Studies and Booker T Washington. These purposive sampled principles were interviewed to understand the reason why their schools had chosen the IB diploma program and how this program has or has not changed their schools academic levels. Informed consents were obtained from this group of participants prior to each interview (Appendix J).

Demographic Data and Response Rate

Of the three groups tested a total population which was enrolled in the IB program at Classen School of Advanced Studies consisted of 127 students. Ninety-four students (74% return rate) responded to the survey. According to Gay and Airasian (2003), a response rate of 60% or lower may lead to some questions about the generalizability of a study's results. The response rate for this study was fourteen percent higher than the threshold set forth by Gay and Airasian's.

Table 1

Survey Demographics

Category	Variable	Number	Percent
Gender	Male	33	35.11%
	Female	49	52.13%
	Blank	12	12.77%
	Total	94	
Race	African American	4	4.17%
	Asian	20	20.83%
	Hispanic	3	3.13%
	Native American	3	3.13%
	White	46	47.92%
	Other	6	6.25%
	No Response	14	14.58%
	Total	96	
Age	Age 14	8	8.51%
	Age 15	22	23.40%
	Age 16	2	2.13%
	Age 17	15	15.96%
	Age 18	18	19.15%
	Age 19	7	7.45%
	Age 20	6	6.38%
	No Response	16	17.02%
	Total	94	
Educational Group	2009 Graduates (Post IB Program)	13	13.83%
	2011 Graduates (Current IB Program)	34	36.17%
	2014 Graduates (Pre-IB Program)	35	37.23%
	No Response	12	12.77%
	Total	94	

The demographics of the survey are outlined in Table 1. Of the respondents, 52% were females, 35% were males, and 13% did not respond. The racial profile of the IB students were made of 48.9% White, 21.2% Asian, 4.26% African American, 3.19% Hispanic, 3.19% Native American, and 20.8% were either other or no response. The ages of the respondents were between the ages of 14 to 20. The highest age percentage was age 15 students at 23.4%. Age 18 and 17 followed with percentages at 19.1% and 16.0%.

Sixteen students, 17% did not identify their age. The remaining age groups were all less than ten people. Age 14 consisted of eight students, 8.5%, age 16 contained two students, 2.1%, age 19 consisted of seven students, 7.5%, and age 20 contained six students for a percentage population of 6.4%.

The demographics for the educational groups consisted of 94 students in total. Thirteen of the students were from Group 1, 2009 post IB; Group 2, 2011 IB seniors contained 34, 26.2%; Group 3, 2014 pre-IB students consisted of 35, 37.2%, 12 of the students, 12.8% did not identify themselves.

Data Collection

Data was collected from all the various areas of the different participants. Group I of the students (2009 Graduates) answered online survey questionnaires via email links during spring 2011. Groups II and III (2011 and 2014 Graduates) completed their online survey via school computers during their English class in April 2011. The interview data was collected through in-person interviews during the summer 2011. This data was then analyzed and sorted in both qualitative and quantitative tables and summarized to best understand and present the overall outcome and to answer the research questions put forth.

Phase I, Part 1 - Instruments

There were two different instruments utilized in this study. For phase I of the study, the primary instrument was a survey (Appendix G). According to Sapsford (2006) one of the main benefits to a survey is it is flexible and can deal with different types of data. Thomas (2003) stated that “surveys are useful in revealing the current status of a target variable within a particular entity” (p. 44). A survey was selected as the primary instrument for Phase I of this study to assist testing the perceptions of the IB program as it relates to students inside the program. The survey utilized a Likert-type Scale model, which asked participants to respond to questions utilizing an indicator of Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or Strongly Disagree (SD). The 20 question survey supported questions that could be grouped into seven categories:

- Perception of the Program (Questions 1 – 8)
- Evaluation of the Program (Questions 9 – 11)
- Success of the Program (Questions 12 – 14)
- Support of the IB Program (Question 15 – 16)
- Academic Credit of the IB Program (Questions 17 – 19)
- Encouragement to Further the Program (Question 20)

Each question within the survey linked back to a category and specific research question. The survey was administered to three separate groups. Group 1 included post graduates through an emailed link to an online survey. Groups 2 and 3 participated in

the survey in April 2011 at Classen School of Advanced Studies in Oklahoma City, Oklahoma. A total population of 94 students participated.

Phase 1, Part 2 - Open-ended Questions

The survey research instrument also included seven open-ended survey questions where students were able to add to the data in their own narrative views. The open-ended questions consisted of their top three choices of career path; their top three choices of college or universities; why did the student choose the IBDP; what did the student feel would be the biggest benefit to completing the IBDP; the students ACT score and SAT scores, if taken; and any additional comment the student wanted to share.

Phase II Instruments

The second instrument was in the form of an Interview Guide with open-ended qualitative interview questions. These questions were used with participants from both the universities (Appendix I) and principals of the high schools (Appendix K).

Researcher's Resources and Skills

The researcher has a strong connection to the Oklahoma Education System in Oklahoma City especially the IB Diploma Program and the students who have completed the program, are in the program currently, and are in the pre-IB stage. In addition, the researcher works closely with the teachers and counselors at the school assisting in both volunteer efforts and as an aerospace industry specialist. The researcher has volunteered several times to mentor teachers in the aerospace and teacher sponsorships during the Oklahoma Aerospace Summit held each summer.

The researcher is also a hiring manager of students coming out of college and understands what the industry is expecting to see as well as the strengths and shortfalls that are possessed by the candidates. Because of first-hand knowledge of the impact of the shortage of STEM educated students on industry in Oklahoma, the researcher strongly believes that high school students need to be prepared for technical careers schooling and this needs to be accomplished at the high school level utilizing advanced academic programs.

Finally, the researcher is currently a graduate candidate at Oklahoma State University working toward a doctorate in Education. Her committee and chair all have a direct association with aerospace and education. Members of her team specialize in STEM level research and cover any overarching areas, which may be lacking.

Potential Ethical Issues

Because this data was collected under the direction of the IRB at Oklahoma State University, there are no foreseen ethical issues with the collection of data or interviewee contacts. The students in the classroom setting were not asked to identify themselves. The survey was administered online, therefore, once a student clicked on the submit button, there was no way to identify the participant back to the answers they provided. For the interview questions, the data held the name of the institution only and within the study was identified as University 1, University 2, University 3, or University 4, therefore keeping the specific responses of the university participants anonymous. High school interviews were referred to as High School 1 and High School 2. Interviews were taped, however, after the data was transcribed, the tapes were erased. All data from the questionnaires and interview questions were held confidential. Section 1.08 of the 6th edition of the Publication Manual of the American Psychological Association (APA) states “authors are expected to retain raw data for a minimum of five years after publication of the research” (12); therefore, the data will be kept on a secure computer by the researcher to meet this requirement.

Timeline of Study

This study was accomplished during the spring, and summer semester of 2011. The data was gathered during the late spring and early summer. Post IB graduates were contacted in early spring 2011. Senior and Pre-IB students were asked to fill out their questionnaire during several days during April 2011 while attending their required

English class. Interviews were conducted during the summer 2011 semester for availability purposes since participants had more available time prior to the start of the fall semester. The data was then collected and analyzed to support Chapter IV findings.

CHAPTER IV

FINDINGS / DATA ANALYSIS

Introduction

The purpose of this explanatory, sequential design was to assess the International Baccalaureate Diploma Program in Oklahoma by evaluating the perceptions the students in IB have of the program. The study further examined the different criteria Oklahoma universities have for admissions and the type of students being considered for admission; the criteria Oklahoma IB high schools have for admissions and the types of students they consider for admission; the programs offered within Oklahoma IB high schools; and the academic credit offered at Oklahoma universities for completing the IBDP.

Phase I of the study presents the findings of an analysis of both quantitative and qualitative data collected from students using a survey instrument designed by the researcher. This phase of the study was a mixed method exploration to elicit perceptions of IB students at Classen School of Advanced Studies in Oklahoma City. The questionnaire consisted of a quantitative, twenty question, Likert-type scale, survey followed by open-ended qualitative questions and demographics. The survey was

administered to three separate groups. Group 1 included post graduates through an emailed linked to an online survey. Groups 2 and 3 participated in the survey in April 2011 at Classen School of Advanced Studies in Oklahoma City, Oklahoma. A total population of 94 students participated.

Phase II of the research followed up with qualitative interviews consisting of two parts and six total interviews. The first part consisted of four interviews which were conducted with Oklahoma university admissions officials to understand what they look for in candidates. Part two included two interviews which were accomplished with high school principals in Oklahoma who host the IB program in Oklahoma.

Phase I, Part 1 – Quantitative Findings - Response to Questions

The questionnaire had a mixture of quantitative and qualitative questions. For consistency of analysis, one-way ANOVAs were used instead of *t-test* for demographic variables. The answers from the various groups were all combined together. A total of 20 quantitative questions were included in the survey. The questions, means, median, and standard deviation of each of the responses to quantitative questions answered in the survey questionnaire are outlined in Table 2. Analysis of variance (ANOVA) was used to investigate each research question that addressed the relationship of the participant's answer to the demographic areas. Analysis of variance is one of the most widely used statistical tests in educational research (Suter, 2006). It is used when testing the

Table 2

Questionnaire Statistical Data

Questions	No of Responses	Mean	Median	Std Dev
1) I feel the program is a good fit, academically, for me.	94	3.9362	4.0000	0.8271
2) I find the IB program hard.	94	3.9787	4.0000	0.7329
3) I find the IB program very stressful.	94	4.1170	4.0000	0.8013
4) I feel the hard work and stress of this program have or will pay off in the end.	93	3.8387	4.0000	1.1730
5) I find the IB program challenging.	91	4.1978	4.0000	0.7183
6) I believe I will be or have been rewarded for taking the IB program.	94	3.5851	4.0000	1.0717
7) I believe the workload associated with the IB program is necessary.	94	3.2979	4.0000	1.1055
8) In the end, I believe the IB program has been or will be worth all the hard work and effort I have put into it.	94	3.5426	4.0000	1.1609
9) I would rather have taken another advanced academic program such as Advanced Placement (AP).	94	2.7447	3.0000	1.0363
10) I feel that I missed out on my high school social life because of participating in the IB program.	93	3.4839	4.0000	1.2390
11) I feel the IB program is essential in meeting the needs to better prepare me for college.	94	3.7128	4.0000	0.9905
12) I believe that the IB program's success is due to the quality of its teachers.	93	3.3656	3.0000	1.0507
13) I feel it is a combination of both the teacher and the program that makes the program successful.	93	3.7419	4.0000	1.0205
14) My decision to pursue or complete the IB program was influenced by someone other than myself.	93	3.5161	4.0000	1.2989
15) I believe the State of Oklahoma is supporting the IB program.	92	2.0978	2.0000	0.9500
16) I would like to see more high schools offer the IB diploma program.	93	3.6344	4.0000	1.0085
17) I feel that Oklahoma Universities are offering the academic credit deserved for completing the IB diploma program.	93	2.0108	2.0000	1.0054
18) I feel the academic credit offered by a given university for my work in the IB program has or will influence were I go to college.	92	3.2609	3.5000	1.1940
19) I feel that out-of-state universities are offering more academic credit for completing the IB diploma program than Oklahoma universities.	92	3.8587	4.0000	1.0226
20) I would encourage other students to complete the IB program.	93	3.2903	3.0000	1.0793

differences of two or more means at a selected probability level (Gay & Airasian, 2000, p.491). An ANOVA is similar to the *t-test*, which compares two means, but with ANOVA, three or more independent samples are being analyzed concurrently.

The concept underlying ANOVA involves a ratio, known as *F*, with group differences as the numerator (variance between groups) and error as the denominator (variance within groups). If the variance between groups is much greater than the variance within groups, greater than would be expected by chance, the ratio will be large and a significant effect will be apparent. (Gay, et al, 2009, p. 342)

The accuracy of the *F* score is based on statistical assumptions of distribution related to normality, equal variances, and random sampling (Suter, 2006). Thus, with ANOVA the sample is divided into groups, and the means of the groups are tested to determine ‘whether the differences among the means represent true, significant differences or chance differences due to sampling error’ (Gay & Airasian, 2000, p. 491).

Since each question in the survey test was analyzed separately and independent of each other, twenty separate one-way ANOVAs were calculated for each of the questions. A criteria score of $p = .05$ was utilized to determine if there was a significant difference between the question asked and the demographics variables of gender, age, race, and education. The results for each ANOVA were recorded and analyzed within each question section.

To further ensure the accuracy of the answers and rule out possible error, each question was further broken down into the three educational groups and the answers to

each question was grouped by the educational areas. The data was then analyzed for consistency between the educational groups. The results were recorded within each question section.

Questionnaire - Question 1

The first question in the survey asked the students if they perceived the IB program, academically were for them. A total of 94 students responded to the question. As referenced in Table 2, the mean of Question 1 was 3.9362 while the median was 4.0. In total, the standard deviation was 0.8271. Of the answers to this question, 51.1% of the respondents agreed that the IB program was a good fit for them academically. 24.5% strongly agreed. Eighteen point one percent of the students were neutral to the question while 6.4% disagreed the program was a good fit for them. Overall 88 of the students either agreed or were neutral that the IB program was academically a good fit for them. ANOVA data for the four demographic variables are shown in Table 3.

Table 3

Question 1 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	.944	3	.315	1.307	.278
	Within Groups	18.776	78	.241		
	Total	19.720	81			
AGE	Between Groups	12.593	3	4.198	1.272	.290
	Within Groups	244.279	74	3.301		
	Total	256.872	77			
RACE	Between Groups	4.310	3	1.437	.607	.612
	Within Groups	184.580	78	2.366		
	Total	188.890	81			
EDUC	Between Groups	1.616	3	.539	1.038	.381
	Within Groups	40.481	78	.519		
	Total	42.098	81			

Table 4

Question 1 Demographic

Population

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB1 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB1 * AGE	78	83.0%	16	17.0%	94	100.0%
IB1 * RACE	82	87.2%	12	12.8%	94	100.0%
IB1 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 5

Questions 1 Mean of Gender

IB1 * GENDER

IB1

GENDER	Mean	N	Std. Deviation
Male	3.6970	33	.9180
Female	4.0816	49	.8123
Total	3.9268	82	.8718

Table 6

Question 1 Mean for Age

IB1 * AGE

IB1

AGE	Mean	N	Std. Deviation
14.00	4.2500	8	.8864
15.00	4.0000	22	.9258
16.00	4.5000	2	.7071
17.00	3.7333	15	1.0328
18.00	3.7222	18	.7519
19.00	4.0000	7	1.1547
20.00	3.8333	6	.4082
Total	3.9103	78	.8855

Table 7

Question 1 Mean for Race

IB1 * RACE

IB1

RACE	Mean	N	Std. Deviation
African American	3.7500	4	.9574
Asian	3.9500	20	.8256
Hispanic	4.0000	3	.0000
Native American	3.6667	3	.5774
White	3.9783	46	.9307
Other	3.6667	6	1.0328
Total	3.9268	82	.8718

Table 8

Question 1 Mean for Education

IB1 * EDUC

IB1

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.8462	13	.8006
2011 Graduate	3.7647	34	.8896
2014 Graduate	4.1143	35	.8668
Total	3.9268	82	.8718

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 1, (Table 3), no significant variances were found; at $p = .05$. Tables 4 details the total number of participates that provided demographic information. Tables 5 through 7 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 1.

Questionnaire -Question 2

The second question in the survey asked the students if they perceived the IB program was hard. A total of 94 students responded to the question. As referenced in Table 2, the mean to this question was 3.9787 while the median was 4.0. In total, the standard deviation was 0.7329. Of the answers to this question, 62.8% of the responses agreed that the IB program was hard. Twenty point two percent strongly agreed. Eleven point seven percent of the students were neutral to the question while 5.3% disagreed the program was hard. Overall, 89 of the students either agree or were neutral that the IB program was hard.

Table 9

Question 2 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Betw een Groups	.177	3	5.912E-02	.236	.871
	Within Groups	19.542	78	.251		
	Total	19.720	81			
AGE	Betw een Groups	8.909	3	2.970	.886	.452
	Within Groups	247.962	74	3.351		
	Total	256.872	77			
RACE	Betw een Groups	5.248	3	1.749	.743	.530
	Within Groups	183.642	78	2.354		
	Total	188.890	81			
EDUC	Betw een Groups	.252	3	8.415E-02	.157	.925
	Within Groups	41.845	78	.536		
	Total	42.098	81			

Table 10

Question 2 Demographic

Population

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB2 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB2 * AGE	78	83.0%	16	17.0%	94	100.0%
IB2 * RACE	82	87.2%	12	12.8%	94	100.0%
IB2 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 11

Question 2 Mean of Gender

IB2 * GENDER

IB2

GENDER	Mean	N	Std. Deviation
Male	4.0000	33	.6614
Female	3.9796	49	.7770
Total	3.9878	82	.7285

Table 12

Question 2 Mean of Age

IB2 * AGE

IB2

AGE	Mean	N	Std. Deviation
14.00	3.6250	8	.5175
15.00	3.9091	22	.8679
16.00	4.5000	2	.7071
17.00	3.8000	15	.8619
18.00	4.2222	18	.5483
19.00	4.0000	7	.5774
20.00	4.1667	6	.7528
Total	3.9744	78	.7381

Table 13

Question 2 Mean of Race

IB2 * RACE

IB2

RACE	Mean	N	Std. Deviation
African American	3.7500	4	.5000
Asian	4.0500	20	.6048
Hispanic	4.0000	3	1.0000
Native American	2.6667	3	1.1547
White	4.1087	46	.6742
Other	3.6667	6	.8165
Total	3.9878	82	.7285

Table 14

Question 2 Mean of Education

IB2 * EDUC

IB2

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.9231	13	.6405
2011 Graduate	4.1176	34	.7288
2014 Graduate	3.8857	35	.7581
Total	3.9878	82	.7285

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 2, (Table 9), no significant variances were found; at $p = .05$. Table 10 details the total number of participants that provided demographic information. Tables 11 through 14 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 2.

Questionnaire -Question 3

The third question asked the students if they perceived the IB program was stressful. A total of 94 students responded to the question. As referenced in Table 2, the mean of Question 3 was 4.1170 while the median was 4.0. In total, the standard deviation was 0.8013. Of the answers to this question, 41.5% of the responses agreed that the IB program was stressful. Thirty-six point two percent strongly agreed. Twenty point two percent of the students were neutral to the question while 2.1% disagreed the IB program was stressful. Overall, 92 of the students either agreed or were neutral that the IB program was stressful.

Table 15

Question 3 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Betw een Groups	.152	3	5.063E-02	.202	.895
	Within Groups	19.568	78	.251		
	Total	19.720	81			
AGE	Betw een Groups	37.107	3	12.369	4.165	.009
	Within Groups	219.765	74	2.970		
	Total	256.872	77			
RACE	Betw een Groups	14.886	3	4.962	2.224	.092
	Within Groups	174.004	78	2.231		
	Total	188.890	81			
EDUC	Betw een Groups	2.851	3	.950	1.889	.138
	Within Groups	39.247	78	.503		
	Total	42.098	81			

Table 16

Question 3 Tukey of Age

Multiple Comparisons

Dependent Variable: AGE

Tukey HSD

(I) IB3	(J) IB3	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Disagree	Neutral	1.7692	1.3089	.533	-1.6712	5.2097
	Agree	8.571E-02	1.2529	1.000	-3.2074	3.3788
	Strongly Agree	-.2143	1.2613	.998	-3.5296	3.1010
Neutral	Disagree	-1.7692	1.3089	.533	-5.2097	1.6712
	Agree	-1.6835*	.5597	.018	-3.1547	-.2123
	Strongly Agree	-1.9835*	.5784	.005	-3.5037	-.4633
Agree	Disagree	-8.571E-02	1.2529	1.000	-3.3788	3.2074
	Neutral	1.6835*	.5597	.018	.2123	3.1547
	Strongly Agree	-.3000	.4369	.902	-1.4485	.8485
Strongly Agree	Disagree	.2143	1.2613	.998	-3.1010	3.5296
	Neutral	1.9835*	.5784	.005	.4633	3.5037
	Agree	.3000	.4369	.902	-.8485	1.4485

*. The mean difference is significant at the .05 level.

Table 17

Question 3 CrosTab of Age

IB3 * AGE Crosstabulation

Count		AGE						Total
		14.00	15.00	16.00	17.00	18.00	19.00	
IB3	Disagree				2			2
	Neutral	4	6	1	1		1	13
	Agree	4	9		6	9	3	35
	Strongly Agree		7	1	6	9	3	28
Total		8	22	2	15	18	7	78

Table 18

Question 3 Demographic

Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB3 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB3 * AGE	78	83.0%	16	17.0%	94	100.0%
IB3 * RACE	82	87.2%	12	12.8%	94	100.0%
IB3 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 19

Question 3 Mean of Gender

IB3 * GENDER

IB3

GENDER	Mean	N	Std. Deviation
Male	4.2121	33	.7809
Female	4.1429	49	.7906
Total	4.1707	82	.7826

Table 20

Question 3 Mean of Age

IB3 * AGE

IB3

AGE	Mean	N	Std. Deviation
14.00	3.5000	8	.5345
15.00	4.0455	22	.7854
16.00	4.0000	2	1.4142
17.00	4.0667	15	1.0328
18.00	4.5000	18	.5145
19.00	4.2857	7	.7559
20.00	4.3333	6	.5164
Total	4.1410	78	.7850

Table 21

Question 3 Mean of Race

IB3 * RACE

IB3

RACE	Mean	N	Std. Deviation
African American	3.7500	4	.5000
Asian	4.0500	20	.6863
Hispanic	4.3333	3	1.1547
Native American	4.0000	3	.0000
White	4.2826	46	.8073
Other	4.0000	6	1.0954
Total	4.1707	82	.7826

Table 22

Question 3 Mean of Education

Groups

IB3 * EDUC

IB3

EDUC	Mean	N	Std. Deviation
2009 Graduate	4.1538	13	.6887
2011 Graduate	4.3824	34	.7791
2014 Graduate	3.9714	35	.7854
Total	4.1707	82	.7826

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participant according to Question 3, (Table 15), no significant variances were found among gender, race, or education at $p=.05$. Age did, however, have a significant variance. In further analyzing age according to question number 3, a Tukey Test on age was run (Table 16). The findings from this test explained the greatest variances according to age were individuals who answered neutral, agree, or strongly agrees categories. In running a Crosstabulation on age (Table 17), the neutral category showed 13 responses with Age 15 being the majority of responses (46%). The agree category included 35 responses with Age 15 and Age 18 both equally the highest with 25.7% in each group. On the strongly agree category, 28 individuals responded with Age 18 being the largest percentage, (32%). Table 18 details the total number of participants that provided demographic information. Tables 19 through 22 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 3.

Questionnaire - Question 4

In regard to Question 4 which asked if the hard work and stress of the program has or will pay off in the end, 93% of the students responded. As referenced in Table 2, the mean of Question 4 was 3.8387 while the median was 4.0. In total, the standard deviation was 1.1730. Of the answers to this question, 37.2% of the responses strongly agreed that the IB program was stressful. Twenty-nine point eight percent agreed. Twelve point eight percent of the students were neutral to the question while 17.0%

disagreed and 2.1% strongly disagreed the IB program was stressful. Overall, 76 of the students either agreed or were neutral that the hard work and stress put into the IB program would pay off in the end.

Table 23

Question 4 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	1.615	4	.404	1.717	.155
	Within Groups	18.105	77	.235		
	Total	19.720	81			
AGE	Between Groups	29.640	4	7.410	2.381	.059
	Within Groups	227.232	73	3.113		
	Total	256.872	77			
RACE	Between Groups	7.258	4	1.814	.769	.549
	Within Groups	181.633	77	2.359		
	Total	188.890	81			
EDUC	Between Groups	4.018	4	1.004	2.031	.098
	Within Groups	38.080	77	.495		
	Total	42.098	81			

Table 24

Question 4 Demographic

Participates

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB4 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB4 * AGE	78	83.0%	16	17.0%	94	100.0%
IB4 * RACE	82	87.2%	12	12.8%	94	100.0%
IB4 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 25

Question 4 Mean of Gender **IB4 * GENDER**

IB4

GENDER	Mean	N	Std. Deviation
Male	3.4545	33	1.3012
Female	3.9796	49	1.0506
Total	3.7683	82	1.1790

Table 26

Question 4 Mean of Age **IB4 * AGE**

IB4

AGE	Mean	N	Std. Deviation
14.00	4.7500	8	.4629
15.00	4.0455	22	1.0455
16.00	5.0000	2	.0000
17.00	3.3333	15	1.2910
18.00	3.0556	18	1.0556
19.00	3.8571	7	1.3452
20.00	3.6667	6	1.2111
Total	3.7308	78	1.1917

Table 27

Question 4 Mean of Race **IB4 * RACE**

IB4

RACE	Mean	N	Std. Deviation
African American	4.2500	4	.9574
Asian	3.9500	20	1.1910
Hispanic	3.6667	3	1.5275
Native American	4.0000	3	.0000
White	3.7391	46	1.1438
Other	3.0000	6	1.6733
Total	3.7683	82	1.1790

Table 28

Question 4 Mean of Education **IB4 * EDUC**

Levels

IB4			
EDUC	Mean	N	Std. Deviation
2009 Graduate	3.6923	13	1.1821
2011 Graduate	3.2353	34	1.1822
2014 Graduate	4.3143	35	.9322
Total	3.7683	82	1.1790

In looking at one-way ANOVAs between the Gender, Age, Race, and Education of the participants according to Question 4, (Table 23), no significant variances were found; at $p = .05$ except that age was approaching a significant variance at .059. Tables 24 details the total number of participants that provided demographic information. Tables 25 through 27 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 4.

Questionnaire - Question 5

The fifth question asked the students if they perceived the IB program was challenging. A total of 91 students responded to the question. As referenced in Table 2, the mean of this question was 4.1978 while the median was 4.0. In total, the standard deviation was 0.7183. Of the answers to this question, 50.0% of the responses agreed

that the IB program was challenging. Thirty-four percent strongly agreed. Ten point six percent of the students were neutral to the question while 2.1% disagreed the IB program was challenging. Overall, 89 of the students either agreed or were neutral that the IB program was challenging.

Table 29

Question 5 ANOVA ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	.773	3	.258	1.058	.372
	Within Groups	18.265	75	.244		
	Total	19.038	78			
AGE	Between Groups	1.352	3	.451	.133	.940
	Within Groups	241.395	71	3.400		
	Total	242.747	74			
RACE	Between Groups	6.919	3	2.306	.983	.405
	Within Groups	175.967	75	2.346		
	Total	182.886	78			
EDUC	Between Groups	.887	3	.296	.561	.643
	Within Groups	39.544	75	.527		
	Total	40.430	78			

Table 30

Question 5 Demographic
Participates

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB5 * GENDER	79	84.0%	15	16.0%	94	100.0%
IB5 * AGE	75	79.8%	19	20.2%	94	100.0%
IB5 * RACE	79	84.0%	15	16.0%	94	100.0%
IB5 * EDUC	79	84.0%	15	16.0%	94	100.0%

Table 31

Question 5 Mean of Gender

IB5 * GENDER

IB5

GENDER	Mean	N	Std. Deviation
Male	4.0625	32	.7594
Female	4.3404	47	.7002
Total	4.2278	79	.7329

Table 32

Question 5 Mean of Age

IB5 * AGE

IB5

AGE	Mean	N	Std. Deviation
14.00	4.1429	7	.8997
15.00	4.3000	20	.5712
16.00	4.5000	2	.7071
17.00	4.1333	15	.9904
18.00	4.1667	18	.7859
19.00	4.0000	7	.5774
20.00	4.3333	6	.5164
Total	4.2000	75	.7352

Table 33

Question 5 Mean of Race

IB5 * RACE

IB5

RACE	Mean	N	Std. Deviation
African American	4.0000	4	.0000
Asian	4.2632	19	.8057
Hispanic	4.0000	3	.0000
Native American	4.0000	3	.0000
White	4.3182	44	.7400
Other	3.8333	6	.9832
Total	4.2278	79	.7329

Table 34

Question 5 Mean of
Education Levels **IB5 * EDUC**

IB5			
EDUC	Mean	N	Std. Deviation
2009 Graduate	4.0769	13	.4935
2011 Graduate	4.2059	34	.8801
2014 Graduate	4.3125	32	.6445
Total	4.2278	79	.7329

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 5, (Table 29), no significant variances were found; at $p = .05$. Table 30 details the total number of participants that provided demographic information. Tables 31 through 34 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 5.

Questionnaire - Question 6

The next question asked if the students believed they would be rewarded for taking the IB program. A total of 94 students responded to the question. As referenced in Table 2, the mean of this question was 3.5851 while the median was 4.0. In total, the standard deviation was 1.0717. Of the answers to this question, 40.4% of the responses agreed that the students believed they would be rewarded for taking the IB program. Twenty point two percent strongly agreed. Nineteen point one percent of the students

were neutral to the question while 18.1% disagreed and 2.1% strongly disagreed that they would be rewarded for taking the IB program. Overall, 75 of the students either agreed or were neutral that they would be rewarded for taking the IB program.

Table 35

Question 6 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	1.327	4	.332	1.389	.248
	Within Groups	18.393	77	.239		
	Total	19.720	81			
AGE	Between Groups	31.440	4	7.860	2.545	.047
	Within Groups	225.431	73	3.088		
	Total	256.872	77			
RACE	Between Groups	1.510	4	.377	.155	.960
	Within Groups	187.381	77	2.434		
	Total	188.890	81			
EDUC	Between Groups	4.789	4	1.197	2.471	.051
	Within Groups	37.309	77	.485		
	Total	42.098	81			

Table 36

Question 6 Tukey of Age **Multiple Comparisons**

Dependent Variable: AGE

Tukey HSD

(I) IB6	(J) IB6	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strongly Disagree	Disagree	-.2500	1.3180	1.000	-3.9366	3.4366
	Neutral	1.5000	1.3348	.793	-2.2335	5.2335
	Agree	.6667	1.2833	.985	-2.9231	4.2564
	Strongly Agree	1.3824	1.3137	.830	-2.2922	5.0569
Disagree	Strongly Disagree	.2500	1.3180	1.000	-3.4366	3.9366
	Neutral	1.7500	.6562	.069	-8.54E-02	3.5854
	Agree	.9167	.5440	.449	-.6050	2.4383
	Strongly Agree	1.6324	.6121	.069	-7.98E-02	3.3445
Neutral	Strongly Disagree	-1.5000	1.3348	.793	-5.2335	2.2335
	Disagree	-1.7500	.6562	.069	-3.5854	8.539E-02
	Agree	-.8333	.5835	.612	-2.4655	.7988
	Strongly Agree	-.1176	.6475	1.000	-1.9287	1.6934
Agree	Strongly Disagree	-.6667	1.2833	.985	-4.2564	2.9231
	Disagree	-.9167	.5440	.449	-2.4383	.6050
	Neutral	.8333	.5835	.612	-.7988	2.4655
	Strongly Agree	.7157	.5335	.666	-.7765	2.2079
Strongly Agree	Strongly Disagree	-1.3824	1.3137	.830	-5.0569	2.2922
	Disagree	-1.6324	.6121	.069	-3.3445	7.977E-02
	Neutral	.1176	.6475	1.000	-1.6934	1.9287
	Agree	-.7157	.5335	.666	-2.2079	.7765

Table 37

Question 6 Demographic

Participates

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB6 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB6 * AGE	78	83.0%	16	17.0%	94	100.0%
IB6 * RACE	82	87.2%	12	12.8%	94	100.0%
IB6 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 38

Question 6 Mean of Gender

IB6 * GENDER

IB6

GENDER	Mean	N	Std. Deviation
Male	3.3939	33	.9981
Female	3.6939	49	1.1762
Total	3.5732	82	1.1114

Table 39

Question 6 Mean of Age

IB6 * AGE

IB6

AGE	Mean	N	Std. Deviation
14.00	4.0000	8	.5345
15.00	3.9545	22	.9501
16.00	4.5000	2	.7071
17.00	3.4000	15	1.3522
18.00	2.7778	18	1.1144
19.00	3.8571	7	1.0690
20.00	3.6667	6	.8165
Total	3.5641	78	1.1234

Table 40

Question 6 Mean of Race

IB6 * RACE

IB6

RACE	Mean	N	Std. Deviation
African American	3.5000	4	1.7321
Asian	3.5500	20	1.0501
Hispanic	3.6667	3	1.5275
Native American	3.3333	3	.5774
White	3.6522	46	1.0998
Other	3.1667	6	1.3292
Total	3.5732	82	1.1114

Table 41

Question 6 Mean of
Education Levels

IB6 * EDUC

IB6			
EDUC	Mean	N	Std. Deviation
2009 Graduate	3.6923	13	.8549
2011 Graduate	3.0882	34	1.2641
2014 Graduate	4.0000	35	.8402
Total	3.5732	82	1.1114

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participant according to Question 6, (Table 35), no significant variances were found among gender, or race at $p=.05$. Education were boarder-lined at $p=.051$. Age did have a significant variance. In further analyzing age, according to question number 6, a Tukey Test (Table 36) was run. The findings from this Post Hoc Test showed no significant variances were found with either of these categories. Table 37 details the total number of participates that provided demographic information. Tables 38 through 41 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 6.

Questionnaire - Question 7

The seventh question asked the students if they believed the workload associated with the IB program was necessary. A total of 94 students responded to the question. As referenced in Table 2, the mean of Question 7 was 3.2979 while the median was 4.0. In

total, the standard deviation was 1.1055. Of the answers to this question, 43.6% of the responses agreed that the workload associated with the IB program was necessary. Nine point six percent strongly agreed. Twenty-one point three percent of the students were neutral to the question while 18.1% disagreed and 7.4% strongly disagreed the workload associated with the IB program was necessary. Overall, 70 of the students either agreed or were neutral that the workload was necessary.

Table 42

Question 7 ANOVA ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	1.009	4	.252	1.038	.393
	Within Groups	18.711	77	.243		
	Total	19.720	81			
AGE	Between Groups	23.801	4	5.950	1.864	.126
	Within Groups	233.071	73	3.193		
	Total	256.872	77			
RACE	Between Groups	6.237	4	1.559	.657	.623
	Within Groups	182.653	77	2.372		
	Total	188.890	81			
EDUC	Between Groups	2.553	4	.638	1.243	.300
	Within Groups	39.544	77	.514		
	Total	42.098	81			

Table 43

Question 7 Demographic

Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB7 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB7 * AGE	78	83.0%	16	17.0%	94	100.0%
IB7 * RACE	82	87.2%	12	12.8%	94	100.0%
IB7 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 44

Question 7 Mean of Gender **IB7 * GENDER**

IB7

GENDER	Mean	N	Std. Deviation
Male	3.0000	33	1.1990
Female	3.4082	49	1.0785
Total	3.2439	82	1.1392

Table 45

Question 7 Mean of Age **IB7 * AGE**

IB7

AGE	Mean	N	Std. Deviation
14.00	3.1250	8	.6409
15.00	3.5455	22	1.1843
16.00	4.0000	2	.0000
17.00	3.0000	15	1.1952
18.00	2.7778	18	1.2154
19.00	3.4286	7	1.3973
20.00	3.3333	6	1.0328
Total	3.2051	78	1.1550

Table 46

Question 7 Mean of Race **IB7 * RACE**

IB7

RACE	Mean	N	Std. Deviation
African American	3.0000	4	1.1547
Asian	3.1500	20	1.0400
Hispanic	4.0000	3	1.0000
Native American	4.0000	3	.0000
White	3.2826	46	1.2049
Other	2.6667	6	1.2111
Total	3.2439	82	1.1392

Table 47

Question 7 Mean of
Educational Levels

IB7 * EDUC

IB7			
EDUC	Mean	N	Std. Deviation
2009 Graduate	3.3846	13	1.1929
2011 Graduate	2.9118	34	1.1901
2014 Graduate	3.5143	35	1.0109
Total	3.2439	82	1.1392

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 7, (Table 42), no significant variances were found; at $p = .05$. Table 43 details the total number of participants that provided demographic information. Tables 44 through 47 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 7.

Questionnaire - Question 8

The eighth question asked the students if they perceived in the end, the IB program would be worth all of their hard work and effort. A total of 94 students responded to the question. As referenced in Table 2, the mean of Question 8 was 3.5426 while the median was 4.0. In total, the standard deviation was 1.1609. Of the answers to this question, 40.4% of the responses agreed that the hard work and effort put forth in the IB program was worth it. Twenty point two percent strongly agreed. Twenty point two

percent of the students were neutral to the question while 11.7% disagreed and 7.4% strongly disagreed the IB program was worth all the hard work and effort. Overall, 76 of the students either agree or were neutral that the hard work and effort put forth in the IB program was worth it.

Table 48

Question 8 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	1.759	4	.440	1.885	.122
	Within Groups	17.961	77	.233		
	Total	19.720	81			
AGE	Between Groups	34.028	4	8.507	2.787	.033
	Within Groups	222.844	73	3.053		
	Total	256.872	77			
RACE	Between Groups	13.614	4	3.404	1.495	.212
	Within Groups	175.276	77	2.276		
	Total	188.890	81			
EDUC	Between Groups	4.161	4	1.040	2.111	.087
	Within Groups	37.936	77	.493		
	Total	42.098	81			

Table 49

Question 8 Tukey for Age

Multiple Comparisons

Dependent Variable: AGE

Tukey HSD

(I) IB8	(J) IB8	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strongly Disagree	Disagree	1.8413	.8805	.235	-.6216	4.3042
	Neutral	.9328	.7846	.758	-1.2620	3.1275
	Agree	2.1429*	.7383	.038	7.766E-02	4.2081
	Strongly Agree	1.6387	.7846	.236	-.5561	3.8334
Disagree	Strongly Disagree	-1.8413	.8805	.235	-4.3042	.6216
	Neutral	-.9085	.7202	.715	-2.9231	1.1061
	Agree	.3016	.6695	.991	-1.5711	2.1742
	Strongly Agree	-.2026	.7202	.999	-2.2172	1.8120
Neutral	Strongly Disagree	-.9328	.7846	.758	-3.1275	1.2620
	Disagree	.9085	.7202	.715	-1.1061	2.9231
	Agree	1.2101	.5372	.172	-.2926	2.7127
	Strongly Agree	.7059	.5993	.764	-.9704	2.3822
Agree	Strongly Disagree	-2.1429*	.7383	.038	-4.2081	-.777E-02
	Disagree	-.3016	.6695	.991	-2.1742	1.5711
	Neutral	-1.2101	.5372	.172	-2.7127	.2926
	Strongly Agree	-.5042	.5372	.881	-2.0069	.9984
Strongly Agree	Strongly Disagree	-1.6387	.7846	.236	-3.8334	.5561
	Disagree	.2026	.7202	.999	-1.8120	2.2172
	Neutral	-.7059	.5993	.764	-2.3822	.9704
	Agree	.5042	.5372	.881	-.9984	2.0069

*. The mean difference is significant at the .05 level.

Table 50

Question 8 CrossTab of

Age

IB8 * AGE Crosstabulation

Count

		AGE						Total
		14.00	15.00	16.00	17.00	18.00	19.00	
IB8	Strongly Disagree					5	2	7
	Disagree		3		5	1		9
	Neutral	2	3		1	7	1	3
	Agree	4	9	1	9	4		1
	Strongly Agree	2	7	1	1	1	4	2
Total		8	22	2	15	18	7	6
								78

Table 51

Question 8 Demographic
Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB8 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB8 * AGE	78	83.0%	16	17.0%	94	100.0%
IB8 * RACE	82	87.2%	12	12.8%	94	100.0%
IB8 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 52

Question 8 Mean of Gender **IB8 * GENDER**

IB8

GENDER	Mean	N	Std. Deviation
Male	3.1212	33	1.2688
Female	3.7755	49	1.1043
Total	3.5122	82	1.2095

Table 53

Question 8 Mean of Age **IB8 * AGE**

IB8

AGE	Mean	N	Std. Deviation
14.00	4.0000	8	.7559
15.00	3.9091	22	1.0193
16.00	4.5000	2	.7071
17.00	3.2667	15	.9612
18.00	2.7222	18	1.2744
19.00	3.5714	7	1.9024
20.00	3.8333	6	.9832
Total	3.5000	78	1.2141

Table 54

Question 8 Mean of Race **IB8 * RACE**

IB8

RACE	Mean	N	Std. Deviation
African American	4.2500	4	.9574
Asian	3.6500	20	1.2258
Hispanic	3.6667	3	.5774
Native American	3.6667	3	.5774
White	3.4783	46	1.2603
Other	2.6667	6	1.2111
Total	3.5122	82	1.2095

Table 55

Question 8 Mean of Educational Level **IB8 * EDUC**

IB8

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.6154	13	1.4456
2011 Graduate	2.9706	34	1.1930
2014 Graduate	4.0000	35	.9075
Total	3.5122	82	1.2095

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participant according to Question 8, (Table 48), no significant variances were found among gender, race, or education at $p=.05$. Age did, however, have a significant variance. In further analyzing age according to question number 8, a Turkey Test on age was run (Table 49). The findings from this Post Hoc Test explained the greatest variances according to age were individuals who answered agree, or strongly agrees categories. In running a Crosstabulation on age (Table 50), the strongly agree category

showed 17 responses with Age 15 being the majority of responses (41.1%). The agree category included 28 responses with Age 15 and Age 17 both equally the highest with 32.1% in each group. Table 51 details the total number of participants that provided demographic information. Tables 52 through 55 further break down the demographics showing the mean, *N*, and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 8.

Questionnaire - Question 9

The ninth question asked the students if they would have rather taken another advanced academic program such as Advanced Placement (AP). A total of 94 students responded to the question. As referenced in Table 2, the mean of this question was 2.7447 while the median was 3.0. In total, the standard deviation was 1.0363. Of the answers to this question, 13.8% of the responses agreed that they would have rather taken an Advanced Placement (AP) program. Seven point four percent strongly agreed. Thirty-one point nine percent of the students were neutral to the question. Thirty-nine point four percent of the students disagreed and 7.4% strongly disagreed that they would have rather taken an Advanced Placement (AP) program. Overall, 50 of the students either agreed or were neutral, 30 of those neutral, stated that they would have rather have taken an advanced academic program such as Advanced Placement (AP).

Table 56

ANOVA

Question 9 ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	1.952	4	.488	2.115	.087
	Within Groups	17.767	77	.231		
	Total	19.720	81			
AGE	Between Groups	11.931	4	2.983	.889	.475
	Within Groups	244.941	73	3.355		
	Total	256.872	77			
RACE	Between Groups	1.301	4	.325	.134	.970
	Within Groups	187.589	77	2.436		
	Total	188.890	81			
EDUC	Between Groups	.934	4	.234	.437	.782
	Within Groups	41.163	77	.535		
	Total	42.098	81			

Table 57

Question 9 Demographic Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB9 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB9 * AGE	78	83.0%	16	17.0%	94	100.0%
IB9 * RACE	82	87.2%	12	12.8%	94	100.0%
IB9 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 58

Question 9 Mean of Gender **IB9 * GENDER**

IB9

GENDER	Mean	N	Std. Deviation
Male	3.0000	33	.9682
Female	2.5714	49	1.1180
Total	2.7439	82	1.0751

Table 59

Question 9 Mean of Age **IB9 * AGE**

IB9

AGE	Mean	N	Std. Deviation
14.00	2.7500	8	.7071
15.00	2.4091	22	.9591
16.00	3.0000	2	.0000
17.00	2.6667	15	.8997
18.00	3.2222	18	1.5925
19.00	2.5714	7	.9759
20.00	2.8333	6	.7528
Total	2.7436	78	1.0982

Table 60

Question 9 Mean of Race **IB9 * RACE**

IB9

RACE	Mean	N	Std. Deviation
African American	2.5000	4	1.0000
Asian	2.8500	20	1.1367
Hispanic	3.0000	3	1.7321
Native American	2.3333	3	.5774
White	2.6957	46	1.0928
Other	3.0000	6	.8944
Total	2.7439	82	1.0751

Table 61

Question 9 Mean of Education Levels **IB9 * EDUC**

IB9

EDUC	Mean	N	Std. Deviation
2009 Graduate	2.6154	13	.8697
2011 Graduate	3.0000	34	1.3027
2014 Graduate	2.5429	35	.8521
Total	2.7439	82	1.0751

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 9, (Table 56), no significant variances were found; at $p = .05$. Table 57 details the total number of participants that provided demographic information. Tables 58 through 61 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 9.

Questionnaire - Question 10

The tenth question asked of the students in the survey was if they believed that they missed out on their high school social life because of participating in the IB program. There were 93 students who responded to the question. As referenced in Table 2, the mean of this question was 3.4839 while the median was 4.0. In total, the standard deviation was 1.2390. Of the answers to this question, 30.9% of the responses agreed that they missed out on high school social life because of the IB program. Twenty-four point five percent strongly agreed. Eighteen point one percent of the students were neutral to the question while 19.1% disagreed and 6.4% strongly disagreed that they missed out on high school social life because of the IB program. Overall, 70 of the students either agreed or were neutral that the IB program caused them to miss out on their high school social life.

Table 62

Question 10 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	9.839E-02	4	2.460E-02	.097	.983
	Within Groups	19.621	77	.255		
	Total	19.720	81			
AGE	Between Groups	10.273	4	2.568	.760	.555
	Within Groups	246.599	73	3.378		
	Total	256.872	77			
RACE	Between Groups	8.884	4	1.721	.728	.576
	Within Groups	182.007	77	2.364		
	Total	188.890	81			
EDUC	Between Groups	2.552	4	.638	1.242	.300
	Within Groups	39.546	77	.514		
	Total	42.098	81			

Table 63

Question 10 Demographic Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB10 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB10 * AGE	78	83.0%	16	17.0%	94	100.0%
IB10 * RACE	82	87.2%	12	12.8%	94	100.0%
IB10 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 64

Question 10 Mean of Gender

IB10 * GENDER

IB10

GENDER	Mean	N	Std. Deviation
Male	3.3333	33	1.2910
Female	3.4898	49	1.2437
Total	3.4268	82	1.2574

Table 65

Question 10 Mean of Age **IB10 * AGE**

IB10

AGE	Mean	N	Std. Deviation
14.00	3.2500	8	1.4880
15.00	3.3182	22	1.1291
16.00	2.5000	2	.7071
17.00	3.7333	15	1.3345
18.00	3.5556	18	1.2472
19.00	3.5714	7	1.5119
20.00	3.0000	6	1.6733
Total	3.4231	78	1.2845

Table 66

Question 10 Mean of Race **IB10 * RACE**

IB10

RACE	Mean	N	Std. Deviation
African American	3.0000	4	.8165
Asian	3.2500	20	1.2085
Hispanic	4.0000	3	1.7321
Native American	4.3333	3	.5774
White	3.3696	46	1.3226
Other	4.0000	6	1.0954
Total	3.4268	82	1.2574

Table 67

Question 10 Mean of Education Levels **IB10 * EDUC**

IB10

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.3846	13	1.5021
2011 Graduate	3.6176	34	1.2796
2014 Graduate	3.2571	35	1.1464
Total	3.4268	82	1.2574

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 10, (Table 62), no significant variances were found; at $p = .05$. Table 63 details the total number of participants that provided demographic information. Tables 64 through 67 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 10.

Questionnaire - Question 11

The next question asked the students in the survey if they perceived the IB program was essential in better preparing them for college. A total of 94 students responded to the question. As referenced in Table 4.2.0, the mean of this question was 3.7128 while the median was 4.0. In total, the standard deviation was 0.9905. Of the answers to this question, 42.6% of the responses agreed that the IB program was essential in preparing them for college. Twenty-one point three percent strongly agreed. Twenty-five point five percent of the students were neutral to the question while 7.4% disagreed and 3.2% strongly disagreed that the IB program was essential in better preparing them for college. Overall, 84 of the students either agreed or were neutral that the IB program was necessary to prepare them for college.

Table 68

Question 11 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	.414	4	.103	.413	.799
	Within Groups	19.306	77	.251		
	Total	19.720	81			
AGE	Between Groups	9.137	4	2.284	.673	.613
	Within Groups	247.734	73	3.394		
	Total	256.872	77			
RACE	Between Groups	20.540	4	5.135	2.348	.062
	Within Groups	168.350	77	2.186		
	Total	188.890	81			
EDUC	Between Groups	1.661	4	.415	.791	.535
	Within Groups	40.437	77	.525		
	Total	42.098	81			

Table 69

Question 11 Demographic Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB11 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB11 * AGE	78	83.0%	16	17.0%	94	100.0%
IB11 * RACE	82	87.2%	12	12.8%	94	100.0%
IB11 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 70

Question 11 Mean of Gender

IB11 * GENDER

IB11

GENDER	Mean	N	Std. Deviation
Male	3.5455	33	1.0923
Female	3.7959	49	.9570
Total	3.6951	82	1.0146

Table 71

Question 11 Mean of Age **IB11 * AGE**

IB11

AGE	Mean	N	Std. Deviation
14.00	3.7500	8	.8864
15.00	3.7273	22	.8827
16.00	5.0000	2	.0000
17.00	3.4667	15	.9904
18.00	3.6667	18	1.2834
19.00	3.5714	7	1.3973
20.00	3.8333	6	.7528
Total	3.6923	78	1.0358

Table 72

Question 11 Mean of Race **IB11 * RACE**

IB11

RACE	Mean	N	Std. Deviation
African American	4.5000	4	1.0000
Asian	4.0000	20	.9733
Hispanic	3.6667	3	.5774
Native American	3.6667	3	.5774
White	3.5435	46	1.0689
Other	3.3333	6	.8165
Total	3.6951	82	1.0146

Table 73

Question 11 Mean of Education Levels **IB11 * EDUC**

IB11

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.6154	13	1.0439
2011 Graduate	3.5882	34	1.1578
2014 Graduate	3.8286	35	.8570
Total	3.6951	82	1.0146

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 11, (Table 68), no significant variances were found; at $p = .05$; however, race demographic was approaching a significant variance at .062. Table 69 details the total number of participants that provided demographic information. Tables 70 through 73 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 11.

Questionnaire - Question 12

The twelfth question asked of the students in the survey was if the IB program's success is due to the quality of its teachers. A total of 93 students responded to the question. As referenced in Table 2, the mean of this question was 3.3656 while the median was 3.0. In total, the standard deviation was 1.0507. Of the answers to this question, 33.0% of the responses agreed that the IB program's success was due to the quality of its teachers. Twelve point eight percent strongly agreed. Thirty-eight point three percent of the students were neutral to the question while 7.4% disagreed and 7.4% strongly disagreed the IB program's success is due to the quality of its teachers. Overall, 79 of the students either agreed or were neutral that the IB program's success was due to the quality of its teachers.

Table 74

Question 12 ANOVA ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	1.466	4	.367	1.546	.197
	Within Groups	18.253	77	.237		
	Total	19.720	81			
AGE	Between Groups	21.442	4	5.360	1.662	.188
	Within Groups	235.430	73	3.225		
	Total	256.872	77			
RACE	Between Groups	5.579	4	1.395	.586	.674
	Within Groups	183.311	77	2.381		
	Total	188.890	81			
EDUC	Between Groups	2.125	4	.531	1.024	.401
	Within Groups	39.972	77	.519		
	Total	42.098	81			

Table 75

Question 12 Demographic Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB12 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB12 * AGE	78	83.0%	16	17.0%	94	100.0%
IB12 * RACE	82	87.2%	12	12.8%	94	100.0%
IB12 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 76

Question 12 Mean of Gender **IB12 * GENDER**

IB12

GENDER	Mean	N	Std. Deviation
Male	3.4242	33	1.2255
Female	3.3673	49	1.0347
Total	3.3902	82	1.1084

Table 77

Question 12 Mean of Age **IB12 * AGE**

IB12

AGE	Mean	N	Std. Deviation
14.00	2.5000	8	.9258
15.00	3.3636	22	.9535
16.00	4.5000	2	.7071
17.00	3.7333	15	1.0998
18.00	2.8333	18	1.2485
19.00	3.8571	7	.6901
20.00	4.1667	6	.7528
Total	3.3590	78	1.1163

Table 78

Question 12 Mean of Race **IB12 * RACE**

IB12

RACE	Mean	N	Std. Deviation
African American	3.5000	4	.5774
Asian	3.3000	20	1.2607
Hispanic	3.0000	3	1.7321
Native American	2.6667	3	.5774
White	3.3913	46	1.0848
Other	4.1667	6	.7528
Total	3.3902	82	1.1084

Table 79

Question 12 Mean of Education Levels **IB12 * EDUC**

IB12

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.8462	13	.6887
2011 Graduate	3.3235	34	1.2726
2014 Graduate	3.2857	35	1.0452
Total	3.3902	82	1.1084

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 12, (Table 74), no significant variances were found; at $p = .05$. Table 75 details the total number of participants that provided demographic information. Tables 76 through 79 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 12.

Questionnaire - Question 13

The thirteenth question asked of the students in the survey was if the IB program's success is due to the combination of both the program and its teachers. A total of 93 students responded to the question. As referenced in Table 2, the mean of this question was 3.7419 while the median was 4.0. In total, the standard deviation was 1.0205. Of the answers to this question, 31.9% of the responses agreed that the IB program's success was due to the combination of the program and its quality of teachers. Twenty-six point six percent strongly agreed. Thirty-one point nine percent of the students were neutral to the question while 5.3% disagreed and 3.2% strongly disagreed the IB program's success is due to combination of the program itself and the quality of its teachers. Overall, 85 of the students either agree or were neutral that the IB program's success was due to the combination of the program and its teachers.

Table 80

Question 13 ANOVA ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	.489	4	.117	.489	.758
	Within Groups	19.250	77	.250		
	Total	19.720	81			
AGE	Between Groups	11.982	4	2.995	.893	.473
	Within Groups	244.890	73	3.355		
	Total	256.872	77			
RACE	Between Groups	16.120	4	4.030	1.796	.138
	Within Groups	172.770	77	2.244		
	Total	188.890	81			
EDUC	Between Groups	.993	4	.248	.465	.761
	Within Groups	41.104	77	.534		
	Total	42.098	81			

Table 81

Question 13 Demographic

Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB13 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB13 * AGE	78	83.0%	16	17.0%	94	100.0%
IB13 * RACE	82	87.2%	12	12.8%	94	100.0%
IB13 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 82

Question 13 Mean of Gender

IB13 * GENDER

IB13

GENDER	Mean	N	Std. Deviation
Male	3.7273	33	1.0687
Female	3.6735	49	1.0486
Total	3.6951	82	1.0504

Table 83

Question 13 Mean of Age **IB13 * AGE**

IB13

AGE	Mean	N	Std. Deviation
14.00	3.2500	8	.7071
15.00	3.9545	22	.7854
16.00	5.0000	2	.0000
17.00	4.0000	15	1.0000
18.00	3.0000	18	1.3284
19.00	3.8571	7	.8997
20.00	3.8333	6	.9832
Total	3.6795	78	1.0629

Table 84

Question 13 Mean of Race **IB13 * RACE**

IB13

RACE	Mean	N	Std. Deviation
African American	3.2500	4	.9574
Asian	3.4500	20	1.2344
Hispanic	4.0000	3	1.0000
Native American	4.0000	3	.0000
White	3.7391	46	1.0421
Other	4.1667	6	.7528
Total	3.6951	82	1.0504

Table 85

Question 13 Mean of Educational Levels **IB13 * EDUC**

IB13

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.7692	13	.8321
2011 Graduate	3.4706	34	1.2848
2014 Graduate	3.8857	35	.8321
Total	3.6951	82	1.0504

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 13, (Table 80), no significant variances were found; at $p = .05$. Table 81 details the total number of participants that provided demographic information. Tables 82 through 85 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 13.

Questionnaire - Question 14

The fourteenth question asked of the students in the survey was if their decision to pursue or complete the IB program was influenced by someone other than themselves. A total of 93 students responded to the question. As referenced in Table 2, the mean of this question was 3.5161 while the median was 4.0. In total, the standard deviation was 1.2989. Of the answers to this question, 28.7% of the responses agreed that the pursuit of the IB program was influenced by someone other than themselves. Twenty-seven point seven percent strongly agreed. Nineteen point one percent of the students were neutral to the question while 13.8% disagreed and 9.6% strongly disagreed the decision to pursue or complete the IB program was influenced by someone other than themselves. Overall, 71 of the students either agree or were neutral that their decision to pursue the IB program was influenced by someone other than themselves.

Table 86

Question 14 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	.498	4	.124	.497	.738
	Within Groups	19.224	77	.250		
	Total	19.720	81			
AGE	Between Groups	23.680	4	5.920	1.853	.128
	Within Groups	233.192	73	3.194		
	Total	256.872	77			
RACE	Between Groups	6.145	4	1.536	.647	.631
	Within Groups	182.746	77	2.373		
	Total	188.890	81			
EDUC	Between Groups	3.280	4	.820	1.627	.176
	Within Groups	38.817	77	.504		
	Total	42.098	81			

Table 87

Question 14 Demographic Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB14 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB14 * AGE	78	83.0%	16	17.0%	94	100.0%
IB14 * RACE	82	87.2%	12	12.8%	94	100.0%
IB14 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 88

Question 14 Mean of Gender

IB14 * GENDER

IB14			
GENDER	Mean	N	Std. Deviation
Male	3.3939	33	1.2733
Female	3.4082	49	1.3216
Total	3.4024	82	1.2944

Table 89

Question 14 Mean of Age

IB14 * AGE

IB14

AGE	Mean	N	Std. Deviation
14.00	3.7500	8	1.0351
15.00	3.9091	22	1.1088
16.00	3.5000	2	2.1213
17.00	3.3333	15	1.2910
18.00	3.1111	18	1.5297
19.00	2.8571	7	1.4639
20.00	2.8333	6	1.1690
Total	3.4103	78	1.3136

Table 90

Question 14 Mean of Race

IB14 * RACE

IB14

RACE	Mean	N	Std. Deviation
African American	3.2500	4	.5000
Asian	3.3500	20	1.4244
Hispanic	4.0000	3	1.0000
Native American	4.6667	3	.5774
White	3.2826	46	1.3443
Other	3.6667	6	1.0328
Total	3.4024	82	1.2944

Table 91

Question 14 Mean of Educational Levels

IB14 * EDUC

IB14

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.0000	13	1.1547
2011 Graduate	3.1176	34	1.4515
2014 Graduate	3.8286	35	1.0706
Total	3.4024	82	1.2944

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 14, (Table 86), no significant variances were found; at $p = .05$. Table 87 details the total number of participants that provided demographic information. Tables 88 through 91 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 14.

Questionnaire - Question 15

The fifteenth question asked the students if they believed the State of Oklahoma is supporting the IB program. A total of 92 students responded to the question. As referenced in Table 2, the mean of this question was 2.0978 while the median was 2.0. In total, the standard deviation was 0.9500. Of the answers to this question, 5.3% of the responses agreed that the State of Oklahoma is supporting the IB program. One point one percent strongly agreed. Twenty-six point six percent of the students were neutral to the question while 34.0% disagreed and 30.9% strongly disagreed that the State of Oklahoma is supporting the IB program. Overall, 31 of the students either agree or were neutral that Oklahoma is supporting the IB program. The majority of the students perceived the state was not supporting the IB program.

Table 92

		ANOVA				
Question 15 ANOVA		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Betw een Groups	2.200	4	.550	2.417	.056
	Within Groups	17.520	77	.228		
	Total	19.720	81			
AGE	Betw een Groups	40.580	4	10.145	3.424	.013
	Within Groups	216.292	73	2.963		
	Total	256.872	77			
RACE	Betw een Groups	18.885	4	4.721	2.138	.084
	Within Groups	170.006	77	2.208		
	Total	188.890	81			
EDUC	Betw een Groups	4.326	4	1.081	2.205	.076
	Within Groups	37.772	77	.491		
	Total	42.098	81			

Table 93

Question 15 Tukey of Age

Multiple Comparisons

Dependent Variable: AGE

Tukey HSD

(I) IB15	(J) IB15	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strongly Disagree	Disagree	1.0833	.4872	.183	-.2796	2.4462
	Neutral	1.2917	.4872	.072	-7.12E-02	2.6546
	Agree	-1.5000	1.2631	.758	-5.0331	2.0331
	Strongly Agree	2.5000	1.2631	.286	-1.0331	6.0331
Disagree	Strongly Disagree	-1.0833	.4872	.183	-2.4462	.2796
	Neutral	.2083	.4969	.993	-1.1816	1.5982
	Agree	-2.5833	1.2668	.258	-6.1269	.9602
	Strongly Agree	1.4167	1.2668	.796	-2.1269	4.9602
Neutral	Strongly Disagree	-1.2917	.4872	.072	-2.6546	7.124E-02
	Disagree	-.2083	.4969	.993	-1.5982	1.1816
	Agree	-2.7917	1.2668	.190	-6.3352	.7519
	Strongly Agree	1.2083	1.2668	.875	-2.3352	4.7519
Agree	Strongly Disagree	1.5000	1.2631	.758	-2.0331	5.0331
	Disagree	2.5833	1.2668	.258	-.9602	6.1269
	Neutral	2.7917	1.2668	.190	-.7519	6.3352
	Strongly Agree	4.0000	1.7213	.149	-.8148	8.8148
Strongly Agree	Strongly Disagree	-2.5000	1.2631	.286	-6.0331	1.0331
	Disagree	-1.4167	1.2668	.796	-4.9602	2.1269
	Neutral	-1.2083	1.2668	.875	-4.7519	2.3352
	Agree	-4.0000	1.7213	.149	-8.8148	.8148

Table 94

Question 15 CrossTab of Age **IB15 * AGE Crosstabulation**

Count		AGE							Total
		14.00	15.00	16.00	17.00	18.00	19.00	20.00	
IB15	Strongly Disagree	1	2	1	6	13	1	2	26
	Disagree	4	7		5	5	2	1	24
	Neutral	2	13		4		2	3	24
	Agree						2		2
	Strongly Agree	1		1					2
Total		8	22	2	15	18	7	6	78

Table 95

Question 15 Demographic Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB15 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB15 * AGE	78	83.0%	16	17.0%	94	100.0%
IB15 * RACE	82	87.2%	12	12.8%	94	100.0%
IB15 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 96

Question 15 Mean of Gender **IB15 * GENDER**

IB15

GENDER	Mean	N	Std. Deviation
Male	2.1515	33	1.1214
Female	2.1020	49	.8955
Total	2.1220	82	.9862

Table 97

Question 15 Mean of Age **IB15 * AGE**

IB15

AGE	Mean	N	Std. Deviation
14.00	2.5000	8	1.1952
15.00	2.5000	22	.6726
16.00	3.0000	2	2.8284
17.00	1.8667	15	.8338
18.00	1.2778	18	.4609
19.00	2.7143	7	1.1127
20.00	2.1667	6	.9832
Total	2.1026	78	.9881

Table 98

Question 15 Mean of Race **IB15 * RACE**

IB15

RACE	Mean	N	Std. Deviation
African American	2.5000	4	.5774
Asian	2.2000	20	1.1965
Hispanic	2.6667	3	.5774
Native American	2.6667	3	.5774
White	1.9565	46	.9179
Other	2.3333	6	1.2111
Total	2.1220	82	.9862

Table 99

Question 15 Mean of Educational Levels **IB15 * EDUC**

IB15

EDUC	Mean	N	Std. Deviation
2009 Graduate	2.5385	13	1.0500
2011 Graduate	1.5294	34	.6622
2014 Graduate	2.5429	35	.9500
Total	2.1220	82	.9862

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participant according to Question 15, (Table 92), no significant variances were found among gender, race, or education at $p=.05$, however, gender was approach a significant variance at .056. Age did, however, have a significant variance. In further analyzing age according to question number 15, a Turkey Test on age was run (Table 93). The findings from this Post Hoc Test did not find significant variances. A crosstabulation table of age was also run (Table 94). Table 95 details the total number of participates that provided demographic information. Tables 96 through 99 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 15.

Questionnaire - Question 16

The sixteenth question was designed to determine if students taking the survey believed more high schools in Oklahoma should offer the IB program. A total of 93 students responded to the question. As referenced in Table 2, the mean of this question was 3.6344 while the median was 4.0. In total, the standard deviation was 1.0085. Of the answers to this question, 30.9% of the responses agreed that more high schools in Oklahoma should offer the IB program. Twenty-two point three percent strongly agreed. Thirty-six point two percent of the students were neutral to the question while 6.4% disagreed and 3.2% strongly disagreed that more high schools in Oklahoma should offer

the IB program. Overall, 84 of the students either agreed or were neutral in their perception that Oklahoma high schools should offer the IB program.

Table 100

Question 16 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	.414	4	.104	.413	.799
	Within Groups	19.305	77	.251		
	Total	19.720	81			
AGE	Between Groups	34.708	4	8.677	2.851	.030
	Within Groups	222.164	73	3.043		
	Total	256.872	77			
RACE	Between Groups	3.136	4	.784	.325	.860
	Within Groups	185.754	77	2.412		
	Total	188.890	81			
EDUC	Between Groups	6.647	4	1.662	3.609	.009
	Within Groups	35.450	77	.460		
	Total	42.098	81			

Table 101

Question 16 Tukey on Age **Multiple Comparisons**

Dependent Variable: AGE

Tukey HSD

(I) IB16	(J) IB16	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strongly Disagree	Disagree	2.3333	1.2336	.331	-1.1171	5.7838
	Neutral	.1852	1.0617	1.000	-2.7845	3.1549
	Agree	1.1449	1.0709	.822	-1.8505	4.1403
	Strongly Agree	1.4035	1.0838	.695	-1.6280	4.4351
Disagree	Strongly Disagree	-2.3333	1.2336	.331	-5.7838	1.1171
	Neutral	-2.1481	.7874	.059	-4.3505	5.422E-02
	Agree	-1.1884	.7997	.575	-3.4253	1.0485
	Strongly Agree	-.9298	.8169	.786	-3.2149	1.3553
Neutral	Strongly Disagree	-.1852	1.0617	1.000	-3.1549	2.7845
	Disagree	2.1481	.7874	.059	-5.42E-02	4.3505
	Agree	.9597	.4950	.307	-.4249	2.3444
	Strongly Agree	1.2183	.5224	.147	-.2429	2.6795
Agree	Strongly Disagree	-1.1449	1.0709	.822	-4.1403	1.8505
	Disagree	1.1884	.7997	.575	-1.0485	3.4253
	Neutral	-.9597	.4950	.307	-2.3444	.4249
	Strongly Agree	.2586	.5408	.989	-1.2542	1.7714
Strongly Agree	Strongly Disagree	-1.4035	1.0838	.695	-4.4351	1.6280
	Disagree	.9298	.8169	.786	-1.3553	3.2149
	Neutral	-1.2183	.5224	.147	-2.6795	.2429
	Agree	-.2586	.5408	.989	-1.7714	1.2542

Table 102

Question 16 CrossTab of Age

IB16 * AGE Crosstabulation

Count		AGE						Total	
		14.00	15.00	16.00	17.00	18.00	19.00		20.00
B16	Strongly Disagree				1	2			3
	Disagree	1	4			1			6
	Neutral	1	6		6	5	4	5	27
	Agree	3	7		4	7	1	1	23
	Strongly Agree	3	5	2	4	3	2		19
Total		8	22	2	15	18	7	6	78

Table 103

Question 16 Tukey of Educ **Multiple Comparisons**

Dependent Variable: EDUC

Tukey HSD

(I) IB16	(J) IB16	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strongly Disagree	Disagree	-.8333	.4798	.418	-2.1736	.5070
	Neutral	7.143E-02	.4122	1.000	-1.0800	1.2229
	Agree	-.3600	.4146	.908	-1.5181	.7981
	Strongly Agree	-.5000	.4201	.757	-1.6735	.6735
Disagree	Strongly Disagree	.8333	.4798	.418	-.5070	2.1736
	Neutral	.9048*	.3052	.032	5.206E-02	1.7575
	Agree	.4733	.3085	.544	-.3883	1.3350
	Strongly Agree	.3333	.3158	.828	-.5490	1.2156
Neutral	Strongly Disagree	-7.143E-02	.4122	1.000	-1.2229	1.0800
	Disagree	-.9048*	.3052	.032	-1.7575	-5.21E-02
	Agree	-.4314	.1867	.153	-.9530	9.013E-02
	Strongly Agree	-.5714*	.1987	.040	-1.1264	-1.65E-02
Agree	Strongly Disagree	.3600	.4146	.908	-.7981	1.5181
	Disagree	-.4733	.3085	.544	-1.3350	.3883
	Neutral	.4314	.1867	.153	-9.01E-02	.9530
	Strongly Agree	-.1400	.2036	.959	-.7086	.4286
Strongly Agree	Strongly Disagree	.5000	.4201	.757	-.6735	1.6735
	Disagree	-.3333	.3158	.828	-1.2156	.5490
	Neutral	.5714*	.1987	.040	1.650E-02	1.1264
	Agree	.1400	.2036	.959	-.4286	.7086

*. The mean difference is significant at the .05 level.

Table 104

Question 16 CrossTab of

Education

IB16 * EDUC Crosstabulation

Count		EDUC			Total
		2009 Graduate	2011 Graduate	2014 Graduate	
IB16	Strongly Disagree		3		3
	Disagree		1	5	6
	Neutral	9	12	7	28
	Agree	3	10	12	25
	Strongly Agree	1	8	11	20
Total		13	34	35	82

Table 105

Question 16 Demographic

Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB16 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB16 * AGE	78	83.0%	16	17.0%	94	100.0%
IB16 * RACE	82	87.2%	12	12.8%	94	100.0%
IB16 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 106

Question 16 Mean of Gender

IB16 * GENDER

IB16

GENDER	Mean	N	Std. Deviation
Male	3.5455	33	1.1206
Female	3.7143	49	1.0000
Total	3.6463	82	1.0467

Table 107

Question 16 Mean of Age

IB16 * AGE

IB16

AGE	Mean	N	Std. Deviation
14.00	4.0000	8	1.0690
15.00	3.5909	22	1.0538
16.00	5.0000	2	.0000
17.00	3.6667	15	1.1127
18.00	3.4444	18	1.1991
19.00	3.7143	7	.9512
20.00	3.1667	6	.4082
Total	3.6282	78	1.0582

Table 108

Question 16 Mean of Race

IB16 * RACE

IB16

RACE	Mean	N	Std. Deviation
African American	4.0000	4	.8165
Asian	3.6000	20	1.0954
Hispanic	3.3333	3	.5774
Native American	4.0000	3	.0000
White	3.7609	46	1.0580
Other	2.6667	6	1.0328
Total	3.6463	82	1.0467

Table 109

Question 16 Mean of Educational Levels

IB16 * EDUC

IB16

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.3846	13	.6504
2011 Graduate	3.5588	34	1.1597
2014 Graduate	3.8286	35	1.0428
Total	3.6463	82	1.0467

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participant according to Question 16, (Table 100), no significant variances were found among gender, or race at $p=.05$. Age and education did, however, have a significant variance. In further analyzing age and education according to question number 16, separate Turkey Tests were run on age (Table 101) and education (Table 103). For age, the findings from this Post Hoc Test explained there were no significant variances. A crosstabulation on age was also run (Table 102). For education, the findings from this Post Hoc Test explained the greatest variances were individuals who answered in the

strongly agree, neutral, or disagree categories. In running a Crosstabulation on age (Table 104), the strongly agree showed 20 responses with 2014 graduates being the highest (55%), the neutral category showed 28 responses with 2011 graduates being the highest (42.8%). The disagree category included 6 responses with 2014 graduates being the highest number of responses (83%). Table 105 details the total number of participants that provided demographic information. Tables 106 through 109 further break down the demographics showing the mean, *N*, and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 16.

Questionnaire - Question 17

The seventeenth question asked the students in the survey if they perceived that Oklahoma universities were offering the academic credit deserved for completing the IB diploma program. A total of 93 students responded to the question. As referenced in Table 2, the mean of this question was 2.0108 while the median was 2.0. In total, the standard deviation was 1.0054. Of the answers to this question, 4.3% of the responses agreed that Oklahoma universities were offering the academic credit deserved for completing the IB program. Two point one percent strongly agreed. Twenty-four point five percent of the students were neutral to the question while 29.8% disagreed and 38.3% strongly disagreed that Oklahoma universities were offering the academic credit deserved for completing the IB diploma program. Overall, 29 of the students either agreed or were neutral that universities in Oklahoma were offering the academic credit

deserved for completing the IB program, while 64% of the students felt Oklahoma universities should offer more credit.

Table 110

Question 17 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	.799	4	.200	.813	.521
	Within Groups	18.921	77	.246		
	Total	19.720	81			
AGE	Between Groups	35.728	4	8.932	2.948	.026
	Within Groups	221.144	73	3.029		
	Total	256.872	77			
RACE	Between Groups	4.752	4	1.188	.497	.738
	Within Groups	184.138	77	2.391		
	Total	188.890	81			
EDUC	Between Groups	3.559	4	.890	1.778	.142
	Within Groups	38.538	77	.500		
	Total	42.098	81			

Table 111

Question 17 Tukey on Age **Multiple Comparisons**

Dependent Variable: AGE

Tukey HSD

(I) IB17	(J) IB17	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strongly Disagree	Disagree	1.2200	.4646	.076	-7.95E-02	2.5195
	Neutral	1.4375	.5329	.064	-5.32E-02	2.9282
	Agree	1.8333	1.0509	.414	-1.1063	4.7729
	Strongly Agree	.0000	1.2686	1.000	-3.5485	3.5485
Disagree	Strongly Disagree	-1.2200	.4646	.076	-2.5195	7.953E-02
	Neutral	.2175	.5572	.995	-1.3412	1.7762
	Agree	.6133	1.0635	.978	-2.3613	3.5880
	Strongly Agree	-1.2200	1.2790	.875	-4.7976	2.3576
Neutral	Strongly Disagree	-1.4375	.5329	.064	-2.9282	5.316E-02
	Disagree	-.2175	.5572	.995	-1.7762	1.3412
	Agree	.3958	1.0950	.996	-2.6672	3.4588
	Strongly Agree	-1.4375	1.3054	.805	-5.0889	2.2139
Agree	Strongly Disagree	-1.8333	1.0509	.414	-4.7729	1.1063
	Disagree	-.6133	1.0635	.978	-3.5880	2.3613
	Neutral	-.3958	1.0950	.996	-3.4588	2.6672
	Strongly Agree	-1.8333	1.5889	.777	-6.2776	2.6109
Strongly Agree	Strongly Disagree	.0000	1.2686	1.000	-3.5485	3.5485
	Disagree	1.2200	1.2790	.875	-2.3576	4.7976
	Neutral	1.4375	1.3054	.805	-2.2139	5.0889
	Agree	1.8333	1.5889	.777	-2.6109	6.2776

Table 112

Question 17 CrossTab on Age **IB17 * AGE Crosstabulation**

Count

		AGE						Total	
		14.00	15.00	16.00	17.00	18.00	19.00		20.00
B17	Strongly Disagree	2	2	1	7	16	1	3	32
	Disagree	2	11		7	1	3	1	25
	Neutral	4	7			1	2	2	16
	Agree		2		1				3
	Strongly Agree			1			1		2
Total		8	22	2	15	18	7	6	78

Table 113

Question 17 Demographic Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB17 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB17 * AGE	78	83.0%	16	17.0%	94	100.0%
IB17 * RACE	82	87.2%	12	12.8%	94	100.0%
IB17 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 114

Question 17 Mean of Gender **IB17 * GENDER**

IB17

GENDER	Mean	N	Std. Deviation
Male	2.0909	33	1.0417
Female	1.8571	49	.9574
Total	1.9512	82	.9926

Table 115

Question 17 Mean of Age **IB17 * AGE**

IB17

AGE	Mean	N	Std. Deviation
14.00	2.2500	8	.8864
15.00	2.4091	22	.7964
16.00	3.0000	2	2.8284
17.00	1.6667	15	.8165
18.00	1.1667	18	.5145
19.00	2.5714	7	1.2724
20.00	1.8333	6	.9832
Total	1.9487	78	1.0051

Table 116

Question 17 Mean of Race **IB17 * RACE**

IB17

RACE	Mean	N	Std. Deviation
African American	1.7500	4	.9574
Asian	2.1000	20	1.0712
Hispanic	1.6667	3	.5774
Native American	1.6667	3	.5774
White	1.9565	46	1.0532
Other	1.8333	6	.7528
Total	1.9512	82	.9926

Table 116

Question 17 Mean of Education Levels **IB17 * EDUC**

IB17

EDUC	Mean	N	Std. Deviation
2009 Graduate	2.3846	13	1.2609
2011 Graduate	1.3235	34	.5349
2014 Graduate	2.4000	35	.9139
Total	1.9512	82	.9926

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participant according to Question 17, (Table 110), no significant variances were found among gender, race, or education at $p=.05$. Age did, however, have a significant variance. In further analyzing age according to question number 17, a Turkey Test on age was run (Table 111). The findings from this Post Hoc Test did not find significant variances. The closest significant different was with strongly disagrees at $p=.064$. A crosstabulation was run on age (Table 112). Table 113 details the total number of

participates that provided demographic information. Tables 114 through 117 further break down the demographics showing the mean, *N*, and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 17.

Questionnaire - Question 18

The next question asked of the students was if they believed academic credit influenced their selection of where to attend college. A total of 92 students responded to the question. As referenced in Table 2, the mean of this question was 3.2609 while the median was 3.5. In total, the standard deviation was 1.1940. Of the answers to this question, 35.1% of the responses agreed that academic credit would or did influence where they attended college. Thirteen point eight percent strongly agreed. Twenty point two percent of the students were neutral to the question while 20.2% disagreed and 8.5% strongly disagreed that academic credit influenced their college selection. Overall, 66 of the students either agreed or were neutral that academic credit offered by universities impacted their selection of where to attend college.

Table 118

Question 18 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	1.339	4	.335	1.402	.241
	Within Groups	18.381	77	.239		
	Total	19.720	81			
AGE	Between Groups	56.931	4	14.233	5.196	.001
	Within Groups	199.941	73	2.739		
	Total	256.872	77			
RACE	Between Groups	4.489	4	1.122	.468	.759
	Within Groups	184.401	77	2.395		
	Total	188.890	81			
EDUC	Between Groups	7.083	4	1.771	3.894	.006
	Within Groups	35.015	77	.455		
	Total	42.098	81			

Table 119

Question 18 Tukey of Age

Multiple Comparisons

Dependent Variable: AGE

Tukey HSD

(I) IB18	(J) IB18	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strongly Disagree	Disagree	.1765	.7432	.999	-1.9024	2.2554
	Neutral	1.1765	.7432	.513	-.9024	3.2554
	Agree	1.8000	.7077	.092	-.1795	3.7795
	Strongly Agree	2.5000*	.7871	.018	.2984	4.7016
Disagree	Strongly Disagree	-.1765	.7432	.999	-2.2554	1.9024
	Neutral	1.0000	.5676	.404	-.5878	2.5878
	Agree	1.6235*	.5203	.021	.1683	3.0788
	Strongly Agree	2.3235*	.6240	.003	.5782	4.0689
Neutral	Strongly Disagree	-1.1765	.7432	.513	-3.2554	.9024
	Disagree	-1.0000	.5676	.404	-2.5878	.5878
	Agree	.6235	.5203	.752	-.8317	2.0788
	Strongly Agree	1.3235	.6240	.222	-.4218	3.0689
Agree	Strongly Disagree	-1.8000	.7077	.092	-3.7795	.1795
	Disagree	-1.6235*	.5203	.021	-3.0788	-.1683
	Neutral	-.6235	.5203	.752	-2.0788	.8317
	Strongly Agree	.7000	.5812	.749	-.9257	2.3257
Strongly Agree	Strongly Disagree	-2.5000*	.7871	.018	-4.7016	-.2984
	Disagree	-2.3235*	.6240	.003	-4.0689	-.5782
	Neutral	-1.3235	.6240	.222	-3.0689	.4218
	Agree	-.7000	.5812	.749	-2.3257	.9257

*. The mean difference is significant at the .05 level.

Table 120

Question 18 CrosTab of Age **IB18 * AGE Crosstabulation**

Count		AGE						Total
		14.00	15.00	16.00	17.00	18.00	19.00	
IB18	Strongly Disagree				1	5	1	7
	Disagree		2		4	6	3	17
	Neutral	1	5		5	3	2	17
	Agree	4	10	1	4	2	1	25
	Strongly Agree	3	5	1	1	2		12
Total		8	22	2	15	18	7	78

Table 121

Question 18 Tukey of Age **Multiple Comparisons**

Dependent Variable: EDUC

Tukey HSD

(I) IB18	(J) IB18	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Strongly Disagree	Disagree	-3.175E-02	.3004	1.000	-.8708	.8073
	Neutral	-.4206	.3004	.629	-1.2597	.4185
	Agree	-.5503	.2860	.314	-1.3492	.2487
	Strongly Agree	-.8929	.3207	.051	-1.7888	3.049E-03
Disagree	Strongly Disagree	3.175E-02	.3004	1.000	-.8708	.8708
	Neutral	-.3889	.2248	.422	-1.0168	.2390
	Agree	-.5185	.2052	.095	-1.0917	5.469E-02
	Strongly Agree	-.8611*	.2513	.008	-1.5631	-.1591
Neutral	Strongly Disagree	.4206	.3004	.629	-.4185	1.2597
	Disagree	.3889	.2248	.422	-.2390	1.0168
	Agree	-.1296	.2052	.969	-.7028	.4436
	Strongly Agree	-.4722	.2513	.337	-1.1743	.2298
Agree	Strongly Disagree	.5503	.2860	.314	-.2487	1.3492
	Disagree	.5185	.2052	.095	-5.47E-02	1.0917
	Neutral	.1296	.2052	.969	-.4436	.7028
	Strongly Agree	-.3426	.2340	.588	-.9962	.3110
Strongly Agree	Strongly Disagree	.8929	.3207	.051	-3.05E-03	1.7888
	Disagree	.8611*	.2513	.008	.1591	1.5631
	Neutral	.4722	.2513	.337	-.2298	1.1743
	Agree	.3426	.2340	.588	-.3110	.9962

*. The mean difference is significant at the .05 level.

Table 122

Question 18 CrossTab
of Educ

IB18 * EDUC Crosstabulation

Count		EDUC			Total
		2009 Graduate	2011 Graduate	2014 Graduate	
IB18	Strongly Disagree	1	6		7
	Disagree	5	10	3	18
	Neutral	2	9	7	18
	Agree	5	6	16	27
	Strongly Agree		3	9	12
Total		13	34	35	82

Table 123

Question 18 Demographic
Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB18 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB18 * AGE	78	83.0%	16	17.0%	94	100.0%
IB18 * RACE	82	87.2%	12	12.8%	94	100.0%
IB18 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 124

Question 18 Mean of Gender

IB18 * GENDER

IB18

GENDER	Mean	N	Std. Deviation
Male	2.8788	33	1.1390
Female	3.4694	49	1.1920
Total	3.2317	82	1.1998

Table 125

Question 18 Mean of Age **IB18 * AGE**

IB18

AGE	Mean	N	Std. Deviation
14.00	4.2500	8	.7071
15.00	3.8182	22	.9069
16.00	4.5000	2	.7071
17.00	3.0000	15	1.0690
18.00	2.4444	18	1.3382
19.00	2.4286	7	.9759
20.00	3.1667	6	.9832
Total	3.2308	78	1.2159

Table 126

Question Mean of Race **IB18 * RACE**

IB18

RACE	Mean	N	Std. Deviation
African American	2.7500	4	1.5000
Asian	3.4000	20	1.2732
Hispanic	3.3333	3	.5774
Native American	4.3333	3	.5774
White	3.1957	46	1.2041
Other	2.6667	6	1.0328
Total	3.2317	82	1.1998

Table 127

Question 18 Mean of Educational Levels **IB18 * EDUC**

IB18

EDUC	Mean	N	Std. Deviation
2009 Graduate	2.8462	13	1.0682
2011 Graduate	2.7059	34	1.2193
2014 Graduate	3.8857	35	.9000
Total	3.2317	82	1.1998

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participant according to Question 18, (Table 118), no significant variances were found among gender, or race at $p=.05$. Age and education did, however, have significant variances. In further analyzing age and education according to question number 18, Turkey Tests were run on both age (Table 119) and education (Table 121). For age, the findings from this Post Hoc Test explained the variances were across the board with neutral being the only one without a significant variance. In running a Crosstabulation on age (Table 120), Strongly Agree contained 12 responses with 41.7% age 15; agree received 25 responses with 40% age 15; disagree received 17 responses with age 18 being 35.3% and age 17 was 23.5%; and strongly disagree containing 7 responses and 71.4% being age 18. From this analysis, it is interrupted that students not yet in the IB program foresaw that academic credit would impact their selection of college choice, while students who are in the program are already completed did not believe academic credit effected their decision. For education, the findings from this Post Hoc Test (Table 120) explained the variances of strongly agree and disagree showed significant variances. In running a Crosstabulation on education (Table 122), Strongly Agree contained 12 responses with 75% being from 2014 graduates and disagree contained 18 responses with 55.6% being from 2011 graduates. Table 123 details the total number of participates that provided demographic information. Tables 124 through 127 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 18.

Questionnaire - Question 19

The nineteenth question asked of the students in the survey was if they believed that out-of-state universities were offering more academic credit for completing the IB diploma program than Oklahoma was offering. A total of 92 students responded to the question. As referenced in Table 2, the mean of this question was 3.8587 while the median was 4.0. In total, the standard deviation was 1.0226. Of the answers to this question, 25.5% of the responses agreed that out-of-state universities offered more academic credit for completing the IB diploma program than Oklahoma universities. Thirty-four percent strongly agreed. Twenty-nine point eight percent of the students were neutral to the question while 7.4% disagreed and 1.1% strongly disagreed that out-of-state universities were offering more academic credit for completing the IB diploma program than Oklahoma was offering. Overall, 84 of the students either agree or were neutral that out-of-state universities offered more academic credit for completing the IB diploma program than universities in Oklahoma offered.

Table 128

Question 19 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	2.058	4	.514	2.241	.072
	Within Groups	17.663	77	.229		
	Total	19.720	81			
AGE	Between Groups	15.956	4	3.989	1.209	.314
	Within Groups	240.915	73	3.300		
	Total	256.872	77			
RACE	Between Groups	11.038	4	2.760	1.195	.320
	Within Groups	177.852	77	2.310		
	Total	188.890	81			
EDUC	Between Groups	2.455	4	.614	1.192	.321
	Within Groups	39.642	77	.515		
	Total	42.098	81			

Table 129

Question 19 Demographic

Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB19 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB19 * AGE	78	83.0%	16	17.0%	94	100.0%
IB19 * RACE	82	87.2%	12	12.8%	94	100.0%
IB19 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 130

Question 19 Mean of Gender

IB19 * GENDER

IB19

GENDER	Mean	N	Std. Deviation
Male	3.5455	33	1.0335
Female	4.1633	49	.9431
Total	3.9146	82	1.0208

Table 131

Question 19 Mean of Age **IB19 * AGE**

IB19

AGE	Mean	N	Std. Deviation
14.00	4.1250	8	.9910
15.00	3.9545	22	.8439
16.00	4.0000	2	1.4142
17.00	4.0667	15	.9612
18.00	4.0000	18	1.3284
19.00	3.0000	7	.8165
20.00	3.8333	6	.9832
Total	3.9103	78	1.0343

Table 132

Question 19 Mean of Race **IB19 * RACE**

IB19

RACE	Mean	N	Std. Deviation
African American	4.0000	4	1.1547
Asian	3.7500	20	1.0699
Hispanic	3.6667	3	.5774
Native American	5.0000	3	.0000
White	3.8913	46	.9939
Other	4.1667	6	1.3292
Total	3.9146	82	1.0208

Table 133

Question 19 Mean of Educational Levels **IB19 * EDUC**

IB19

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.3846	13	.9608
2011 Graduate	4.0588	34	1.1532
2014 Graduate	3.9714	35	.8570
Total	3.9146	82	1.0208

In looking at one-way ANOVAs for the Gender, Age, Race, and Education of the participants according to Question 19, (Table 128), no significant variance were found; at $p = .05$; however, gender was reaching a significant variance at .072 Table 129 details the total number of participants that provided demographic information. Tables 130 through 133 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 19.

Questionnaire - Question 20

The twentieth question asked of the students in the survey was if they as students would encourage other students to complete the IB program. A total of 93 students responded to the question. As referenced in Table 2, the mean of this question was 3.2903 while the median was 3.0. In total, the standard deviation was 1.0783. Of the answers to this question, 29.8% of the responses agreed that they would encourage other students to complete the IB program. Twelve point eight percent strongly agreed. Thirty-seven point two percent of the students were neutral to the question while 11.7% disagreed and 7.4% strongly disagreed that they would encourage other students to pursue completing an IB diploma. Overall, 75 of the students either agreed or were neutral that they would encourage other students to pursue completing the IB program.

Table 134

Question 20 ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
GENDER	Between Groups	.590	4	.148	.594	.668
	Within Groups	19.129	77	.248		
	Total	19.720	81			
AGE	Between Groups	16.586	4	4.147	1.260	.294
	Within Groups	240.286	73	3.292		
	Total	256.872	77			
RACE	Between Groups	1.247	4	.312	.128	.972
	Within Groups	187.643	77	2.437		
	Total	188.890	81			
EDUC	Between Groups	2.170	4	.542	1.046	.389
	Within Groups	39.928	77	.519		
	Total	42.098	81			

Table 135

Question 20 Demographic Participation

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
IB20 * GENDER	82	87.2%	12	12.8%	94	100.0%
IB20 * AGE	78	83.0%	16	17.0%	94	100.0%
IB20 * RACE	82	87.2%	12	12.8%	94	100.0%
IB20 * EDUC	82	87.2%	12	12.8%	94	100.0%

Table 136

Question 20 Mean of Gender

IB20 * GENDER

IB20

GENDER	Mean	N	Std. Deviation
Male	3.0303	33	1.1315
Female	3.4082	49	1.0977
Total	3.2561	82	1.1201

Table 137

Question 20 Mean of Age **IB20 * AGE**

IB20

AGE	Mean	N	Std. Deviation
14.00	3.6250	8	.9161
15.00	3.5909	22	.9081
16.00	5.0000	2	.0000
17.00	2.8667	15	1.2459
18.00	2.5000	18	1.0432
19.00	3.5714	7	1.2724
20.00	3.5000	6	.8367
Total	3.2308	78	1.1387

Table 138

Question 20 Mean of Race **IB20 * RACE**

IB20

RACE	Mean	N	Std. Deviation
African American	3.5000	4	1.2910
Asian	3.2500	20	1.1642
Hispanic	2.6667	3	1.5275
Native American	3.6667	3	.5774
White	3.3478	46	1.0158
Other	2.5000	6	1.6432
Total	3.2561	82	1.1201

Table 139

Question 20 Mean of Educational Levels **IB20 * EDUC**

IB20

EDUC	Mean	N	Std. Deviation
2009 Graduate	3.5385	13	1.0500
2011 Graduate	2.6765	34	1.1206
2014 Graduate	3.7143	35	.8935
Total	3.2561	82	1.1201

In looking at a one-way ANOVA between the Gender, Age, Race, and Education of the participants according to Question 20, (Table 134), no significant variances were found; at $p = .05$. Table 135 details the total number of participants that provided demographic information. Tables 136 through 139 further break down the demographics showing the mean, N , and standard deviation for each of the demographic areas, Gender, Age, Race, and Education as related to question 20.

Phase I, Part 2 – Qualitative Findings

Questionnaire - ACT and SAT Scores

Statistical analysis of ACT and SAT scores were conducted through results asked as part of the survey questionnaire. ACT / SAT are standard test scores which are required for college entrance. For the ACT scores a total of fifty (50) participants listed their score. The mean of the ACT score was 28.44 with a median of 28.5 and standard deviation of 3.2774. The scores ranged from a 19 to a 34. Of the 50 participants, 34 students reported receiving an ACT score of 28 or better with 20 of them receiving a 30 or better. Three students made a 34 which is highest possible score on ACT test. For the SAT test a total of 13 students reported taking the test. The mean was 1669.231 with a median of 1770 and a standard deviation of 369.1310. For the SAT test, the scores were more random with the lowest score 1070 and highest 2140. Three students reported

making a 2000 or greater score. The ACT and SAT results are shown in Table 140 and Table 141.

Table 140

ACT Scores

ACT Scores	Graduation Groups			Grand Total
	2009	2011	2014	
19			1	1
20			1	1
24		3	1	4
25	1	2		3
26		2	1	3
27		4		4
28	1	7	1	9
29	2	2	1	5
30	2	4		6
31		5		5
32	2	1		3
33		2		2
34	2	1		3
Blank or Not Taken	3	1	29	33
Grand Total	13	34	35	82

Table 141

SAT Scores

SAT Scores	Graduation Groups			Grand Total
	2009	2011	2014	
1070		1		1
1220		1		1
1300		1		1
1320		1		1
1370		1		1
1650		1		1
1770		1		1
1900	2			2
1910		1		1
2060	1			1
2090		1		1
2140	1			1
Blank or Not Taken	9	25	35	69
Grand Total	13	34	35	82

Questionnaire - College Preferences

The questionnaire also asked for the IB students to outline where the student planned to attend college or their university choice. A total of 74 participants identified a university or college selection. The results are summarized in Table 142. Of their first choice identified, 63.5% selected an out-of-state university while 36.5% preferred an Oklahoma college or university. Of the Oklahoma universities chosen, the majority, 51.2% preferred the University of Oklahoma as their choice. Of the 63.5% IB students who elected out-of-state schools, a large number of these schools were Ivy League.

Table 142

University Choices Summary

Location	Choice # 1	Choice # 2	Choice # 3	Grand Total
Oklahoma	27	32	25	84
Out of State	47	35	28	110
Grand Total	74	67	53	194
Percentages				
Oklahoma	36.5%	47.8%	47.2%	43.3%
Out of State	63.5%	52.2%	52.8%	56.7%

The in-states college choices are shown in Table 143, while Table 144 shows the out-of-states selections.

Table 143

In state university Choices

Location	University Selection	Choice # 1	Choice # 2	Choice # 3	Overall Total	Percent of Total
Oklahoma	Northeastern University			1	1	1.2%
Oklahoma	Northwestern		1		1	1.2%
Oklahoma	OCCC			1	1	1.2%
Oklahoma	OCU	1		2	3	3.6%
Oklahoma	OSU	2	12	2	16	19.0%
Oklahoma	OU	21	11	11	43	51.2%
Oklahoma	Saint Gergory's University	2	1		3	3.6%
Oklahoma	SNU			1	1	1.2%
Oklahoma	SWOSU		1		1	1.2%
Oklahoma	Tulsa University		3		3	3.6%
Oklahoma	UCO	1	3	7	11	13.1%
Oklahoma Total		27	32	25	84	

Table 144

Out-of-State university Choices (Part 1)

Location	University Selection	# 1	# 2	# 3	Total	Total
Out of State	American University			1	1	0.9%
Out of State	Baylor University	1			1	0.9%
Out of State	Boston University			2	2	1.8%
Out of State	Brown			1	1	0.9%
Out of State	Cal. Tech. Inst.		1		1	0.9%
Out of State	Carnegie Mellon			1	1	0.9%
Out of State	Colorado University	2		1	3	2.7%
Out of State	Converse College			1	1	0.9%
Out of State	Cornell University	1	1		2	1.8%
Out of State	Denver University	1			1	0.9%
Out of State	DePaul University	1			1	0.9%
Out of State	Duke University	1	2		3	2.7%
Out of State	Emory			1	1	0.9%
Out of State	Florida University		1		1	0.9%
Out of State	Georgetown University		1		1	0.9%
Out of State	Harvard	4	1	1	6	5.5%
Out of State	Havard		1		1	0.9%
Out of State	John Hopkins	1			1	0.9%
Out of State	Julliard	2			2	1.8%
Out of State	Kansas State		1		1	0.9%
Out of State	Missouri	2			2	1.8%

Table 144 (continues)

Out-of-State university Choices

Location	University Selection	Choice # 1	Choice # 2	Choice # 3	Overall Total	Percent of Total
Out of State	MIT	2		2	4	3.6%
Out of State	NYU		1	2	3	2.7%
Out of State	Oxford	2			2	1.8%
Out of State	Princetown		1		1	0.9%
Out of State	Reed College		1		1	0.9%
Out of State	Rhode Island Sch of Design	1			1	0.9%
Out of State	Rice University	2			2	1.8%
Out of State	Rise		1		1	0.9%
Out of State	Saint Louis University	1			1	0.9%
Out of State	San Diego State University			1	1	0.9%
Out of State	SMU			2	2	1.8%
Out of State	Stanford	3	5	2	10	9.1%
Out of State	UCLA	3	5	1	9	8.2%
Out of State	US Air Force Academy	1			1	0.9%
Out of State	US Naval Academy		1		1	0.9%
Out of State	University of California			2	2	1.8%
Out of State	Berkley		1		1	0.9%
Out of State	Berkley	1			1	0.9%
Out of State	University of Chicago	1	1		2	1.8%
Out of State	University of Dallas	1			1	0.9%
Out of State	University of Houston		1		1	0.9%
Out of State	University of Iowa	1			1	0.9%
Out of State	University of Michigan	1		1	2	1.8%
Out of State	University of Missouri			1	1	0.9%
Out of State	University of N Colorado		1		1	0.9%
Out of State	University of Penn	1	1		2	1.8%
Out of State	University of S California	1		1	2	1.8%
Out of State	University of Texas	2		2	4	3.6%
Out of State	University of Texas		3		3	2.7%
Out of State	University of Tulsa	1	1	1	3	2.7%
Out of State	University of Washington	1			1	0.9%
Out of State	USA O	1			1	0.9%
Out of State	Vanderbilt	1			1	0.9%
Out of State	Vassar College	1			1	0.9%
Out of State	Washington University	1	1		2	1.8%
Out of State	William Jewell College	1			1	0.9%
Out of State	Yale		1	1	2	1.8%
Out of State Total		47	35	28	110	

Questionnaire - Career Path

In addition to university preference, the IB students were also asked to identify their career path. A total of 225 careers were identified. Twenty-six point seven percent intended to pursue some sort of medical profession while 11.6% wanted to become an engineer. Other career choices are outlined in Table 145. Of these choices, the majority of career selections would need a strong STEM background to select a degree within the identified career path.

Table 145

Career Choices

Career Path	Total	Percent
Acting	3	1.3%
Art	9	4.0%
Business	12	5.3%
chef	5	2.2%
counsel	17	7.6%
Engr	26	11.6%
film	1	0.4%
Lawyer	10	4.4%
Medicine	60	26.7%
Music	7	3.1%
other	6	2.7%
Pharmacy	7	3.1%
Politics	6	2.7%
Science	18	8.0%
Sports	2	0.9%
Teacher	15	6.7%
Vet	4	1.8%
Writing	17	7.6%
Grand Total	225	
Std Deviation	50.509	

Questionnaire - Why Did You Choose IB?

At the conclusion of the survey questionnaire, there was an area provided for the participant to comment on why they selected the IB program. The comments have been laid-out in no particular order other than numerically numbering them for ease of reading. The responses received to this question are outlined in Table 146.

Table 146

Why Did You Choose IB (Part 1)

Why Did You Choose IB?
1 To align my career path toward international affairs
2 At first I didn't want to take the IB program but eventually, I start to like it. It prepares me for my future
3 Because I didn't feel like I was skilled in any arts programs and my parents forced me to.
4 Because I would've had to specialize in a specific art in order to not be in the IB program.
5 Because my parents encouraged it
6 Because my parents pushed me
7 Honestly, at first, I didn't even know what I was getting into. When I first came to this school, I knew I was never going to qualify for the VPA program, so I went for academics. I suppose you could say that I was tricked into going into this program, but I'm pretty glad that I went through it, because (perhaps this is just an ego type of thing), I personally like sounding much more intellectually superior to my peers.
8 I always felt bored in regular school even in private school and i felt it would challenge me more.
9 I am a person who like challenges and I feel like the IB program is a true challenge but in the end, all the effort I put into it will pay off and get me into a college I really look forward to attending.
10 I believed the program would help in preparing me for college courses and workloads.
11 I choose the IB program over the Visual and Performing Arts program at Classen, and above other Oklahoma High Schools, because of the quality of education it ensured and the college credit administrators at Classen portrayed. While the information about college credit has been revealed to be unreliable in the grand scheme of things, the quality of education in Classen SAS, and in particular from the teachers in the IB program, is of a much higher caliber than other schools as I have discerned from friends and family spread out across the state. The depth and commitment to the actual learning process in the IB program remained my incentive to complete the program.
12 I chose it thinking it would help prepare me for college, and hopefully help me get into the college of my choice. In the end, it really did.
13 I chose the IB because I thought that it would academically challenge me in many ways. Always wanting to excell above my peers due to my competitive personality, I loved being in the IB program and being able to go through harder courses with very intellectual people. The diversity of the classes provided with the program has made me a well-rounded person. To have knowledge of many different subject areas is necessary for the modern world is more pluralistic and diverse than perhaps ever before. Therefore future careers ask for knowledge and the ability to connect to different types of people. I know that I have made the right choice because I have grown from the program, not only academically but personally.
14 I chose the IB diploma program at first (in the sixth grade) due to urging from my parents who considered the IB program a way to challenge me academically and ensure future success, and also the encouragement from my elementary school teachers which instilled in me a belief that I was a student with great potential. Even then I enjoyed a challenge and was not apt to turn a chance to push myself academically.
15 I chose the IB program because I wanted to push myself (which wasn't happening in my elementary school, and I'm pretty sure would not have happened in the middle school I would have gone to). As I haven't been through the "real part" of the IB program, I think Pre-IB has been able to push me harder than I would have been pushed in "normal" schools
16 I chose to attend classen because it was suppose to be one of the best schools for academics. I had no prior knowledge of what the IB program was and did not know what I was getting into.
17 I chose to participate in the IB program because I was told that it would be beneficial to my college education and would likely earn me college credits that would equate to nearly a year at the university level. Upon checking university policies, I have found that in most cases this is untrue. While IB could earn you some level of college credits, I feel that the program was over-sold to me.

Table 146 (continues)

Why Did You Chose IB (Part 2)

Why Did You Choose IB?
18 I chose to pursue the program because I thought that it would ultimately result good college prep and college credits for when I entered college.
19 I didn't choose the Ib Dimploma program. I can to Classen unaware of what major I was and what the IB Diploma program was. I stil oblivious to the program until Junior year.
20 i didnt it was chosen for me
21 I didn't. I was forced into it.
22 I felt it would be best on my college applications and the (advanced) information taught would help me post-high school.
23 I felt it would promote the best outcome when being accepted to colleges.
24 I felt that the IB Diploma program offered a challenging curriculum.
25 I had no choice. My parents chose it for me.
26 I have BIG goals and I know that everything starts with my education. IB was my best option while living in Oklahoma
27 I heard it would be more difficult than taking normal classes and the idea intrigued me.
28 I heard that it was academically challenging and the more that I was exposed to the IB program, the more that I saw its benefits.
29 I liked the challenge offered.
30 i mainly chose to participate in the IB program because of my sister who also participated so i did not exactly have a choice.
31 I really did not choose the Ib program. I definately did not know what all the IB program entailed until my junior year, in which case it was already too late to get out of the program. I stayed in the program and got into the program because my parents pushed me, but at the same time, I initially feel that this program will be beneficial in the long run.
32 I started the program because my sister was a part of it, but now that I'm in I really enjoy it. Even if I wouldn't get college credit for it I would still want to be in the program. Having the knowledge is worth the work. Getteing college credit just makes even more worth it.
33 I thought it would provide me with a lot of college credit and experience necesary for doing well in both school and work.
34 I want the credit offered by the IB.
35 I wanted a challenging program.
36 I wanted a rigorous academic program that would challenge me and prepare me for college and beyond.
37 I wanted something challenging, that wasn't testing my ability to fill in a bubble.
38 I wanted to be challenged more than my friends at other schools to achieve a sense of superiority over them intellectually.
39 I wanted to be more prepared for college and have the IB diploma to show on my resume when I apply for college and jobs.
40 I wanted to challenge what I thought I could handle, and I wanted to challenge how smart I thought I was.
41 I wanted to go%2e
42 I was originally a dance major and I had to switch to IB because of an injury. I mainly switched because I love Classen so I didn't want to leave and I didn't have the skills for any other major. My parents also strongly encouraged it because of the credits and knowledge.
43 I was told I would recieve a lot of college credit and would be better prepared.

Table 146 (continues)

Why Did You Choose IB (Part 3)

Why Did You Choose IB?
44 I was told it would be beneficial in college acceptance, but I wish I had been better informed of what the IB program included and what to expect throughout this experience
45 I was told that I would be rewarded with two years worth of college credit hours. Despite my deception, I chose to continue the program because I wanted to challenge myself.
46 In all truthfulness, I went to Classen SAS where it was mandatory to choose a major. I always felt academically strong so I decided to choose my major as an International Baccalaureate.
47 Influenced by parents. Had no idea what the program was when I started. Now I'm more adapted and the program is starting to make more sense. I plan to pursue it in more depth later on in high school.
48 It will help me in the future and I could be prepared for college.
49 It's like AP.
50 My choice for IB was born pretty much out of necessity. My previous school had no real programs that I could further myself in at Classen, so I had to choose IB, if only because there wasn't really any other choice for me to make.
51 My choice to participate in the IB Diploma program was largely due to the fact that I attended Classen School of Advanced Studies. IB was a highly accessible program at my high school. Once you were on track in the 6th grade, most students remained on that path until their senior year.
52 My mom made me
53 My older sister is in the IB program at Classen so my parents wanted me to follow in her footsteps
54 My parents basically chose it for me but, looking back, it was definitely the best program available at the best for me.
55 My parents chose the IB program for me. I didn't really have a choice. I don't think I even knew there were other options until I first arrived at the school. The application was already over and done with, and I didn't want to go through the hassle of trying to change my major later.
56 My parents decided for me.
57 My parents did. I did not leave the program out of laziness and my desire to stay in the school with most of my friends.
58 My parents directed me to the program
59 My parents encouraged me to take this course.
60 My parents entered me in the program on their own. I had no choice.
61 My parents entered me into the program because they believed that it would be beneficial to my future career.
62 My parents felt that it was the right thing for me to pursue.
63 My parents strongly encouraged me to enter the IB Diploma program before I really even knew what it was. It focused on academics and hard work, so I figured I could handle it.
64 My parents thought it would be best for me at the time, and I didn't disagree. It was unique and prestigious.
65 My school made me choose the program.
66 My sister was in it. In elementary school I was not challenged and I wanted to be, plus I love Classen and I couldn't get in for anything else.
67 Since I take my academics and studies very seriously, I thought this school's program would fit me. I plan on going to a very good college hopefully with a scholarship and thought this school would help me reach that.
68 Started out as an IB major and never changed.

Table 146 (continues)

Why Did You Choose IB (Part 4)

Why Did You Choose IB?
69 The IB Diploma program, as far as I know, is a better and more challenging program than any other. I enjoy being challenged early, as I know that in my career I will constantly be put under pressure to do well and succeed. The IB program prepares me for that.
70 The IB program in Oklahoma City allows students from going to inner city public schools in which many of the students will not even attend college, to be surround by students and faculty who not only expect you to attend college, but plan the entire high school experience around preparing you for college.
71 The IB program offered the most interesting and rigorous courses compared to classes offered to Visual and Performing Arts students. The decision to choose the IB program was by no means influenced by an illusion that such a program would aid the college application process or that significant credit would be given for the exams.
72 The IB program offers a much wider array of choices in where to go to school and in the knowledge that you will learn. There is better opportunity to get a better job after college, because IB is so much farther ahead than regular high school courses.
73 The IB program was advertised as a program that would not allow teach the studentts to think, but that would provide up to 30 hours of college credit.
74 the program is challenging
75 There are more opportunities with an IB Diploma than there are with just a regular high school diploma.
76 To be honest, I did not know what the IB program was. I knew it would be stressful, I knew it would be chalanging, but I did not know what it entailed untill my 11th grade year. I was told I was accepted into Classen SAS and that was all I wanted to know, I wanted to go to this highscool.
77 To better prepare me for college and to be challenged.
78 Wanted a challenge, was a VPA. Changed to IB.
79 Wanted to prepare more for college.
80 Well as a 7th grader i felt that based on the reputation of classen and how the IB program would help me get into college. I however was not given all the information so once i became a junior I was shocked and regretted the decision.
81 When I applied at Class SAS, I didn't have another talent so I applied as IB.
82 When I enrolled in 6th grade, I was too late to be VPA

When summarizing the common themes provided in Table 146, the following themes appear:

- My parents were the reason I selected IB
- Wanted a challenge
- Better prepare for college
- The college credit offered
- Looked good on a college application.

Questionnaire - Benefits of the IB Program

At the conclusion of the survey questionnaire, there was an area provided for the participant to comment on the benefits they, as the student, were receiving by completing the IB program. The comments have been laid-out in no particular order other than numerically numbering them for ease of reading. The responses received are displayed in Tables 147.

Table 147

Benefits of IB (Part 1)

Benefits
1 A full ride to any college of my choice
2 A scholarship
3 Based on conversations I've had with or had relayed to me, IB makes several aspects of college much easier than if I was to be in another program.
4 becoming prepared for college
5 Being better prepared for the rigors that college presents.
6 Being prepared for the workload that college brings and already having formed strong study habits.
7 Being very prepared for college
8 Camaraderie with other IB students is definitely the greatest benefit of the IB program. The stress and work definitely brings IB students together, and we all become very close to each other. I still remain close to all my IB friends.
9 College credit and a certain level of independent thought.
10 College credit, yet the work that is required is not worth the credit given.
11 College preparation.
12 Extra time in college, easier time in college, college credit, scholarship opportunities
13 From the very beginning I heard that the IB program was much more difficult than going to an Undergraduate in many Oklahoma universities.
14 getting so many college credits, enough to clep out of many classes in college.
15 Go to a better university or college.
16 Going to College
17 Having an idea of what college would be like.
18 Having completed the relatively large amount of work, understanding concepts that are normally taught at a college level, and taking on and completing an array of different projects made me much more well rounded in terms of the work I know I can accomplish, as well as giving me background education in the field of my choice.
19 Having more of a choice in where I want to go to school and the knowledge that I obtain that other students won't.
20 Having the knowledge, both general and specific. The knowledge and experiences I have and will gain will give so many opportunities to do what I want, no matter what it is.
21 I believe the biggest benefit for being in this program will be being able to cope with stress and pushing myself to get things done and accomplished. I believe that the IB program has pushed all the laziness out of me and I will be completely prepared for the college lifestyle.
22 I can put it on my resume, but not everyone would recognize what it really is. At least I would know that I didn't quit.
23 I feel like the IB program is one of the best academic programs in the nation and it raises your chances of getting into an Ivy League college or any other good college in the nation.
24 I feel that the biggest benefit would be the fact that I'm absolutely positive that my first four years of college would be much easier than it would have been if I had not gone through this program, and knowing that I'm probably able to CLEP out of so many of my lower level classes, it just makes me even more proud of myself.

Table 147 (continues)

Benefits of IB (Part 2)

Benefits
25 I learned how to word things in a certain way that would give me a passing grade
26 I think my biggest benefit from completing the IB Diploma program will be the experiences with my friends that it indirectly caused.
27 I think the biggest benefit of teh IB program would probably be work ethic. I know by watching others go through it, you learn a lot about time management while going through the program.
28 I thought that I would receive more for college.
29 If colleges and universities locally or in the state actually gave more credit hours for the IB students' hard work in the IB program, then that would be a big benefit. I think that the time management that we have learned has been beneficial to us in college life, however.
30 If colleges in Oklahoma gave credit for the hard work I have put into the program.
31 If your major at the college you plan on attending accepts the credits for the HL courses you choose.
32 Increased chances of college admission.
33 It gets me ready for colaege and helps me get through or over my "walls".
34 It looks good for colleges
35 It prepares me for my future. It prepares me for college. It may be stressful at times but it's worth it in the end
36 It was meeting my mentors. Dr. Warner helped me realize my personal philosophy, and I want to continue in the search for truth.
37 It will give me an advantage in my academic knowledge for when I go to college.
38 Just being able to write an essay on something you may or may not know anything about.
39 Learing how to manage my time better for homework and other important work related jobs.
40 Learning how to manage my time well and to deal with stress.
41 Learning things at a more advanced rate and colleges.
42 Learning to deal with the stress and how to complete the workload as we will have in college.
43 Learning to work under stress. And how to write huge essays.
44 Not including the college credit, the IB Diploma program offers incredibly detailed education that can be used in a wide selection of Science, Engineering, Math, and even English college classes. It gives a chance for those who are truly gifted and those who will put in effort to have a head start in their education even before college.
45 Personal enlightenment and cynicism.
46 preparation for college
47 Probably just knowing what to except when choosing/going to college.
48 Start official coursework earlier.
49 staying close to the other students taking the program and being challenged
50 Stress managment. The IB Diploma program has prepared me for college in understanding how to deal with stress, and the effects of it on myself. This has allowed me to understand my willingness to succede, and given me confidence to be able to go through College and Medical School
51 the advanced schools that accept students when seeing that they have completed the IB program
52 The amount of essays assigned at Classen prepares for college level english classes.
53 The biggest benefit is definitely the Extended Essay. Writing the Extended Essay is probably an ability that would be useful in college.
54 The biggest benefit is the potential to be better prepared for a college classroom environment.

Table 147 (continues)

Benefits of IB (Part 3)

Benefits	
55	The biggest benefit of completing the IB diploma program I believe will be receiving my diploma (knock on wood). Along with that diploma comes international recognition for the work that I have done, and it will be a meaningful part of my academic record. In the college admissions process I feel that IB played a role in the decisions that were made about my application and scholarships that I was offered because my participation in this program demonstrated not only above average academic skill but also a propensity to challenge myself and doggedly pursue knowledge beyond the level of an average student. Thus the biggest benefit thus far has been the value of participation in the program to colleges, Baylor University in particular.
56	The biggest benefit to complete the IB Diploma program is that it will be a very important part of my academic record. I believe that my future medical school will look at this being a challenging program that took meticulous amounts of work and dedication to complete. Plus, the world is ever-changing and I know for a fact that wherever my career leads, whether that be in-country or out, I will have an international education that will be known and accepted.
57	The biggest benefit to completing the IB program would be the college credit. The program requires such a depth and breadth of study in order to acquire the diploma that some colleges offer a large amount of credit hours.
58	The feeling of success that you were able to complete such a difficult program and it greatly prepared you for college.
59	The general knowledge gained in class
60	The IB program certainly provided interesting opportunities for learning, though AP programs also offer much in that respect. The IB program, however, includes a significant international component that offers a perspective AP courses may not.
61	The IB program does focus on critical thought and does push students to look at the world with a more analytical eye.
62	The IB program has prepared me for the academic rigors of college and so the transition into college will be easier, especially in consideration of the level of stress and need for time management.
63	The information you learn as well as the study habits that come from it.
64	The prestige associated with the IB diploma will hopefully open a lot of doors for me both in college and while looking for work.
65	The program better prepares you for college.
66	The quality of education and how much it prepares you for college, but also how much it prepares you for everyday life.
67	The recognition that goes with it can put you ahead when it comes to colleges and jobs.
68	The scholarship and a great career that I love.
69	The style of teaching. The classes offered.
70	The Writing.
71	This is hard to say as I have never attended a "real" American High School and it's hard for me to picture or define the standards in Oklahoma. For me, IB did prepare me for college through experience in research and writing, especially. I have never liked 'bubble-in'/standardized testing and I find IB to be a unique and beneficiary alternative. We all have a voice and it speaks more for our understanding of a subject than any looped knowledge of facts and figures. IB gives you a well-rounded sampling of a student's work through essays, formal tests, projects and dissertations.
72	This program would be best for those wanting to go to an Ivy league school or in Europe because they give credits to IB classes unlike schools everywhere else in America. Its for those who have a special talent in any of the main course subjects; like being very advanced in math or having amazing literature analysis skills.

Table 147 (continues)

Benefits of IB (Part 4)

Benefits	
73	Ultimately, even though many colleges do not accept the IB Diploma, I know it will help me because of the high-quality education I got from it. Although I may still have to take the same classes as anyone else at the college I go to, I know that after going through IB, I will not be struggling to keep up and constantly stressing out. I chose the IB program for the experience and education I will receive, and for the classes I can get out of taking in college.
74	Unlike the AP program, IB creates well-rounded students who must have advanced knowledge in many areas as well as dedicating time outside of school to community works.
75	When I got to college, I was surprised by how prepared I was for the work load. Also, if I hadn't been in the IB program, I wouldn't have felt I could get into highly rated colleges. For most colleges, the IB diploma is extremely helpful for college credit
76	When you get to college, you enter as a sophomore. If the school accepts IB credits.
77	Writing and the type of classes offered. the style of the classes
78	You are already partially prepared for college level courses and the work and ability to think that they entail.
79	Your freshman year in college, academically, will be so much easier. Senior year in IB is definitely harder than the first year in college. The college credit isn't too bad either, but no SL credit at most, if not all, Oklahoma Universities.

When summarizing the common themes provided in Table 147, the following themes appear:

- The college credit received
- Scholarships
- Be prepared for college
- Learn to cope with Stress
- Raises chances for acceptance into Ivy League Schools
- Time Management
- Ability to Write Better
- Develop a well-rounded individual
-

Questionnaire - Other Comments

In addition to the benefits the students believed they received, another section was provided for any additional comments that the students wanted to address. The student comments are outlined in no particular order, but are also numbered for easy of reading. The comments of the students are shown in Tables 148.

Table 148

Comments (Part 1)

Comments
1 A stress management class, it does not have to be a class that only teaches you different strategies to deal with stress, but it should also contain activities for stress reduction
2 As a result of Oklahoma colleges not giving as much college credit for IB as they would AP, students also do not give IB the consideration as the program should receive. I believe this is a vicious circle. Until this changes, the workload student must maintain for IB is pointless.
3 As it stands, the workload of the IB Program is not worth the effort. Only half of the tests provide credit, and that only comes with very high scores. Oklahoma colleges do not provide nearly enough credit for the classes. Had I taken AP courses instead, I could have enough credit to cover nearly two years of college. As it stands, I will possibly have enough to cover three classes. The program is essentially more work for less credit.
4 colleges need to accept it better, rather than have such a high standard or not accept it compared to ap tests
5 I always felt and still feel like I was the only student in my year who enjoyed or even appreciated the IB Program. That being said, I think it is a very valuable program and, if the students can learn to appreciate it, it will benefit them immensely.
6 I believe students should be more informed upon beginning the IB program as to what is involved. This program, although difficult, is very effective and I would appreciate seeing more credit given from colleges and more schools participating throughout Oklahoma. In addition, a student should have the option of receiving IB certificates if he or she is unable to handle the rigors of pursuing the entire IB diploma
7 I do not believe that colleges provide accurate credit for the courses taken, nor are the students informed of what the program will entail or provide before they enter it.
8 I feel as if I was not well informed of what I was getting myself into when I first started the IB program.
9 I feel like Classen did not tell us ahead of time what the IB program would fully entail. They told us that it would be good for college and that we would receive a lot of college credit, but they did not tell us the work load and the full story about what we would experience in the program.
10 I feel like there is a risk associated with the IB. I really hope that all this work will be worth it in the end.
11 I feel that one of the few things I have gained from the IB programs is the fact that I understand what it takes to succeed in a higher learning atmosphere, which is one of the greater benefits from the course in its entirety.
12 I feel that the staff could definitely be improved. We lack passionate teachers. Kids who do well in this program are not the ones who have their parents hauling them through, they are the ones who really enjoy learning and want to succeed. Teachers who hate their jobs often ruin this drive.
13 I hope it's worth it in the end. I don't feel like Oklahoma really takes the IB program as seriously as the rest of the world or the country for that matter.
14 I just wish IB classes were considered the same value and credited the same at colleges everywhere. Also, it's hard for those who lack a bit in one subject than the other. For example I'm very good at math but struggle to have a good grade in English. This worries me when it comes to the English IB test.
15 I like the combination of the VBA program with the IB program. It offers me the best of both worlds. I believe the state should offer us a better school.
16 I think the IB program itself is great, I think the way Oklahoma and Classen SAS handles the program is pitiful.
17 I wish more colleges would credit the IB program higher and recognize the efforts that the students that go through it put in it.
18 I would like to see the IB program become better organized (and I believe our administration has already made steps in that direction) so that in the future students are aware of its requirements earlier on in the process and thus can be well prepared for success. I would also like to see more support for the program both on a state level and a district level (for example, the fact that after all of this work we must pay \$300 for our tests is disparaging) and to see it offered in its various forms (diploma or certificate) to more students who are willing to make this immense commitment.

Table 148

Comments (Part 2)

Comments
19 I would never recommend this program to anyone. It wasted 2 years of my life that I will never get back.
20 IB really does need to be given more credit.
21 It is hard work, but worth it for most people in the end.
22 It is stressful and a lot of hard work, but in the end I think it's more than worth it.
23 It needs to be more organized, and people in our community need to be more aware. Also, colleges need to give graduates credit because they do not award us what we deserve, especially after we have put forth a lot of hard work!
24 It should be recognized more in American universities. It is harder to complete than AP classes, yet lacks the rewards.
25 It's hard
26 Just because a student is enrolled in the IB program, it does not mean he/she will be prepared to go into any field once they leave for college. The IB program does offer a quite flexible class schedule, but if a student wishes to excel in a field such as engineering for example, he/she and the parents should not only pick SL and HL classes that will help them with their goals, but also take it upon themselves to learn even more. This is where the faculty and staff is supposed to help the student with their educated backgrounds, which Classen always had.
27 More awareness
28 My school possesses a very diverse environment. Not only did I learn from the vigorous coursework provided by IB, but I also learned through my peers who all had different experiences and backgrounds. They're varying insights truly showed me that more than one take can be taken on a particular subject.
29 No
30 No because I already feel that the program is successful in being well rounded and reaching every element that a child needs to know for college and for life.
31 No.
32 Not really. There's just so much I could say.
33 Other than more credit for the work I have put into it, no.
34 Our school should inform us about the program. They really don't let us students know anything, and it is very disorganized. I wish that more universities gave credit for IB as well, because it is a challenging program and deserves recognition for completion.
35 The actual diploma is not worth it, but going through the courses will help when it comes to facing the challenges college courses will give us.
36 The concept of creating a program which stresses the idea of independent thought and higher, more critical reasoning is a great concept. However, this idea is drowned in the program by an absence of concise structure weighed down though unnecessary concepts and unfocused work procedures.
37 The IB Diploma program is not a sensible choice.
38 The most significant issue facing students of all career paths is the availability of IB courses. Though I agree with the intent of the IB program, I feel strongly that schools have not, and possibly cannot, accommodate the wide array of talents that students are trained out of through the process of institutionalized education. For students who have significant artistic talents, a single IB course in art is not sufficient. For those who have significant programming capabilities, Classen, specifically, has not facilitated those students to any means whatsoever after the departure of the most successful teacher in this regard in May of 2006. Producing students ready for the college environment for the sake of producing them is not enough justification for adopting the IB program or any "college preparatory" program. There must be an emphasis on the fostering of individual creativity and in understanding the interconnectedness of both art and science. Technology without culture is meaningless. Culture without technology is just as meaningless. IB schools must have the funds to diversify their course offerings and to push the IBO to continue to diversify its offerings as well. Fostering creativity is not only in the context

Table 148

Comments (Part 3)

Comments
39 The scholarship for students that complete it.
40 The stress level of my experience in the IB Program was unnecessary in my opinion. Also I feel that my school could have been more helpful and informative in the IB process. I was completely unaware of the IB requirements until the beginning of my junior year and was not informed of the possibility of junior testing/deadlines until it was too late.
41 There isn't a good variety of courses at Classen. We are very myopic. Science, math, English, History, philosophy, psychology. Save for the last two classes, the curriculum is not much different from a regular high school. Perhaps that is why others do not respect the Programme. Some of the teachers do not properly prepare for the course. Some of the students are unfit for the program. They are lazy, and are too busy socializing, and they rampantly cheat. They are a joke to the other students who do take the program seriously.
42 tremendous work load and a lot of stress
43 waste of time and effort compared to AP
44 Well I personally, even though I've mentioned that the program is very stressful before, it really does help you with how you manage your time, and not to be stressed over the smallest of things. In most cases, most would think it's a sacrifice for having so much fun, but personally, most of the best times I've had is with this small/isolated group of people I've had the same classes with for the last 2 years, and honestly, I wouldn't have been doing anything else. I actually feel rather special with the fact that I'm able to ask more intellectually based questions and expect at least a very well thought out response accompanying it. It's just like a huge group helping each other, and others talking about IB majors being stuck up is a fallacy. It may only seem that way because of how we talk, and what we talk about, the completely differ with the other norms that go around.
45 With the teacher question, it definitely depended on the teacher. Some teachers really helped prepare students for the test. Other teachers did not effectively teach students at all, and I made the minimum passing score on the IB test in their subject areas.
46 You have to have students and teachers that are really committed and want to succeed, there are many teachers that are not as enthusiastic and it makes things more difficult for the student.

When summarizing the common themes provided in Table 148, the following themes appear:

- Workload is not worth the academic credit received
- Colleges need to accept IB
- Need to offer IB certificate not just IB diploma
- Students need to understand IB at the beginning of program
- Oklahoma needs to take IB serious
- Combination of Visual Performing Arts and IB work well
- Harder than AP, yet lacks the rewards

Summary of Questionnaire Findings

In reviewing the overall findings of the twenty question survey, the average number of responses for each question was between 91 and 94 responses. Out of 127 total IB students in the three groups, the response size was very good. When evaluating each question by to the demographics utilizing one-way ANOVAs, the majority of the questions had no significance found. Question numbers three, four, six, eight, fifteen, sixteen, seventeen, and eighteen did have significance found relative to age. Question numbers sixteen, and eighteen, did have significance found relative to educational levels. Question number eleven had a variance for race which was approaching significance. Question number nineteen had a variance for gender which was approaching significance. There were no significant variances found relative to the other questions and demographics.

The questions were categorized by seven different groupings. Questions 1 through 8 addressed the Perception of the Program. These questions related to difficulty, workload, stress, being a good fit, and worth all the hard work were all discussed. Throughout these questions, the students all either agreed or strongly agreed in majority. Therefore, the conclusion in this area is that the IB program, according to the students, is very hard, it is difficult, there is a heavy workload, it is challenging, the program is a good fit, and the hard work associated with the program will, in the end, pay off. This section of questions was all very positive of the IB program as it relates to the feel of the program.

Evaluating the Program was the next group of questions. Question 9 addressed if students would have rather taken AP classes versus IB program. For this question, students were neutral in response. Question 10 asked if the student believed they had missed out on high school social life and the majority agreed even though the answers were spread out. Question 11 dealt with if the IB program was essential in preparing them for college. A very high majority agreed in this category.

The Success of the Program or reasons for the success of IB, Questions 12 and 13 were discussed next. The students were neutral in this area. The participants were also neutral and agreed that it is a combination of both the teachers and the program that makes the IB program a success. In looking at the reason the student selected the IB program, Question 14, the students agreed that they were influenced by someone other than themselves to pursue the IB program.

The next section of questions looked at how well the Support of the IB Program. Question 15 asked the students if they believed the State of Oklahoma was supporting the IB program. The majority of the students either disagreed or strongly disagreed that the state was supporting the program. In looking the see if the student perceived that more high schools should offer the IB program, Question 16, the responses were either neutral or they agreed more schools should have the IB program.

Addressing the Academic Credit of the IB Program was the sixth section. Here the question was asked of the students if they felt Oklahoma universities were offering the academic credit deserved for completing the IB diploma program. The answer to Question 17 was the majority strongly disagreed that Oklahoma universities were offering

the credit deserved. Question 18 asked if the credit offered to them by the university influenced where they planned to attend college, the majority agreed it did influence where they planned to go to college. Question 19 discussed if they believed out-of-state universities were offering more academic credit for completing the IB diploma program compared to Oklahoma universities and the response showed the majority strongly agreed this was happening.

The last question in the survey addressed if the student believed that they would support continuing to offer Encouragement to Further the Program. The majority of the students responded neutral to the question.

In looking at pre-college entrance test scores, ACT and SAT, the evaluated conclusion was these IB students scored extremely high in these areas. There were a large amount of 2014 students who had not taken the ACT or the SAT test yet. In analyzing the college choices the students were considering, the largest number were out-of-state schools. As another benchmark, career choices were also requested. No significant conclusion was identified from the career choice selection.

In analyzing the questions regarding Why Did you Choose IB, Benefits of IB, and Comments, there were several common themes which continued to appear in each category. These themes included: IB prepares for college, it is challenging, the college credit offered, the ability to write, learning to deal with stress management, and the IB program needs to be supported more.

Phase II – Part I

University Interviews

Background Factors Affecting University Perspectives

Due to the importance of capturing fair and spontaneous responses in a qualitative study, narratives from the four selected universities have been paraphrased as closely as possible from the transcripts of the interview tapes. A team member from the Admission's Department of each of the four universities, was interviewed and asked the same eight questions. Each university in the study was randomly assigned a number to protect the confidentiality of the interview.

The interview questions asked of each interviewee are outlined in Tables 149.

Table 149

University Interview Questions

University Interview Questions	
No	Question
1	What type of students do you like to see when recruiting?
2	Can you tell a difference with students who have completed Academic Advanced Programs versus regular high school program? Explain?
3	What criteria do you use when looking for incoming students?
4	How strong do you feel the Oklahoma High School programs are in Oklahoma?
5	Oklahoma legislation is focused on growing STEM education in the state. Have you seen a change in the students wanting to pursue STEM technical programs?
6	How do you feel Oklahoma is preparing their students for college, are they prepared as much as say kids from other states, countries?
7	In your opinion, what else could be done to better prepare our students for college?
8	Looking at advanced academic programs, our state currently has two primary focused programs. These include AP and IB. <ol style="list-style-type: none"> Can you explain your perception of these programs? Do you perceive one better prepares students and how? Do you perceive one is harder than the other? Please explain?
9	In looking at the the IB Diploma Program, which includes intense courses in all areas of study including extended essay, and internal assessments, do you believe students should receive more college credit than just equivalent AP credit for receiving this diploma? Why or Why not?

University Participant 1

Participant #1 was identified as an admissions coordinator for the university for new students. This participant had previous knowledge of the IB program from previous employment in another state.

University Participate 1 - Question 1

Participant 1 responded that the question sounded simple; however, each state has their own rules. The participant stated that their university publishes basic admission requirements. As long as a student meets the minimum requirements, they will be admitted to the university. Most major universities have two separate departments for recruiting new students. One is their admission department and the other is their recruiting office. Students can be admitted through either of these departments. The Regents of the university allow for some grey areas in admissions also. For example, if a student does not meet basic admissions requirements, then they might look at other areas such as their high school academic program, community service, special circumstances the student might be involved with, etc. Participant 1 provided an example of a high school graduate from Beijing, China who had a grade point average (GPA) of 2.9. However, when reviewing the students' high school academic curriculum, it was discovered the student had taken IB courses which in the Participant 1's view, were extremely harder courses than traditional high school courses. Therefore, it was recommended that the student be accepted into the University.

University Participate 1 - Question 2

The second question inquired whether or not the participant or university could tell a difference between students who have completed an academic advanced program versus a regular high school diploma. The respondent stated that their university was moving toward that direction. The interviewee stated that school programs are very

important. In their opinion, these advanced programs exist to help determine how students perform and help them excel to reach higher potential.

University Participate 1 - Question 3

The third question asked what criteria the university considers pertaining to incoming students such as test scores, community services hours, AP classes, etc. The respondent stated that the University considers a combination of several things. The best predictor, if only one were available, would be GPA. However, a combination of test scores, GPA, and class rank are equally considered. Sometimes class rank is hard to get because some high schools are not ranking students. The participant also stated that the university recruiters wonder when they see an all 3.5 GPA from a high school but do not see students in the top quarter of the class. The University also looks at the high school, programs, GPA, etc. when issuing scholarships. When asked if students tend to select a university based on scholarships, the answer was yes, especially the top tier students. The interviewee stated that the 2011 to 2012 incoming freshman class is the largest the University has ever had. The respondent stated that the economy and awareness of the University is what has driven this. The university cost is not cheap; however, compared to many other out-of-state universities, Participant 1's University is very competitive.

University Participate 1 - Question 4

The next question centered on how strong the University felt about Oklahoma high school programs. The interviewee stated that Oklahoma is interesting. There are pockets of excellence, but strength of the student education is very diverse. In their opinion, the funding of high school programs was the main reason. One might think that rural areas are weak; the interviewee stated that was not true. They stated it depends on the program, and the school district, etc. The Admissions office gets to know the districts to better understand the standards of the different programs offered. Overall, Participant 1 rated the high school programs as pretty good. However, one identified issue was in writing ability. They stated this issue is not just related to Oklahoma. In offset, they commented that writing is one huge advantage of offering the IB program. Florida has challenged this area and incorporated a Florida Writes Program. It is mandatory there that the teacher require a specific number of papers to be written and specific number of writing assignments. Each student in grades six through eight has to keep a portfolio of his/her writing skills. When asked if the Participant thought the AP program might address writing, the comment was that it probably will. At least, the University would love to see it. Students need to be able to speak and write effectively. They state that if a student has been successful in the IB program, then the student can write.

University Participate 1 - Question 5

The fifth question addressed Oklahoma legislation which is focused on Science, Technology, Engineering, and Mathematics (STEM) education in the state. The question asked if there had been changes in the number of students wanting to pursue STEM technical programs. According to the interviewee, they are seeing students pursue these areas. However, the interviewee did state that they would like to see more active partnerships between the University, the Regents, and the 6-12 educators. There is some connection, but it could be stronger. A lot of the educators need to understand the expectations and what it means to be a freshman in a university zoology course for example. The University is doing some counseling groups, some within the state and some out-of-state which is helping with awareness. Students need to understand what programs are out there and how or what they need to do to be prepared. Another possibility is to have more employers involved, which would be beneficial too.

University Participate 1 - Question 6

Another question asked of Participant 1 was his perception of how well Oklahoma is preparing students for college as compared to other students from other states, or countries. According to the interviewee, there is no huge difference. Higher education with the last election has gotten people talking more. With current budget cuts, people are questioning the focus more. It is more like a grass roots effort now; they do not want their kids left behind. Parents are becoming more involved. Oklahoma is becoming

more aware too. It is hard to make change; it is a slow process; but the movement is there.

University Participate 1 - Question 7

In looking at advanced academic programs, Oklahoma has two primary focused programs. These include the Advanced Placement (AP) and International Baccalaureate (IB) programs. The interviewee was asked if he could explain his perception of these programs, if one is better than another, and if he believed one was harder. According to Participant 1, there was no question that the IB program best prepares a student for college. However, he believed that was a personal preference. He believed his school had already outlined the difference in the programs, and the IB program was in his opinion much better, and much harder.

University Participate 1 - Question 8

The last question in the interview addressed examining the IB Diploma program which includes intense courses in all areas of study including extended essay, and internal assessments to determine if students should receive more college credit than just equivalent AP credit for receiving the IB diploma. According to the Interviewee, there really has not been a push to look at the credit offered. The University does not see that many IB applicants. The majority of their applicants are international students. He agreed that maybe if he changed his school's credit offering he might see more students.

He also recognized that Oklahoma only has two schools which offer the IB program. Most of the parents or students the Admissions office had talked to stated that it was not about the credit, it was about the learning experience, preparation, rigidity, and confidence knowing the first year of college would not be overwhelming. There had not been a push to change their university policy. There is a huge increase in AP focus though, up about 10% over previous years. Also, concurrent enrollment is up. The interesting thing with IB students is commitment; it is all or nothing. The program develops a well rounded individual. IB is not for everyone. The interviewee stated they would like to see an increase in the IB schools, but not at the expense of the overall program. The Interviewee saw a huge spread of IB in Florida, and now is a strong believer that parents and students need to understand what they are getting into. It requires a lot of dedication, but the outcome is so worth it if they can make it through the program. The Interviewees agreed that maybe the University needed to revisit the credit offered for the IB diploma.

University Interview - Participant #2

Participant 2 was the Director of Admissions for the University. This participant had some previous knowledge of the IB program due to the fact a previous co-worker in the admissions office had pursued IB in high school. That co-worker, however, was no longer with the University.

University Participate 2 - Question 1

The first question asked of the interviewee was what type of students do you like to see when recruiting? Participant 2 responded to the question stating that the University looks for academically prepared students. She likes to see students who have taken academically rigorous program and are able to handle the program.

University Participate 2 - Question 2.

Question 2 was designed to determine if the participant or university representative could tell a difference between students who had completed an academic advanced program versus regular high school. The respondent stated that her university can definitely tell a difference. The students are much more ready for college. The University is seeing a change recently where guidance counselors are pushing students to take AP/Honors classes and find that the students who are not ready perform poorly in them. Some schools are just tougher than others. Of the students attending their university, over 51% are from out-of-state, and 25% are international students.

University Participate 2 - Question 3

The third question asked what criteria the University required for incoming students like test scores, community services hours, AP classes, etc. The respondent stated that the university likes to see holistically developed students. Their requirements

included a combined 3.0 GPA, 22 ACT or 1020 SAT, required essay, and counselor recommendation. They also weigh the right to ask for additional information if they feel necessary. The University does not look at unweighted GPA, only the 4.0 scale. Writing skills vary greatly across the board; so they look at English scores and even email correspondence between the student and the University to understand how a student writes.

University Participate 2 - Question 4.

The next question centered on University perceptions of Oklahoma high school programs. The Interviewee stated that Oklahoma as a whole is not doing as well as other states; but within Oklahoma we definitely see many exceptions to that. Oklahoma has students from both Classen School of Advanced Studies, and Booker T. Washington and it really varies across the board as to what resources are available. Some public schools may be getting better; but in others not as good. In smaller areas, there have been some really good students; but in some areas the students have not been exposed to as much advanced study. Every state seems to have its own difficulties.

University Participate 2 - Question 5

The fifth question addressed Oklahoma legislation which is focused on Science, Technology, Engineering, and Mathematics (STEM) education in the state. The question asked if the participant perceived a change in the number of students wanting to pursue

STEM technical programs. According to the interviewee, there has been some increase, but their university does not have an engineering degree so they probably have not seen as much. Often students ask if they offer an engineering program and are referred to other universities in the state that do offer the program. Within science, the numbers have grown tremendously. The participant mentioned the school's successful science program that is often overshadowed by some of the larger flagship schools. For math seen growth. Some students have gone on to medical or dental schools. This participant commented "If you like a smaller learning environment, our university is definitely one way to go."

University Participate 2 - Question 6.

Another question asked of Participant 2 was how well Oklahoma is preparing students for college compared to other students from other states, or countries. According to the interviewee, writing is a big component, and Oklahoma struggles there. Test preparation is also an area of struggle. Some students, who are graduated seniors, may have not even taken the ACT yet. Preparing and practicing for college and just getting out there knowing what it takes is important. An example might be how many times a student can or needs to take the ACT, that sort of thing. Math continues to be a big struggle as well.

University Participate 2 - Question 7.

In looking at advanced academic programs, Oklahoma has two primary focused programs. These include the Advanced Placement (AP) and International Baccalaureate (IB) programs. The interviewee was asked if she could explain her perception of these programs, if one is better than another, and if she felt one was harder. According to Participant 2, their university has really been working hard to increase their profile by not just working with AP and IB, but also National Merit students and others. It appears sometimes that pure AP is something that both parents and counselors think all students should be doing. Those classes are not necessarily the right or best classes for everyone. What the Participant liked about the IB program was that students have to be fully ready to take every course, not just one or two. However, for some students maybe the middle of the road or one-on-one course would be more beneficial. About a year ago, this University went through a process of looking at IB programs; looking at what other colleges were doing through the country; and really giving an opportunity for some of those students to come to our school. At this point they cannot totally accept everything that comes in as general education, but do work with the students. They have gotten to the point where they look closer and are starting to advertise to those students that this is a place where those credits are accepted with just a little different process to go through. They are really trying to reach out more and definitely realize the benefits to having IB students. IB perception is that it is harder. There is no data to back it up, but from talking to the students IB is probably more difficult.

University Participate 2 - Question 8

The last question in the interview addressed the IB Diploma program which includes intense courses in all areas of study including extended essay, and internal assessments, and whether or not students should receive more college credit than just equivalent AP credit an IB diploma. According to the interviewee, additional credit should be offered. Students should come in prepared, but at the same time the college does not want them coming in and finishing so quickly that there has been no time spent in developing them. Some people could say that is a financial concern of the colleges. The college does not necessarily look at it that way, however, in reflecting on the participant's own background in higher education, students, no matter what classes they take, need that time to develop in their life and have those experiences. The participant proposed that colleges really need to be challenging everyone.

Participant 3

Participant 3 was a Guidance Counselor for one of the colleges at the University; and was also responsible for recruiting IB students. This participant had previous knowledge of the IB program and had been an IB teacher for over 16 years before retiring.

University Participate 3 - Question 1

The first question asked of the interviewee was what type of student do you like to see when recruiting? Participant 3 responded that their university sees a good match between what they are looking for and IB students. His department wants students with an eclectic interest, strength across curriculum and elaborated that most of the University's colleges require almost half their courses to be outside their center of excellence, so students who are more diverse thrive better. The university wants students to begin courses understanding what the professor wants them to do. They are looking for students who have learning skill already and are able to go through hurdles, go above hurdles. According to Participant 3, they understand that IB requires such hurdles, so they know the students are ready because they know how difficult the program is. Also, they want students who can or have taken extracurricular activities, which is one of the requirements with the IB program. IB has the expectation that they will not just do school work all the time. The trick is to be able to handle and do well at both school work and community involvement. His university wants students who can talk, write well, understand they cannot just skim through reading, but rather actually read it and understand the material and think about it. The university wants students who have higher thinking skills because we want to give them even higher thinking skills. According to the Interviewee, as a personal opinion, IB is the best vehicle to get students ready to go to college.

University Participate 3 - Question 2

Question 2 explored the issue of whether or not the participant or university could tell a difference between students who had completed an academic advanced program versus regular high school. Part of the respondent's job is to talk with students on probation. The respondent shared that "They tell me things like; I was valedictorian in my high school, top 10% of my class, straight A's, a 3.9 GPA, or whatever; and now I have 2 F's and a D's and I do not know why?" The respondent continued:

The answer is because you did not have to do anything in high school.

That is just horribly wrong. For students to go through high school and not have to work, and to think 'everything is really easy and I'll make all A's in college' is terribly misleading to students; it messes them up. The AP or IB programs push them beyond their comfort zones. That is really an important thing. It is very odd, sometimes the kids in college that have the most trouble are the national merit students because they have got the brains, but they were not pushed in high school. It was just automatic that they could pass everything they took; they did not have to think about it, and now they come to college and professors expect them to work and they fail. They do not have discipline, or higher thinking skills. They cannot think before they write something. It is pretty amazing".

Participant 3 described a time that a mother brought her child back after Thanksgiving and commented that her child "went to the best school in this out of state

city and now is failing, why?” The interviewee answered, “because the child did not have to work in high school.” The interviewee told another story –

There was a teacher who retired from an IB high school who taught French IB. She went to a private school and started teaching the exact same class and they fired her because it was too hard. The students were angry because it was so hard, and the parents were angry, but she was teaching the exact same way she had taught IB. So who’s getting the better education? American high schools are failing. Half of Oklahoma high schools were on the list of bad high schools. Can you tell a difference in advanced academic students? You certainly can. Maybe not 100% of the students are better, but the majority does much better. The acceptance rate of IB students to universities is certainly higher than AP or regular high school.

University Participate 3 - Question 3

The third question asked what criteria the university looks at for incoming students, like test scores, community services hours, AP classes, etc. The respondent stated that the university is mainly a merit based on scholarship school. The scholarships his university gives are based on test scores, and GPA, which figure in very strongly. His department also looks at leadership and community service, which are more subjective than SAT or ACT, but they take all things into consideration. GPA can be very subjective too. It depends on the school. A 4.0 at one school may not be the same at another because of the difficulty of one schools program versus another. ACT is a fair

weighting. Our applications now ask if you are in their school's IB program. It's a common question now, if your school offers the program, why are you not in it. The interviewee had seen students who said they wanted to go to Harvard or to be doctors or lawyers, and yet they are not in their school's IB program. "Why not? Their answers were the program was too hard. Educators want students to get into the IB program for the abstract reason that it is a great program and it is going to get you ready for college, but students and parents are concerned about how much scholarship and college credit their kids are going to get. Therefore, our university responds to that in that we offer a scholarship whether a student receives the IB diploma or not. His university wants students to do the program so the university said they would put a monetary value on it and offer scholarships for going through the IB diploma program."

When asked what inspired your university to do that, the interviewee responded that "it was a teaming between an IB high school and the University. It took over 20 years to get where we are. It helped that the IB high school had students whose parents were community leaders and university professors so they understood how different the IB program was and supported it. So it was an easier sell. It is a niche marketing thing to get an IB school started. Our university knows that the IB students are good students and feels offering the credit is worth getting them." When asked if other public schools support IB classes, the answer came back as "no." The interviewee did not believe other public schools support IB schools. Participant 3 believed that other schools view IB schools as different; they drive students to find their individuality which some schools do not like.

University Participate 3 - Question 4

The next question centered on how strong the university felt about Oklahoma high school programs and the preparation the schools are providing to prepare the students for college. The interviewee believed that most high schools were not preparing their students and stated that “Oklahoma high schools would not be seeing such high failure rates.”

University Participate 3 - Question 5.

The fifth question addressed Oklahoma legislation which is focused on Science, Technology, Engineering, and Mathematics (STEM) education in the state. The question asked if they had seen a change in the students wanting to pursue STEM technical programs. According to the interviewee, there was not enough information to accurately address the question and preferred to decline to commit.

University Participate 3 - Question 6.

Another question asked of Participant 3 was how well Oklahoma is preparing their students for college as compared to other students from other states, or countries. The Interviewee preferred to discuss Oklahoma’s IB program rather than other out-of-state or international programs. According to the Interviewee, they receive 40 to 60 IB students each year and 30 to 40 of these are out-of-state or international students. They

receive around 15 from Oklahoma schools and around that same number internationally. Oklahoma Regents require universities to accept IB higher learning (HL) credit which requires two years to complete the class. IB standard level (SL) is a one year course. These SL classes are just as good as AP and better in some cases. However, most Oklahoma universities will not look at or accept SL credit. Participant 3 believed that if a university is accepting AP credit (which is one year to complete) then they should be accepting SL credit too. The respondent also stated that “Oklahoma law states that completing the IB diploma satisfies Oklahoma high school graduation requirements. This means that if you for some reason are lacking PE or some other high school required courses but earn the IB diploma then you can graduate anyway.” The respondent stated that this is a pretty good law and believed that Oklahoma policy on IB is not very strong, but it could easily be changed. According to Participant 3, the regents could change it without legislation as has been done in Texas. Another difficulty Oklahoma has with IB is certifying teachers. It is very costly to do so. Participant 3’s University is looking into having the capability to certify IB teachers. They currently certify AP teachers, so offering IB certification might offer more help to Oklahoma schools.

University Participate 3 - Question 7.

In looking at advanced academic programs, Oklahoma has two primary focused programs. These include the Advanced Placement (AP) and International Baccalaureate (IB) programs. The interviewee was asked to explain his perception of these programs; explain if one is better than another or if he felt one was harder. According to Participant

3, AP does not restrain individuals to complete the AP class before they can take the AP exam for that subject. IB, on the other hand, does require you to take the class in order to take the test. IB also requires you to take on-going internal assessment for two-years. These internal assessments are similar to mini-theses related to the subject matter of the class. So, if one is just good at taking tests, he will have to do more than just take a test to pass IB. The IB program asks students to prove what they know. IB programs ask them to demonstrate what they know and how to apply it. AP is not a bad program, but it is mostly memorization of dates and events. The IB program wants students to understand why an event was important; they want to understand your thought process. IB is a better assessment model. The IB program is more across the board, requiring users to step outside their comfort zone sometimes. Universities are looking for students who can apply learning to various areas even if they are not good at them. In addition to the IB test and assessments, a student also has to take theory of knowledge to get them to think deeper, write a 4,000 word extended essay, and have at least 150 community service hours. Participant 3 stated that IB is the most difficult of advanced academic programs.

University Participate 3 - Question 8.

The last question in the interview addressed the IB Diploma program which includes intense courses in all areas of study including extended essay, and internal assessments, and whether or not students should receive more college credit than just equivalent AP credit for receiving the IB diploma. According to the Interviewee,

students should be recognized for going through this difficult program and completing it. The participant's university understands the program and stands behind these students offering them additional credit up to around 30 hours for completing the program. In Oklahoma, only two schools offer the IB program. For Oklahoma to do an IB program it takes a lot of resources and a lot of planning. One has to set the IB schedule first, and there is usually resentment. The school has to buy college level books instead of high school which is a big cost difference. Teachers have to be certified. One has to convince students that it is okay to study more, to read more, to write more, and that there is a real reason to do that. One has to change the culture, and that is tough. There are several different schools that have tried to start an IB program, but they could not pull it off by themselves. The Participant's university has embraced the IB program. Maybe if other universities would embrace it more and offer more than just HL credit, the IB program in Oklahoma might grow.

Participants 4

Participants 4 were a group of three admission counselors for the university. The participants did not have any advanced knowledge of the IB program other than what they had read or heard about it. The three participants represented different areas within the University. For easy of the study, these three individuals will be referred to as Participant 4 within this study.

University Participate 4 - Question 1

The first question asked of the interviewee was the type of students do they prefer to see when recruiting? Participant 4 responded to the question with a general statement that the University looks to provide access to all who want an advanced education. Her university's focus is on honor students and average ACT or SAT scores, but her organization also focuses on targeting low income families, or first generation college students. The University understands its mission is to provide an education to all. The University is very proud of the average ACT and Honor programs it has and does award students with many scholarships based on these academics. However, the University also prides itself in supporting programs such as Oklahoma's Promise. In addition, the University also has a significant transfer program. If students are willing to work, the university will work with them. Internationally, the University is experiencing a huge push in the Asian market, especially China. Most of those students are very good students. Most of them are high achieving students. When asked if she believed international students are more prepared, Participant 4 responded with a yes, in some areas, especially with science and mathematics skills, however, English or understanding or comprehension skills are lower. In Oklahoma, typically they experience a lot of remediation in math and science.

University Participate 4 - Question 2

Question 2 asked whether or not the Participant or University could tell a difference between students who had completed an academic advanced program versus regular high school. The respondents stated that yes; her organization can see a difference. When she receives the students' high school transcripts, the school can make a difference. Part of her University's admission requirements included 15 core units. High schools understand this requirement and try to prepare the students. The interviewee stated that they are able to weigh the GPA for the core curriculum which includes four units of English, three units of math, and three units of science. Participant 4 stated that is where they really see a difference with AP credit when working with the weighted average. The larger institutional high schools in Oklahoma have the AP program, but the students from the smaller schools can still come to the University and take tests. For AP you do not have to take the course to sit for the exams.

University Participate 4 - Question 3

The third question asked what criteria the University looks at for incoming students like test scores, community services hours, AP classes, etc. The respondent stated that the regents require test scores, unweighted GPA, and weighted core units as their basic requirements for admission. Her university does have a holistic admission program, which does look at items like community service, and other areas outside GPA

and test scores. The University does see the biggest identifier of good students as GPA, not test scores. Retention at the university is tied back to GPA.

University Participate 4 - Question 4

The next question centered on how strong the University felt about Oklahoma high school programs. The interviewees stated that in Oklahoma the schools vary greatly. The interviewees stated that they were amazed Oklahoma has so many school districts. The participants explained that one of them had come from an area that offered regional high schools where smaller areas are cored up to make larger high schools. Coming from that environment, Oklahoma is very different especially in the small rural areas where there might be a high school with four graduating seniors. In the regional schools, these type students would have been bused into the regional schools where, in their opinion, there would have been a broader learning knowledge of teachers and students. Oklahoma does have some high schools where they are really pushing their students, and then other schools it makes you wonder what the students are learning.

University Participate 4 - Question 5.

The fifth question addressed Oklahoma legislation which is focused on Science, Technology, Engineering, and Mathematics (STEM) education in the state. The question asked if they had seen a change in the students wanting to pursue STEM technical programs. According to the interviewee, her university is seeing a huge push toward

engineering and computer science. The question comes to mind if these students are prepared for these programs. Her university sees many freshman students enter these programs and then transfer to other areas. They do see the students who have more math and science backgrounds are the ones that are succeeding in these programs.

University Participate 4 - Question 6.

Another question asked of Participant 4 was how well the interviewee perceived how Oklahoma was doing in preparing their students for college as compared to other states or countries. According to the interviewees, the preparation varies greatly. The respondents stated they believe for the most part Oklahoma is on the right track; however, there is still a lot of work to still do to prepare students. Funding is a big issue, and schools are constrained. This is one area, from their viewpoint, as to question why Oklahoma puts so much money to operate such small schools. The respondents referred back to the regional schools. We know funding is an issue. It is hard to understand why Oklahoma puts so much money to operate such small schools.

University Participate 4 - Question 7.

In looking at advanced academic programs, Oklahoma has two primary focused programs. These include the Advanced Placement (AP) and International Baccalaureate (IB) programs. The interviewees were asked if they could explain their perception of

these programs, if one is better than another, and if the interviewee believed one was harder. According to Participants 4, their university has seen a large number of students pursuing engineering and computer science. When asked if she thought the students were prepared for these programs, the answer came back with a mixture. She does, however, see students who have more math and science backgrounds continuing with the engineering and computer science programs. When asked how Oklahoma ranks to other states or countries in the preparation of students for college, the respondent answered that Oklahoma is average. Students from some areas have more opportunities than students from other areas. She believes that Oklahoma was on the right track though. Funding was one issue that they believed was responsible. In comparing Oklahoma to New England, in New England taxes are much higher, but it pays for the educational system. She was surprised after coming to Oklahoma that taxes are not higher. She felt that schools are constrained by funding. She did think that by consolidating more districts, synergies could be found.

When asked what else Oklahoma could do to benefit their future college students, the respondents stated they believed a lot falls to high school counselors. These counselors are overworked and underpaid too. She believed overall Oklahoma does a great job but if they would partner more with the universities in regard to training, workshops, etc high schools would be better. It appears that a lot of the students are meeting the bare minimum requirements to graduate and be accepted into college. There could be a more consolidated interest in preparing students for college. Students do not know what is out there. Students rely on parents too much. Maybe offering survival courses or university boot camp would help prepare students more.

University Participate 4 - Question 8.

The last question in the interview addressed the IB Diploma program which includes intense courses in all areas of study including extended essay, and internal assessments, and whether or not the Participant 4 believed students should receive more college credit than just equivalent AP credit for receiving the IB diploma. According to the interviewees, they found it interesting that Oklahoma universities do not offer any credit for focus areas on SAT or ACT to receive credit either. She explained that the SAT centers on critical grammar / vocabulary and reading in addition to math but there is no science. On the opposite, the ACT focuses on all four areas: English, reading, math, and science. The thought with the SAT, is that one has to have good critical reading and critical thinking skills in order to understand and excel in science. Another comment offered in the interview was the thought that universities sometimes like to provide her own flavor of certain classes and if credit is offered her university would not be able to guide their students in that given direction. The interviewees explained that her university does offer a lot more AP credit. She said she felt that she was bound by what the Regents of Higher Education allows her to do. She thought, maybe the name of the program, IB, makes one think that it is more about global learning and it distances people from understanding what the program actually is or provides. Even though it is more of an in-depth learning environment that teaches students how to apply what they learn rather than just memorizing, decision makers possibly do not understand the difference.

Table 150

Summary of Interview Questions and Responses for University Interviews (Part 1)

#	Questions	Participant #1	Participant #2	Participant #3	Participant #4	Summary of Findings
1	Type of Students when Recruiting	<ul style="list-style-type: none"> * Publish Basic Admissions Requirements on Website * Meet the minimum requirements, the students are accepted * Regents at university allows for some grey area for those students who might fall beneath the minimum requirement, but excell in other areas, certain circumstances 	<ul style="list-style-type: none"> * Academically prepared students * Students who have taken academically rigorous program and were able to handle the program * General minimum requirements, published 	<ul style="list-style-type: none"> * Want students with an eclectic interest - strength across curriculum * Require almost half courses to be outside center of excellence - students are more diverse * Want students who have learning skills already, ready for hurdles * Their university knows IB requires these hurdles, so they look for those kids first. * Want kids with extracurricular activities, not just school related. * Want students who can write well and higher thinking skills 	<ul style="list-style-type: none"> * Want to provide an education for all who want to learn * Focus is on honor students and average ACT, but also focus on low income families, and first generation students * Publish their general requirements * See a lot of international students who are more prepared in math and science, but not english 	<ul style="list-style-type: none"> * All university in Oklahoma publish their minimum requirements * Prefer honor students, or those who are college prepared
2	Difference with students who had academic advanced programs	<ul style="list-style-type: none"> * Assist to help determine how student perform and allows school to see higher potential 	<ul style="list-style-type: none"> * Their university could definitely tell difference in student s who took advanced programs. * Students are more ready for college * University is seeing push by schools to have students go through programs that are not prepared and they perform badly 	<ul style="list-style-type: none"> * Their university could definitely tell difference in student s who took advanced programs. * See kids not making it, reason - not prepared in high school * Not 100% are better, but majority are 	<ul style="list-style-type: none"> * Their university sees a difference * Larger high schools utilize the AP; smaller schools, the university allows students to take AP test at their university 	<ul style="list-style-type: none"> * Generally, they can see a large difference * These students tend to do better in college
3	Criteria for Incoming Students	<ul style="list-style-type: none"> * Looks for a combination of things. * GPA is best predictor * Combination of test scores, GPA, and class rank * Also look at the high schools, not all the same 	<ul style="list-style-type: none"> * University looks holistically at students * Look at a combined 3.0 GPA, 22 ACT or 1200 SAT, required essay, and counselor recommendation. * Also weigh right to ask for additional information if needed * University does not look at unweighted GPA * Writing skills vary greatly 	<ul style="list-style-type: none"> * Mainly a merit based scholarship school. * Scholarships given are based on test scores, and heavy weighting on GPA, leadership, and community service * GPA can be subjective * ACT is fair weighting * Want students from IB because great program and prepares students for college * Their university offers credit for the IB program rather the diploma is issued or not, going through the program is the real test 	<ul style="list-style-type: none"> * Minimum requirements are published * Look at test scores, community services hours, AP classes, etc. * Regents require test scores, unweighted GPA, and weighted core units * University looks at holistic admission program * Retention at the university is tied back to GPA 	<ul style="list-style-type: none"> * All said a combination of test scores, GPA, leadership, community service * All stated schools vary, so GPA's and class ranks vary * Really like to see IB / AP students - tend to be more prepared

Table 150 (continues)

Summary of Interview Questions and Responses for University Interviews (Part 2)

#	Questions	Participant #1	Participant #2	Participant #3	Participant #4	Summary of Findings
4	Strength of Oklahoma high school programs	<ul style="list-style-type: none"> * Pockets of Excellence * Strength of Education is very diverse * Funding - Main reason * Rural areas are not necessary weak * Overall, good * Primary concern - writing ability 	<ul style="list-style-type: none"> * As a whole, not doing as good as other states * Within Oklahoma - many exceptions, like Booker T. Washington and Classen SAS * In some schools it's getting better, but in others it's not. * In some schools - no exposure to advanced studies * Every state struggles with this 	<ul style="list-style-type: none"> * Stated they did not feel most high schools are preparing students * Otherwise, Oklahoma high schools would not be seeing such a high failure rate 	<ul style="list-style-type: none"> * Interesting that Oklahoma has so many school district, around 500, some with a graduating class of 4 * Regional districts - combine several together. Other states do this. * There are lots of large schools, and many small ones, not as many middle ones. * University can see when schools push students, having them take 4 math, 4 science instead of basic ones. 	<ul style="list-style-type: none"> * Schools vary across the state * Writing ability is an issue * Funding an issue
5	Change in students wanting to pursue STEM	<ul style="list-style-type: none"> * Their university are seeing students pursue this area * Would like to see more active / partnership between university, the regents, and 6-12 educators * More pre-college student awareness of the fields available to them * Possibly partnering with corporations 	<ul style="list-style-type: none"> * Their university has seen some increase * Their university does not offer an engineering program * Within science - numbers are growing tremendously * Math and Engineering, not as much 	<ul style="list-style-type: none"> * Did not feel he could address 	<ul style="list-style-type: none"> * We have a lot of students going into engineering and computer science * We do see students who have taken more math and science backgrounds to better 	<ul style="list-style-type: none"> * The universities are seeing student move toward this area * More partnering between the universities, regents, high schools, and industry * Need more awareness of the areas available to students
6	Oklahoma preparing students for college	<ul style="list-style-type: none"> * No huge difference * With budget cuts, more focus and questioning of cost * More parental involvement, parents questioning their kids future * Hard to make change, process slow, but movement is there 	<ul style="list-style-type: none"> * Writing is a big component where Oklahoma struggles * Test preparation is another area of struggle, like ACT/SAT * Understanding what is available for students to major in and the requirements it takes is lacking * Math is another big struggle 	<ul style="list-style-type: none"> * Previously stated writing was an issue * More IB schools would help 	<ul style="list-style-type: none"> * Believe Oklahoma is on the right track * Understand funding is a major issue * A lot fall on the counselors at high schools, overworked and unpaid * Would like to see partnering with the universities, schools through training, workshops * Students rely on parents to much 	<ul style="list-style-type: none"> * There are issues but primarily on right track * More partnering between the universities, regents, high schools, and industry * Writing is an issue * Math is an issue * More test preparation needed

Table 150 (continues)

Summary of Interview Questions and Responses for University Interviews (Part 3)

#	Questions	Participant #1	Participant #2	Participant #3	Participant #4	Summary of Findings
7	AP vs IB, Difference, Does one program better prepare students, one harder than other	<ul style="list-style-type: none"> * No question, IB program best prepares a student for college. * IB, in their opinion, much better, and much harder 	<ul style="list-style-type: none"> * Appears pure AP is all that is needed from a parents / counselors viewpoint * What their university likes about IB is that students are ready to take all classes, not just one or two * University went through process of looking at IB program, and try to change to allow more students come to their university 	<ul style="list-style-type: none"> * IB requires the course to be taken before sitting for the IB exam, AP does not require this * IB requires internal assessments, like mini thesis, for each course, AP does not * IB asked students to prove what they know; AP is not bad, but it's more memorization, they do not have to know how to use the material * IB requires students to step outside their comfort zone; for sure IB is the most difficult of advanced academic programs 	<ul style="list-style-type: none"> * Their university primary deals with AP * Do not know the IB requirements that much * Feel IB is more a global, focus is more broadly, more creativity * Knows their university only accepts HL credit for IB 	<ul style="list-style-type: none"> * No question, IB program best prepares students * What their university likes about IB is that students are ready to take all classes, not just one or two * IB asked students to prove what they know; AP is not bad, but it's more memorization, they do not have to know how to use the material * Do not know the IB requirements that much

Table 150 (continues)

Summary of Interview Questions and Responses for University Interviews (Part 4)

#	Questions	Participant #1	Participant #2	Participant #3	Participant #4	Summary of Findings
8	Do IB students in Oklahoma get the credit for the rigorous program they complete	<ul style="list-style-type: none"> * There really has not been a push to look at the credit offered for IB at their university * The university really does not see many IB applicants * Majority of IB students are international * Agreed if their university offered more credit then they would probably see more students * The university believes IB is not about the credit offered, but about the learning experience, preparation, rigorous, and confidence of learning * AP is up about 10% * The university stated they would like to see an increase in IB schools in Oklahoma, but it is a lot of commitment * Agreed their university should revisit the credit offered for the IB program 	<ul style="list-style-type: none"> * Their university believes additional credit should be offered. * Want students who are prepared, however we also want our time with them * University policy - They need to be challenging everyone. 	<ul style="list-style-type: none"> * Students should be recognized for going through this difficult program * Their university offers up to thirty hours for going through the IB program * For Oklahoma to support, culture has to change * Students and teachers have to believe that it is okay to study more, to read more, to write more, and that there is a reason to do it * SL credit is the key * Our university has embraced the IB program, maybe if other universities in Oklahoma embraced it and offered credit (HL and SL), then the IB program in Oklahoma might grow. 	<ul style="list-style-type: none"> * Their university found it interesting that there is no credit offered for focus areas on SAT or ACT * Realize that good critical reading / ability to understand is critical in science classes * Felt that university likes to add their own flavor of teaching, if credit offered they wouldn't be able to steer the student in a certain direction * Maybe the name IB makes one think it is global learning, lack of understanding * Felt that the university was bound by the regents 	<ul style="list-style-type: none"> * Their university believes additional credit should be offered. * The university really does not see many IB applicants * Agreed if their university offered more credit then they would probably see more students * For Oklahoma to support, culture has to change * Students and teachers have to believe that it is okay to study more, to read more, to write more, and that there is a reason to do it * SL credit is the key * Felt that university likes to add their own flavor of teaching, if credit offered they wouldn't be able to steer the student in a certain direction * Maybe the name IB makes one think it is global learning, lack of understanding

Summary of University Interview Findings

After finishing all the university interviews, summary tables were created to summarize the key points taken from each interview (Table 150). The first three questions addressed types of students coming into the universities. In analyzing the first 3 questions: 1) the types of students the university likes to recruit, 2) how the university views academic advanced students, and 3) the universities criteria for incoming students, all four of the universities offered similar responses. All the universities published minimum entrance requirements. The universities all wanted or preferred to have honor students who were prepared for college. The universities all agreed there is a big difference with students who have had an advanced academic program in high school. Most all the universities tend to look at a combination of criteria when looking at new students. These include test scores, GPA, leadership, and community service. Each university also stated that there are large variations in GPA based on the school and the programs offered. In addition, there were also discussions in regards to schools that offer the AP program and the variations of how the AP program is taught. With IB there is not much variance in what the student learns.

The next three questions looked at Oklahoma as a whole and the universities perception of how pre-college preparation is being handled. These questions included the strength of the high school programs, STEM pursuit, and preparing students for college. Several of the answers to these three questions crossed over between the three responses. The universities all felt the high schools vary greatly across Oklahoma. There are areas of good and bad. Most of the universities are seeing a larger push for students to pursue

STEM related fields. They believed this could be even stronger if more awareness of the fields offered in STEM were addressed. In addition, several of the universities identified the need for more teaming of universities, regents, high schools, and industry through workshops, seminars, and meetings. Each university felt Oklahoma is on the right track; however, change still needs to be addressed. Oklahoma continues to be very weak in writing and math skills. However, the universities at the same time recognize the issues centered on funding.

The last two questions focused on the IB program and a better understanding of how it compared to AP, if one program was harder than the other, and if the academic credit being offered at Oklahoma universities is appropriate for the rigorous IB program. Three out of four of the universities stated that they understood the IB program; and without doubt, agreed the IB program best prepares students for college. They all recognized that IB students come to college with learning skills and succeed faster and better than those who do not have the skills coming into college. In addition, IB students appear to handle all areas of study, not just the fields they are good at.

When looking at the credit the universities offer for completing the IB program, all the universities agreed that more credit might be deserved. They each agreed if their university offered more credit, then they would probably see more students. Two of the universities have changed their policy as it relates to IB and now offer more than the basic HL credit. One university now offers up to 30 credit hours for those students completing the IB program. A couple of the universities also believed that their university wanted to add their own flavor of teaching and if students moved too quickly through their college program, the university would not be able to add their touch to the

students. Also, one of the universities felt that the name IB: International Baccalaureate makes people feel the program is more international or globally focused. Many people do not understand the program. All the universities believed that for Oklahoma to support the IB program, culture would have to change. Students and teachers, along with parents, have to believe that it is okay to study more, to read more, to write more, and that there is a reason to do it.

Phase II - Part 2

High School Interviews

Background Factors Affecting High School Perspectives

In Oklahoma, two schools offer the IB program. These two schools are Classen School of Advanced Studies, and Booker T Washington. Due to the importance of capturing fair and spontaneous responses in a qualitative study, narratives from the two selected high schools have been paraphrased as closely as possible from the transcripts of the interview tapes. A team member from each of the two high schools was interviewed and asked the same nine questions. Each of the high schools in the study was randomly assigned a number to protect the confidentiality of the interview.

The interview questions asked of each interviewee are outlined in Table 151.

Table 151

High School Principals – Interview Questions

High School Principals - Interview Questions	
No	Question
1	Would you describe your advanced academic programs?
2	What type of students do you like to see when recruiting?
3	How do you recruit students for the program?
4	What criteria do you use when looking for incoming students?
5	How strong do you feel the Oklahoma High School programs are in Oklahoma?
6	Oklahoma legislation is focused on growing STEM education in the state. Have you seen a change in the students wanting to pursue STEM technical programs?
7	How do you feel Oklahoma is preparing their students for college, are they prepared as much as say kids from other states, countries?
8	In your opinion, what else could be done to better prepare our students for college?
9	Looking at advanced academic programs, our state currently has two primary focused programs. These include AP and IB. a. Can you explain your perception of these programs? b. Do you perceive one better prepares students and how? c. Do you perceive one is harder than the other? Please explain?
10	In looking at the the IB Diploma Program, which includes intense courses in all areas of study including extended essay, and internal assessments, do you believe students should receive more college credit than just equivalent AP credit for receiving this diploma? Why or Why not?

High School Interviewee #1

High School #1 was identified as a high school that offers the International Baccalaureate Program in addition to other advanced academic programs. The Participant had previous knowledge and was well versed as it related to the IB program.

High School Interviewee #1 - Question 1

The first question asked the high school participants to describe their advanced academic programs. High School Interviewee 1 responded that their school has basically four programs. Coming into the ninth grade year, every student in the building participates in the IB middle year's program. The middle school program is grade six through ten. It is a little different from the IB diploma program because there is no subject specific syllabus for the program; it is more a philosophy of teaching. IB does have some requirements of assessments in each subject area where the students are really building in that sixth through tenth grade continuum to prepare the students for grades 11 through 12. For example, science has a self design lab; however, the lab in sixth grade will look very different than tenth grade. The idea is to expose them to the skills that they will use during the diploma program. The whole program feeds together, the concept of internationalism, and developing the whole student - so all ninth and tenth grade students are doing middle years.

Also, in ninth grade, students have the choice to participate in the pre-engineering program. They do the first two years in their high school building. They have the same science and math classes as all the other students, so it is really not much different from the normal program except that they have an actual engineering class that they take in addition to their other classes. It is a choice for the students. If they decide that want to take it, they can continue on through the tenth grade. At the end of tenth grade they can finish the program, but that would require them to leave the campus in eleventh and twelfth grades to attend the local technical university for half a day. It is a difficult decision for them to make. They have to drop three courses in the high school.

They have four courses at the high school, then three courses at technical college. When they finish, they earn a certification which can get them scholarships to some of the engineering universities. But at the same time, unless they certain they want to pursue engineering; there are risks such as possible admission issues to a more general university.

So at that point, sophomore year is the decision year. Sophomore year is also when they start thinking if they want to pursue the diploma program or do a combination of advanced placement and diploma courses. They want everyone to take some type of advanced coursework, at least one advanced class before graduating. The students pick what fits them best; it is all student choice, no admission requirements for any of the programs. All classes are open enrollment. For the students who want to do the diploma program, they are presented with all the information in their sophomore year. After the diploma classes fill, any additional slots can be filled with other students.

All students have to meet basic high school requirements, the college ready program. Then students who are more visual performers might want to take both AP studio art and IB art. An advantage of IB art is that the student receives one on one feedback with an examiner that is not offered with AP. However, AP allows them to do 3D, 2D, and different things. IB is more restrictive in what the program is looking for. This high school offers IB theater, and both AP and IB music theory. They may have some students who will only be doing a fine art portion of advanced work because that is the type of student they are. They really do not have any straight path that says this is the road students have to take.

High School Interviewee #1 - Question 2

Question 2 asked what type of students you like to see when recruiting.

Interviewee 1 responded to level set, sixth through eighth grade.

“Middle school is not covered at our school. Our school is a ninth through twelfth grade program. Admission for the school runs December through January of a student’s eighth grade year and is done through application. The requirements are really pretty low. A student must have the following: be in the 35th percentile in testing on national test; have a 2.5 GPA for past three semester, which is all of seventh grade and first part of eighth grade; have 15 or fewer absences from all seventh grade and first part of eighth grade; no suspension; and a positive teacher recommendation; but that’s it. Students apply and we select 60% from quadrants one and two, which is where more of our minorities tend to come from, 40% from quad three and four, which in the past has been more traditionally Caucasian. We go out to every school in the district, explain the program, and encourage them to apply.

High School Interviewee #1 - Question 3

The third question explored how the high school recruited students for the program. The respondent stated that they go out to every school in the district, explain

the program, and encourage students to apply. All students come in the same as freshman, no levels. They all take the same math, same science, etc. Then from there they will get help to select their path - a student might want more traditional high school or they may want to move toward more of an advanced program.

We will start recruiting for the diploma program their sophomore year. Basically, we never look at their test scores or grades. It is more - are they willing to work really hard. These classes are not just advanced classes; they are college level courses. We tell the student they will not be able to avoid their weakness in IB. The IB program requires if you do not like math or science, you still have to take them. Even if you hate history, English or writing, you will still be taking a college level course. The school explains the value of doing this is to show the student everything is achievable if they are willing to work for it. The students the school likes to see the most are those with a 'B' average. These students understand what working hard is; and they are used to doing that. They have had to do their homework in the past; they have had to study for test.

The hardest kids to recruit are the top students, straight A's, or future national merit finalists. These students have never had to study; they've gotten by on natural talent. If they have a homework assignment, they whip it out in five minutes putting no thought into it. They are the type of students who feel they already know as much as the teacher who will be teaching them because high school is all basic level. These are kids that when they get into the diploma program, want to drop. Now these students are having to work, which means they do not have as much free time, now they have to

spend time studying, which takes away free time. They may score a B on a test, which freaks both them and their parents out because they think something is wrong. But, it is because they have not been challenged. Eventually they will be challenged, and for most kids, it is not until college that this happens, and then they hit a wall and do not make the grades, lose their scholarships, and come back home and sit on the couch. Our largest numbers of students who stress and want to drop out after their junior year are those advanced students who think that high school should not be like this. The best kids plug through the program, making B and C for the most part, but they are content with doing that. They see what they are getting out of the program. They have now gotten the confidence to know they will make it through college.

When asked if they accept students outside the district, the Interviewee answered that their school district has a very hard time allowing them to accept students outside the district, however, there are a few, a handful, who they do accept. It is hard because they are limited.

High School Interviewee #1 - Question 4

The next question asked what criteria the high school looks for with incoming students such as test scores, community activities, references, etc. The Respondent stated that all admission requirements are posted on their website. Their school utilizes the Explorer test and Oklahoma Core Curriculum Test (OCCT). A student must be in the 35th percentile in testing on the national test, have a 2.5 GPA for the past three semesters which is all of the seventh grade and first part of the eighth grade, and have 15 or fewer

absences from all seventh grade and first part of eighth grade, no suspensions, and a positive teacher recommendation. They do have a rubric which shows how to score all these, but other than that it is very blind as to who will be admitted.

High School Interviewee #1 - Question 5

The fifth question centered on how strong they felt high school programs were within the state with regard to advanced academics and how the high schools compare to other surrounding state programs. The Interviewee stated there was a big push a few years ago for all high schools to do AP. A student could get AP put on their transcript almost anywhere. Our school said “we actually are going to doing AP.” Other schools, just kind of listed it. Then AP started catching on that their name was being used and colleges were giving preference based on rigor on the transcript, but there was no way to really know if the school was truly teaching advanced placement. So AP went through this thing where the teachers had to be authorized or certified to teach, which meant that teachers had to send in their syllabus for approval and AP had to ensure the rigor was there. So everybody did that. So we still have AP on all the transcripts.

The disappointing thing, even though AP is difficult, you just do not feel the students across the district are all getting the same experience. Part of the fault for this is AP really does not provide the details on how to teach. Yes, you have gotten your syllabus approved but it just says that the teacher is going to teach these overall topics on these dates. It does not say the detail you are going into or the classroom techniques which will be used. A lot of students are sitting in those classes and they have never

been given the information where they could pass the AP exam at the end. IB is very different from that. For one, it is very challenging for a teacher and yet easy. IB spells out the level of detail, the breath, the depth, and defines for the teacher actually what needs to be covered.

High School Interviewee #1 - Question 6

The next question addressed Oklahoma legislation which is focused on Science, Technology, Engineering, and Mathematics (STEM) education in the state. The question asked if the Interviewee had seen a change in the students wanting to pursue STEM technical programs. According to the Interviewee, their school does not participate in the STEM program. Other than receiving emails from the State Department, they do not come across STEM. Their school district decided their school would not be one of the schools to participate. The district applied for STEM grant and their school was not selected. Their school does have a pre-engineering program which is emphasized starting in ninth grade. Here, every freshman student has to take Biology I; and sophomores have to take Chemistry, Chemistry I or Pre-AP Chemistry. Junior year the student must take Physics. If they feel they are able to go beyond Physics, they can opt out of Physics I and take an AP science class. So they can go beyond Physics, but they cannot go below it. Then we have a Robotics' program. It's a volunteer program and it is not supported by the District, and it is expensive. The teacher who works with the robotics program does so after school, and looks for grants to help fund the project. The interview quoted:

We hear STEM pushed at the legislation level but not as much at the local level. Our school looked at our own school ACT and SAT scores and saw math was our weakest area. The College Board rule was recommended for us to use - Biology, Chemistry, and Physics for everyone. So we decided to adopt this rule as our internal policy, after each student finishes Chemistry, the student had to take Physics. We also realized that those students that really are not ready for AP were probably the one's weaker in Math too. So by adopting Physics, it gave these students one more class to practice those Algebra skills. Our Physics teachers became our Math teachers. In most of their classes, these Physics teachers are spending about a third of their time testing the Math that is needed for Physics. So by embedding that, it has opened doors for a few more students to not shy away from Math based subjects.

When asked if they find it hard to find teachers or funding, the respondent stated that their school has a large foundation that does numerous fundraisers each year. Also the teachers submit numerous grants three times a year. The general fund is very small, which covers copy paper, ink supplies, etc. They have some bond money, but that money is specified for technology or books. Most all their money comes from their Foundation or from the IB/AP program. With AP/IB the state gives an incentive of \$100 for every passing score. So that gives their school about \$60,000. They do receive about ~\$80,000 from the District for the IB program in total. Between the IB subscription fees, which is about \$10,000, then there are testing costs for all free and reduced lunch and every single student, pays IB per cap fee, which in total is about \$30,000. So over half

the money received goes straight back to the IB. In the end, the school has ~\$40,000 to buy books, and do all training (\$2k per teacher at least every 5 years)

High School Interviewee #1 - Question 7

Another question asked of Interviewee 1 was how well they felt Oklahoma is preparing their students for college especially in STEM areas and how does it compare to other programs from other states, or countries. Also, what else could be done to better prepare our children for college. According to the Interviewee, as it relates to Math and Science, Oklahoma is probably equally prepared as other states. But that is not saying a whole lot.

We have a kid that is taking Physics from an Education major that has had eight hours of Physics, therefore, they can be certified in the State of Oklahoma to teach Physics; or they were primarily a football coach that was some type of Physical Education major but has some type of Physical Science and Physics so when they took an umbrella test early in life they are certified to teach any area. Now this coach is the schools Physics teacher. If we want students to excel in Math and science then we have to prepare those Math and Science teachers. We have student teachers come in to our school from all the different universities that are going into Science and they just do not have the hours of what they will be expected to teach. It happens in our school, we will need more Chemistry and they will start looking at all teachers certifications and they will tell the teacher

you have Chemistry, can you teach it. The teacher responds that they had Chemistry 20/30 years ago and they took eight hours of it; but the school responds, but you need to teach it. It becomes an injustice to the students. We just do not have enough specialized teachers. Generally, graduates who have these specialties, teaching is probably not where they will go.

High School Interviewee #1 - Question 8

In looking at the advanced academic programs, our state offers two primary focused programs, AP and IB. Each interviewee was asked to explain their perception of each program, address if they felt one program better prepares students, and if they could expand on the difficulty level of both AP and IB programs. The Interviewee stated that AP is, in general, definitely easier than IB. With AP, a student does not have to do all the extra work. IB requires internal assessments, special projects, extra papers, and extra presentations. AP does not require this.

As far as content, the material covered is just as difficult, but AP students are not expected to personally do as much with it. Our school feels like AP is well suited for those national merit students. It is a memorization class. We call AP U.S. History, 'churn and burn', same with AP Biology. The students go through as many facts, dates, generals, battles, etc. as possible. However, a student cannot discuss for five minutes about the subject when they are finished. But, they memorized it. What can a student do with the facts they have memorized? What type of

work would a student do if they majored in history? With IB, the students are required to do something with it. Yes, they need the same background, same set of facts. But, IB puts more responsibility on the students, now do something with those facts. Take two different events in history and compare and contrast them. Discuss, do not just give dates involved with a particular battle, but tell why those individual were there, what was their motivation, what did they get out of it, what mistakes did they make, how could have they done it different. Now tell me a battle today that resembles it, now tell me what we have learned from history or how we repeated it. It makes a kid think more.

In science, in biology for instance, the students have to have the facts, but most of their test questions are, instead of ‘what is the organ that does this function’, they are giving research graphs, diagrams, charts with a little bit of background information in them and they are told “okay based on what you see in the data draw a conclusion. What was the experiment trying to accomplish. What would be their next step based on this? What is still not answered, what question is still left out there?” The student has to process the experiment. The AP exam is known for huge multiple choice, and then they do have the lengthy response at the end. IB is more short answer or essay but they have basically eliminated multiple choice. They want to know what you can do. Instead of the ‘Gotcha Test: Do you remember this fact? No, you don’t. Gotcha!’ IB is more: ‘Tell

me what you know. Tell me what you do know, what you can do with it, list as many facts as you remember about it.’

So for the students who do IB it is more work, it is more effort, it is more time at home. With AP there is not the amount of homework, there is memorization, some reading, but you are not expected to be held accountable on a day-to-day basis. You will take a test in two weeks. But for IB students, their assignment will be “tomorrow you guys are going to be Russia and you are going to be Germany and you are going to battle it out and redo the treaty.” So they have to come in ready to fully participate. Now every AP class is not necessarily like this. It is the perception that it is easier. You do not have to do as much, you do not have to stay up as late, and you are not pulling the ‘all nighters’ in AP. IB is, ‘this is all due, I have got to be done. I have to be prepared.’ Now the kids feel the IB tests are fairer. It gives them a chance (to show) that they do know stuff. We have kids their first year who take the AP test and earn a 1 or 2 and then the second year take the IB test and they do well, it actually shows what they do know. If the universities would look at those IB exams, they would be more appreciative of what the kids know. The AP kids forget what they have learned two days after the test. When these AP students enter their history class in college they may not be bringing any tools with them. They have forgotten them. The IB kids know where to start, how to dig, and how to find the information they need.

High School Interviewee #1 - Question 9

The last question in the interview addressed looking at the IB Diploma program which includes intense courses in all areas of study including extended essay, and internal assessments, and asked if they felt students should receive more college credit for receiving the IB diploma. According to the Interviewee, this is their schools biggest frustration. They do not understand how professionals in education do not take the time to look at this IB program and see what is there. They do tell students in their sophomore year when recruiting them, there are universities that give amazing credit, and some of the universities allow students to walk in with 30 hours of credit starting as a sophomore. At a lot of universities offer extra perks, like enrolling earlier or housing assignments. ‘There are universities that offer scholarships. But, we instruct our students to not do IB for any of these reasons; it will not be enough. The work is too hard, it is too demanding. There are too many late nights, too many moments of almost breaking.’”

Going into the program at the end of the sophomore year, most students do not know where they are going to school at that point. When they finally decide their junior year to go to OU or OSU, and they look at the university’s credit policy, the student is going to say, ‘why am I doing this?’ We have more students drop the program, those advanced students drop, because they say, ‘I’m going to OU or OSU, and I have talked to Admissions at the University and the University says they really do not care about IB, you get credit for AP. There is not any point to doing IB and I do not want to do all this extra work when my university says, it

really does not matter.’ Our response is, ‘who did you talk with?’ A lot of times it is the tour guides, when the student says: ‘What do you guys do with IB?’ and the guide says, ‘IB? I have not heard of IB. We give credit for AP here.’ It may be someone in the Admissions Office, and we ask them, ‘Did you talk with the Director of Admissions, because they understand the IB program, they know the work you have done?’

Our school just recently had someone return from (one of the universities) and we had parents tell us that the university said IB was not worth our time. We responded: ‘They said those words?’ And the parent said, ‘Yes, they said those words.’ We tell them that the universities do not understand. There are many of the universities that now offer credit because they have actually spent time doing the research to see that it is financially worth their effort to give away the credit. What they have done is look at IB students, full AP students, students who have come from those high schools but not taken the programs, and then a regular high school student. In every single category, the IB students have outperformed everyone else: as far as GPA after the freshman year, and years to actually earn the degree. The average to graduate college is now five years, IB students are earning it in four years. Even if the IB student walks in with a full year of credit, these students are double majoring or taking a year off to do study abroad programs. The students are graduating in four years. The percent of these students graduating is

almost 100% at those universities compared to some universities where the average graduation rate is 55% graduation.

Everything used to track these students showed these are the kids that have the skill sets. It did not matter what their GPA was in high school, nor did it matter what their test scores were. If the students had the IB credentials and completed the program, these kids were succeeding, and maintaining a high GPA in college. The universities are now saying that the average GPA drops about a full point at the end of their freshman year compared to their high school GPA. The IB drops, but it is only a tiny, tiny bit. AP drops about half what everyone else does. Most of those students have never had to do this time consuming studying - how to do research, how to write a formal paper, how to do like what is required in the IB extended essay, which is a personal research program.

According to the Interviewee:

Research shows these are the students universities should want. We tell kids that if they go into the program wanting the credit hours, they will be so disappointed. If they look at selected universities, like Princeton, Harvard, Yale, and every year we have students who go to those schools, every single student who applies to those schools are either IB or full AP students. They are not going to give the student credit because that would be these universities entire freshman class. However, they will not even

look at your application without showing that type of rigor. So it at least gets your application in the door.

For OU and OSU, these are the states two biggest draws, even though we have other state universities. It is such a challenge when you look down at Texas. Now, Texas State Legislation has a law stating that if you earn the IB diploma you will be given at least x amount of hours at any state universities. Oklahoma does not have that. There has been other research done by Department of Education and other organizations comparing AP and IB exams and AP and IB scores. What you see when looking at the credit policies at OU and OSU is, yes, they will give credit for HL (IB Higher Level), but they are expecting a score of six or seven. HL is a two year class. It is AP plus one year. They are given credit for an AP score of a three or four that is actually a full year less of work and less knowledge level than what you get with IB HL. These universities are expecting two years of work and being almost perfect at two years of work to get credit at OU or OSU.

In looking at the sciences, biology, chemistry, or physics, the first year at the school is the AP class. It is AP and the basic content of IB. The second year is the additional IB content. These students have gone above and beyond AP. According to the respondent:

Yet they have to 'so' out perform an AP kid to earn credit. All the research studies do show that is unfair. Research shows SL (Standard

Level) tests are the same as AP exams. Well most Oklahoma universities do not award credit for SL. We believe the reason for this, AP is owned by the College Board and OU and OSU are members of the College Board. AP is the College Board's program. It is a for profit organization. They have all these test scores; they get all this money in there. So there is a push to get those kids in there, and the universities offer the credit. We have been told the credit hour a university offers comes from their individual departments. That is IB's problem, IB is a non-profit global organization and in order to convenience universities that the IB program is worth giving credit it really requires someone locally with enough connections going to each department showing, 'here is the IB syllabus, here are the past IB exams, please look at it, please consider offering credit.' When you do not have the state legislation behind you saying this is valued, it is almost impossible. Over the years both Booker T and Classen have said: 'this is just too hard!'

Our state universities are losing some of our best kids because these kids are savvy; their parents shop around. 'Who is going to give credit for IB?' They will choose a university that gives them credit; but that may not have been their first choice because the universities will recognize both SL and HL. We can deal with the state universities only accepting HL, but the cutoff of six and seven are a little high. The universities have never looked at a kid who gets a five, they do not understand what work that student is capable of. The universities are

probably looking at if IB scores one through seven, then the only ones our university wants is six and seven. We are like, ‘No; a four is a phenomenal kid in that subject area. Six and seven are off the scale.’ Our school gets very few six or seven students.

What is most disappointing, to our school, is those Admission offices saying IB is not of value or worth a student’s time. It is not right telling the student to not do all that extra work, when you can just do AP and for more credit. AP does not teach skills. AP is content only. IB has such a strong emphasis in teaching skills. With IB you are required to do the six subject areas. When a student is in English or a foreign language, they learn the skills necessary if they are going to major or work in that field. When a student is in science, they are going to learn how to design their own lab; they will do it multiple times. They have to learn to do procedures and how to put everything together.

With AP, there is what is called ‘cookbook’ labs, 12 of them, and they are fill-in-the-blank. The kids will ask: ‘Why did we just do this? What was the point?’ And we ask, ‘what was the hypothesis? Or, what were the variables?’ And the kid answers, ‘I don’t know; I just followed the directions.’ So there is no processing. The kids that take Physiology have to do a physiological research study where they have to get permission slips signed and do all the data collection, statistics, and analysis. It is just an experience that AP cannot even begin to touch and yet the Admissions office tells them: ‘it’s not worth their time.’ If

Oklahoma really wants to attract top quality kids in the state, they need to rethink what is happening. The IB program is growing so rapidly in the United States, that the universities would receive students from other states too that probably turn down Oklahoma because they are not recognize or understand the IB program. The University Admission offices need to be training and instructing their staff about the program. It is so disappointing for students when the university does not even know or recognize the term, 'the IB program.'

High School Interviewee #2

Interviewee 2 represented a high school that offers the International Baccalaureate Program in addition to other advanced academic programs. The participant representing the high school had previous knowledge and was well versed as it related to the IB program.

High School Interviewee #2 - Question 1

The first question asked the high school Interviewee to describe their advanced academic programs. Interviewee 2 responded that their school is a magnet school that accepts students by application. The application describes the nature of the IB program. The AP program is not defined since it is an optional scenario whereas IB students come

in as an IB major and those students understand and are willing to complete all the requirements. Interviewee 2 offered the following comments.

In our situation, we like to consider ourselves as a diploma program. Students from grades six through ten are in what we referred to as Pre-IB to prepare for the diploma program which is in grades eleven and twelve. A lot of students in our IB program take AP tests and some of the AP courses, however, primarily the AP courses are more for the Visual Performing Arts (VPA) students. The AP courses are similar (in) that they can receive credit at college; however, different in other ways. There is not an AP diploma and you cannot specialize in AP areas, like AP Biology, or AP English Language. Both programs end in external examinations at end of year and have governing bodies monitor the programs which use the external exam test scores to determine if they can earn college credit or the IB diploma.

When asked if their students have to pick either IB or VPA, the answer was yes, the student does have to pick one on their application. An additional question was asked in regard to the benefits of having a middle school Pre-IB program. The respondent clarified that the middle school program aligns the curriculum properly. From 6th grade on as the student matures into abstract thought, and a higher order of thinking, the school can tailor their program to meet the needs of the student so they are ready for those high school years, especially IB. For IB, there are certain requirements that the program requires, i.e. external exams, internal assessments, and foreign languages. When asked if

their school accepts students into the program in high school or if they have to start in middle schools to be in the program, the Interviewee said:

There are situations that do allow a student to start in high school for example. A student moves to Oklahoma (who) was in the IB program in their previous area. If they performed well then it makes sense. If students come in at the end of the sophomore year and they were honors track, or AP and were at the top of their class, (it) does not mean they would be ready for the IB program. You have to already be prepared for the extended essay or internal assessments in order to make it through the IB program during the junior and senior year.

High School Interviewee #2 - Question 2

Question 2 asked what type of students does the school like to see when recruiting. Participant 2 responded that the IB program states, as does the College Board of the AP, that the mere cognitive advanced nature of a student's capabilities is not the only factor; it is not even the primary focus. The school looks for the motivation, the willingness of the student to identify what needs to be done to be successful and to work toward that. So in their applications, the school looks for students who show a high level of academic success, straight A, all A's and a B's. They look for standard testing that shows and demonstrates that same consistency. Finally, teacher recommendations are utilized that back up the student's motivations, inspiration, and passion about doing a

good job. Then the school takes all that and paints a picture of a student that will work and they believe will be successful in the program.

High School Interviewee #2 - Question 3

The third question explored how the high school recruited students for the program. The Interviewee stated that each year during enrollment period, which is November to January, the school will go out to each of the district elementary schools and have a representative speech at parent meetings about their school, and about the program. These meetings allow parents to ask questions, and get answers to inquiries they may not be able to access otherwise. In addition, word of mouth is obviously big, as are national rankings. The newspapers also have write-ups about the school. When asked if they only accept students from the District, the response came back that for the past couple years, their school has only accepted primarily students in the District school boundaries. They do make exceptions with certain cases, for instance, the Guitar program may need upper level students to fill in some of the advanced programs they have, and a specific band type might be another example. IB specifically is almost strictly sixth grade level entrance, unless a student has been in an IB program prior.

High School Interviewee #2 - Question 4

The next question asked what criteria the high school looks for with incoming students such as test scores, community activities, references, etc. The respondent stated

the school basically uses a rubric to identify these key areas. Test scores, grades in school, and teacher reviews are also utilized. The application also asks about hobbies and interests to get to understand the student.

High School Interviewee #2 - Question 5

The fifth question centered on how strong they perceived high school programs were within the state with regard to advanced academics and how the high schools compare to other surrounding state programs. The Interviewee did not have as much knowledge about rural areas, but believed the AP program is generally pretty strong in most areas and remarked that the IB is only at Classen and Booker T. As to other states, both programs compared favorably. When asked if the school thought other states were embracing the IB program more, the Interviewee responded that in certain spots, like Florida for instance, which is the flagship state for the IB program, the program is being embraced more. Some reasons for this were believed to be political, like, “who is in charge, or who is pushing the program?” Another example which was given was a school in Texas, where a new superintendent moved in who had worked with the program, and established a new IB program there. Questions from the political, district level administration suggested the expense of the IB program might not be giving them the “bang for their buck” because AP is actually free. That administration believed that if the end goal is simply college credit, then they can look at the two, AP and IB, and say AP is free and we can still get all the college credit. The problem with that thinking specifically here at this Interviewee’s school where they have an IB diploma program, is

that it misses encountering a larger portion of the learning profile. This profile details global mindedness; it suggest that becoming a global citizen is important and the school wants students to be immersed in different cultures to learn things in World History class that goes beyond the boundaries of just memorization and becomes respectful and understanding of other cultures in the world. The AP program does not necessarily do that. When asked what the benefit of having the “pick and choose” IB program versus IB diploma program, the respondent offered the following comments.

If you do not take the diploma program and just sit for one IB test, you are not required to take the three components of the IB diploma Extended Essay, Theory of Knowledge, or the Creative and Action Service (CAS) requirements. These three components are at the core of the IB diploma. If you are taking an individual IB class, you do not take these three. Those three go to the heart of what knowledge is. Extended Essay asks the student to demonstrate at a very high level deep knowledge of some topic; it goes beyond volunteer work. It could be participating in a basketball team, leading an organization, etc. Theory of Knowledge gets the student to question general theory and understand knowledge learning. In their mind, why would it be better to take the IB course versus the AP course? If you take AP, it is much more recognized at the collegiate level. Obviously, we feel the IB is much more above the AP. They have learned to understand a subject, know the skills of how to analyze the subject, not just memorize the dates and names. IB is more in-depth understanding.

High School Interviewee #2 - Question 6

The next question addressed Oklahoma legislation which is focused on Science, Technology, Engineering, and Mathematics (STEM) education in the state. The question asked if (the interviewee) had seen a change in the students wanting to pursue STEM technical programs. According to the Interviewee, when a person thinks of the IB program, the question is sometimes asked, “Does IB prepare a student better than AP?” The IB program is not tailored to address specific needs of engineering minded students. Rather IB is a very good foundation for preparing students. It certainly prepares students in Math and Science. The program is not geared to funnel into a straight STEM initiative. However, it does prepare a student to learn how to analyze a concept. IB has internal assessments and lab work that adds additional concepts and analysis above general courses. It really draws students to research and dives them into a topic which is shown with the Extended Essay. IB also teaches the writing skills so students can communicate their findings properly.

High School Interviewee #2 - Question 7

Each of the interviewees was asked in their opinion, “What else could be done to better prepare our children for college?” According to Interviewee 2, if ACT and SAT tests demonstrate success, there needs to be a higher level of importance to preparing students for those exams. At some schools, it is an option for students to take a pre-college entrance test. There should be a very dedicated plan for students starting in

middle school. If schools begin planning in seventh and eighth grade that students will go to college, the schools will have time to teach the students their weakness. Schools start with the Explore Plan ACT continuum to track and understand where their student's weaknesses are, then work individual plans and class structures to turn their weaknesses around. The IB program, in general, assists to strengthen individuals in all areas. Since the IB program is made up of six focus areas, the chances of students being strong in all these areas usually does not happen too often. The program helps students to overcome their weakness and focus on the areas the student understands.

High School Interviewee #2 - Question 8

In looking at the advanced academic programs, our state offers two primary focused programs: AP and IB. Each interviewee was asked to explain his or her perception of each program, address whether or not they believe that one program better prepares students, and if they could expand on the difficulty level of both AP and IB programs. Interviewee 2 stated that with the IB program you see students invest completely in a programmatic approach to developing themselves. So you hear students talk at length about EE (Extended Essay) and IA (Internal Assessments). Students have a large understanding of this program that is developing them. The students may not like it; but at the end day, they understand this body of work that they have been compiling makes consistent comprehensive sense to them.

In the AP program, I see more where students who will say, 'I did good last year in my Math class so I will be fine taking an AP class this year. If

I fail in that class, it is only that class.’ The AP program does prepare you, it does. However, it is only contingent if students take three or more AP classes and if students take their senior level math. If you blow those off, it can hurt you in your freshman year in college. With the IB program, there is no lay down period. Your senior year is your ultimate climatic experience of the overall program, so students do not sense a ‘let down.’ Sometimes AP students think in their junior year, they have all their AP classes complete, so they can just sit back and cruise their senior year. AP allows you to do that; not always, but sometimes. There are those students who push themselves and take Probability, Statistics, Calculus, etc. The IB does not afford our students the opportunity to just sit-back, it is laid out for you. The students know in advanced, their junior and senior year the student already knows who they are, what they will be doing, and everything they have to complete in order to make it through the program. It’s a good overall look forward, the comprehensive feel of the program. The IB program plans for the student all the things needed, that the student most probably does not even realize until later in life they needed.

The question of how difficult or stressful the students felt the IB program to be was addressed. The answer to the question was: “Yes, the IB program, the whole thing, is difficult and stressful to some of the students. With the AP side, students can take three very tough AP classes; however, it’s just those three courses. As compared to the overall IB where the student has to work on their Extended Essay at home, participate in

Theory of Knowledge, and CAS on top of their entire Group One through Six focused areas that the students are completing. Class by class, IB may not be tougher but as a whole, IB takes much more to complete.”

When asked if funding is a big problem, the respondent discussed the limited staffing issues they have. Their teachers can only teach six classes at a time which in their school’s structure is three a day. Students have a total of four classes a day. The school does utilize a large adjunct staff of teachers. If they had more staff members, they could offer students more class options. Possibly colleges could assist with teaching options by allowing their local universities to teach classes such as Physics, however, only teachers who are certified in IB or AP can teach IB and AP classes. Participant 2 continued with the following comments.

Our school district does help us with funding through the gifted and talented program. Our parental support is also very large and helpful. Parents are usually very eager to help with IB tests and exam fees. However, the overall cost is still a huge problem. The District has tried to help as best they can. Between the cost of certifying IB teachers, IB books, which are all college level text books, and IB fees, it is hard for the School to keep up. AP tests are free. The District, the Board and the School all worked hand in hand to get this program going, and they have been supportive; however, not everyone understands the program needs.

Another huge benefit of the academic program is the Fine Art side, the visual performing arts offered to the students. The IB students benefit

greatly by allowing them to team with the VPA classes. A good example of this is when the school has an IB student who is also an amazing guitar player. Oklahoma School of Science and Math is purely academic focused with no VPA options. There is a place for all types.

High School Interviewee #2 - Question 9

The last question in the interview addressed the IB Diploma program which includes intense courses in all areas of study including Extended Essay, and Internal Assessments, and whether or not they believe students should receive more college credit than just equivalent AP credit for receiving the IB diploma. According to Interviewee 2 they believe the students should get more credit for sure. The IB curriculum is equal to AP or better. It correlates strongly with college success. It is certainly on an equal footing with AP. The reason the IB program is not recognized more than AP is simply the fact that there is a deeper saturation of school for AP than IB. Another issue with some universities might be that some people believe IB is a world curriculum versus a U.S. curriculum. Again, (those universities) do not understand the program or the benefits it brings. Interviewee 2 continued with the following remarks.

When you look at universities, you can tell that some of them have done their research. An example is the University of Nebraska. They just sent our school brochures stating that they are now accepting SL credit not just HL. Some universities are starting to realize that by recognizing the entire IB program and looking at both SL and HL classes, they are finding

really good kids that may not have considered their university previously. Maybe that is a reflection that more colleges are moving in the direction of recognizing the IB program. We certainly hope that our friends at OU and OSU will see the benefit of the IB program. It is certainly not a reflection of the students' talents we are pumping out of the IB program. There is not a question, when students leave our program; they are highly ready for college. These students have the skills to succeed. The next step is to institute a process by how we make that happen, by how we get the state universities to understand the IB program. The SL is the key. For some reason, when people hear the terminology SL/HL, they think HL means equal to AP. HL just means students have spent two years in that course. With AP, students do not spend two years in the course; it is one year just like SL. SL is equal to AP and then HL the student goes above and beyond. Obviously we want to get HL credit, but we contend that SL should be the same as AP.

Most of the IB students, by participation in the IB program, are high level students who will receive good scholarships. When asked if state universities, such as OU or OSU would understand and support the program through credit approval, if Oklahoma and Oklahoma high schools would start more IB programs, the answer was: "Certainly. It is a domino effect. If universities offered more college credit, more equal footing to what is offered for AP then high schools would be more willing to take that dive and say here is a great advanced program above and beyond what we currently have, and certainly equal footing to AP that adds all this extra. If all this happened then there

would be a push for more equal funding by the state. There would certainly be awareness and a push for the IB program. Oklahoma would be retaining these amazing students instead of allowing them to go to other universities that supported the IB program.”

Table 152

Summary of Interview Questions and Responses for High School (Part 1)

No	Questions	High School #1	High School #2
1	Describe your academic programs?	<ul style="list-style-type: none"> * 4 programs: IB, AP, Visual Perf, and Regular * Everyone participates in the middle school year's program * The IB non-diploma program is more a philosophy of teaching * Offer a pre-engineering program * Sophomore year is decision year 	<ul style="list-style-type: none"> * Magnet school that accepts based on application * 2 programs IB Diploma or visual performing arts; students select when they come into program * School is on a block schedule, 4 classes every other day with 8 classes a semester/school year * 6 - 12 grade program * Offer both IB and AP class * Visual Perf primarily take AP classes, however some IB take them. * Middle school program aligns curriculum properly.
2	What type of students do you like to see when recruiting for your program?	<ul style="list-style-type: none"> * Admission is through application in ninth grade * Student must have following in 7 and 8 grade: be in 35th percentile on nat'l test, 2.5 GPA for 3 semesters, have fifteen or fewer absents, no suspension, a teach recommendation * About 60% minorities, 40% other 	<ul style="list-style-type: none"> * The mere cognitive advanced nature of a student's capabilities is not only factor * Look at motivation, the willingness of the student to identify; high level of academic success, standard testing, and teacher recommendation
3	How do you recruit students for your program?	<ul style="list-style-type: none"> * Go out to every school in district, explain the program and encourage students to apply * All students come in as freshman with no level or path * Recruit diploma program sophomore year * Hardest kids to recruit are straight "A" students or future national merit finalist. They've never had to work, and IB will not allow that * Basically only allow students within district 	<ul style="list-style-type: none"> * Enrollment period - Nov - Jan * Go to each school in district and speech with parents and students about program * In addition, word of mouth is big, along with newspaper. Our national ranking is big driver. * Accept primarily only students from within the district; however, there are those special case (mostly with VBA). IB is within district.
4	What criteria do you use when looking for incoming students? Like test scores, references, etc.	<ul style="list-style-type: none"> * All admission requirements are posted * Look at the explorer and OCCT test. * Student must have following in 7 and 8 grade: be in 35th percentile on nat'l test, 2.5 GPA for 3 semesters, have fifteen or fewer absents, no suspension, a teach recommendation * Follow a rubric which shows how we score everything 	<ul style="list-style-type: none"> * Utilizes a rubric to identify key areas. * Test scores, grades in school, and teacher reviews and recommendations * Also look at hobbies and interest in order to get a good understanding of the student.

Table 152 (continued)

Summary of Interview Questions and Responses for High School (Part 2)

No	Questions	High School #1	High School #2
5	How strong do you feel the Oklahoma high school programs are in Oklahoma with regards to advanced academics's and how do they compare to other surrounding state's programs?	<ul style="list-style-type: none"> * Big push for all high schools to do AP a few years back * Question if all school follow same rigor with AP * Teachers have to submit syllabus for approval but it is high level and it does not detail how the teacher will teach * Students take the classes, but are not given the information to ever pass the AP test. * IB spells out the level of detail, the breath, the depth, and defines for a teacher actually what needs to be covered. 	<ul style="list-style-type: none"> * Not much know about rural areas * Generally AP is very strong in most areas * IB only at Classen and Booker T. * Favorably compared to other states * IB is embraced more in other states, like Florida. Reason: political, who's pushing the program * Funding issue: depends on the focus of those incharge. Is focus college credit, then IB may not be best "bang for buck" (AP is free), if it's the learning experience, learning the profile - IB is best.
6	Oklahoma legisalation is focused on growing STEM education in the state. Have you seen a change in the students wanting to pursue STEM technical programs through your advanced academic program?	<ul style="list-style-type: none"> * Their school does not participate in STEM; district applied but their school was not selected * Do offer pre-engineering program * Every student has to take Biology I, Chemistry, and Physics * Robotics program * Funding for all the programs is an issue; their school has a large foundation that offers numerous fundraisers which helps * State gives the school incentive of \$100 for all AP and IB passing test scores 	<ul style="list-style-type: none"> * Neither AP nor IB is geared to funnel into a straight STEM initiative. * IB prepare a student to learn how to analyze a concept, AP does not. * IB diploma forces strong math and science skills * IB has internal assessments and lab work that adds additional concepts and analysis above general courses. * IB draws students into research, as seen through the required extended essay; IB teaches writing skills also * Get some funding from gifted and talented programs; parental support is large and assist with overset cost such as exam fees. Overall cost is a huge problem and district does best they can; however not everyone understand the cost and needs. * Staffing at their school is an issue, utilize a large adjunct stuff. If there were more teachers, could teach more. Maybe colleges could assist with this.

Table 152

Summary of Interview Questions and Responses for High School (Part 3)

No	Questions	High School #1	High School #2
7	<p>How do you feel Oklahoma is preparing their students for college as it relates to STEM areas? Are they prepared as much as say diks from other states, countries?</p>	<ul style="list-style-type: none"> * As related to math and science - probably equally prepared as other states. - But not saying much * If we want students to excel in math and science then we have to prepare the teachers * Have teachers that teach subjects that have minimum requirement (8 hrs) to teach - they do not the subject well * Not enough specialized teachers, the good teachers will not work for a school when they are offered large salaries by corporations 	<ul style="list-style-type: none"> * If ACT and SAT test demonstrate success, then there needs to be a higher level of importance to preparing students for those exams. * At some schools it is an option in taking pre-college exams * Schools should begin planning in 7th and 8th grade preparing students for college. Then they can focus on a students weakness. * IB program, in general, assists to strengthen individuals in all areas. * IB helps students to overcome their weakness and focus on the areas the student understands.
8	<p>Looking at advanced academic programs, our state currently has two primary focused programs. These included the AP and IB programs. Explain your perception, is one better, and expand on difficulty</p>	<p>AP is, in general, easier than IB. With AP a student does not have to do all the extra work. IB requires internal assessments, special projects, extra papers, and extra presentations.</p> <ul style="list-style-type: none"> * Material covered in AP is just as difficult as IB, but AP does not expect students to personally do as much with it * AP is a memorization class * With AP students go through as many facts, dates, generals, battles, etc., however, they cannot discuss for five minutes what they know or how to apply it * With IB - students are required to do something with it. Need the same background and set of facts, but they have to do something with the information * The kids will almost break during IB it is that difficult, late nights, lots of stress, lots of work. 	<ul style="list-style-type: none"> * Students in IB invest wholly in an programic approach to developing themselves. * The AP student does prepare and teach students, however, it's only contingent if the student takes 3 or more AP classes and a senior level math course. One individual class does not prepare students * With IB there is no lay-down period, the senior year is the ultimate climatic experience of the overall program. * With AP sometimes, students in their junior year have all their AP classes complete, so they just sit back and cruise their senior year. There are AP students who push themselves individually with extra course or concurrent courses. * With IB - students know in advance, the challenge is their junior and senior year. It is challenging and stressful, but the end reward is great * IB pre-plans for the students all thinks needed to be prepared for life.

Table 152 (continued)

Summary of Interview Questions and Responses for High School (Part 4)

No	Questions	High School #1	High School #2
9	<p>In looking at the the IB program - do you believe students should receive more college credit?</p>	<p>* Their schools biggest frustration</p> <p>* They explain to students coming in - some schools give amazing credit, some offer up to 30 hours, however, do not do the program because of this, it's not enough for how hard the program is</p> <p>* Most students do not know there sophomore where they are going, but in junior year, they decide on OU or OSU and they look at those schools policy for IB credit - they say "Why am I doing this"</p> <p>* Stastics in college show IB students outperform all others in GPA first year, years to earn the degree (4 vs 5 years) even if students have received credit they are double majoring or doing a year of study abroad. Grad rates are 100% vs other that are 55%</p> <p>* OSU and OU both recognize IB HL (High Level) which is two year in the subject, but the student has to score a 6 or 7 which is almost perfect; a 4 in IB is a phenomenal student</p> <p>* Standard level is the same as AP (both one year) - SL is not recognized by OSU, OU, nor most state universities</p> <p>* Standard level (SL) is key to change</p> <p>* Our state is losing out on our best kids, because kids are savvy, parents shop around, and out-of-state universities who offer this credit are getting these students</p> <p>* IB is growing so rapidly in US that if Oklahoma universities would reconsider their policies, Oklahoma would retain these good kids plus the state would most likely be receiving students from other states</p>	<p>* Our school believes students should get more credit for sure.</p> <p>* IB curriculum is eaqual to AP or better - it correlates strongly with college success.</p> <p>* Reasons why: 1) deeper saturation of AP schools, 2) people believe IB is a world curriculum versus and U.S. curriculum - Again, they do not understand the program or the benefits it brings.</p> <p>* Some universities have done their research - that by recognizing the entire IB program and looking at both SL and HL classes, they are finding really good kids</p> <p>* We hope that OU and OSU will see the benefits of the IB program - it's not a reflection of the students talents - these students are more than ready.</p> <p>* Next step is education, institute a process. Many universities tend to think HL is equal to AP. HL means students have spent 2 years in the course. SL is one year, AP is one year. SL credit is key.</p> <p>* Most IB students receive good scholarships by the nature of being good students.</p> <p>* The push has to start somewhere. If our universities would offer the credit, more high schools would incorporate the programs, and more funding would come. It's a domino effect.</p> <p>* Oklahoma would be retaining these amazing students instead of allowing them to go to other universities that support the IB program</p>

Summary of High School Interviews

A comprehensive key-point summary of the findings from the two High School interviews for each question is outlined in Table 152. Each of the two schools had a very different approach to how their school was set up and the structure of the programs offered. One school was only a high school while the other was a middle school and high school. One school had multiple advanced programs while the other offered only two. However, the primary goals of both schools was the vested interest of their students and their goal was to prepare students both academically and skill wise to be ready for college. Both of these schools produced amazingly talented individuals.

When evaluating the two IB schools in Oklahoma, the two agreed upon the types of students that preferred to recruit into their advanced academic programs. They wanted motivated, willing student who would keep trying, and wanted to learn. For both schools, students had to apply and test to be accepted. Each school used a set of individual rubrics to identify the students accepted into the program. They considered past grades, attendance, test scores, and teacher recommendations. The schools also considered student hobbies, outside interests, and community involvement. Each school accepted primarily from only within their district.

When asked how strong they each perceived Oklahoma high schools were when compared to surrounding states, they both commented favorably. However, both stated more could be done. Generally, AP is very strong in most all areas of Oklahoma; but the standard of AP is not the same in all schools. For AP, teachers have to submit a syllabus for approval, but it is a high level outline and does not detail how the teacher will teach.

IB spells out the exact level of detail, the breadth, the depth, and defines for a teacher actually what needs to be covered. Other states, like Florida and Texas are embracing the IB program.

In the areas of STEM and preparing for these areas, both schools responded that their schools are not STEM schools. Neither the AP nor IB programs are geared to funnel into a straight STEM initiative. However, both schools believed they were preparing students in the path of STEM. One school offers a Pre-Engineering program and their entire students take Chemistry, Biology, and Physics. The other school is heavy into Math and Science. The IB diploma program forces strong Math and Science skills. IB prepares a student to learn how to analyze a concept, AP does not do this. IB has internal assessments and lab work that adds additional concepts and analysis above general coursework. IB draws students into research, as seen through the required Extended Essay, and IB teaches a student how to write.

When looking at how Oklahoma is preparing students for college as compared to other states, they agreed in some areas it is about the same: Math and Science, probably equally. But both said “that’s not saying much.” If ACT and SAT tests demonstrate success, then there needs to be a higher level of importance on preparing students. At some schools it is an option to take these tests. Schools need to prepare early, in seventh or eighth grade, by learning the student’s weakness so they can help strengthen it. IB, in general, tends to strengthen students by identifying and addressing their weaknesses in all areas.

Staffing and qualified teachers were a major concern to both schools. Teachers were spread very thin, sometimes teaching in subjects which were not their specialty. Finding qualified teachers is very difficult in Oklahoma. Individuals, for example, who are Physics specialists, are not going to teach in high schools when they are in such demand at large corporations. A large number of adjunct teachers are utilized at these schools. It is a tough balance of supply and demand.

In comparing the AP program to the IB program, both schools said AP is easier than IB. With AP a student does not have to do all the extra work. IB requires internal assessments, special projects, extra papers, extra presentation, and oral assessments. The material covered in AP is just as difficult as IB, but AP does not expect students to personally do as much with it. AP is a memorization class. AP goes through the facts, dates, generals, battles, etc., however, an AP student, in general, cannot discuss for five minutes what they know, why the battles occurred, or how to apply the information. IB students are required to do something with the material. AP does prepare and teach students, however, it is only contingent upon whether or not the students take three or more AP classes and a senior level math course. One individual class will not prepare them. IB pre-plans for the students all things needed to be prepared in life, it teaches skills. Students almost break with IB in that it is that difficult --- the late nights, the constraint pressure, the work load, the expectation, and the stress.

In response to the issue of academic credit deserved for completing the IB diploma program, both schools identified this as their biggest frustration. For sure these students deserve more credit. IB curriculum is equal to AP or better; it correlates strongly with college success. Students coming into the program are advised that some

schools offer amazing credit, some up to 30 credit hours, however, they should not do the program because of the credit in that it is not enough credit for all of the hard work they will put into the program. Statistics in college show IB students outperform all others in first year GPA, years to graduate (even if the student gets credit, they are double majoring or doing study abroad), and the graduation rate is 100% for IB versus 55% for all other.

Education at the universities as it relates to IB is lacking. When students tour the schools or call the Admissions office, sometimes the response is “Why are you doing IB versus AP? We give credit for AP.” People need to be educated. Some universities have done their research in looking at the IB program and are realizing what amazing students they are finding. OSU and OU both recognize HL credit which is a two-year study in the subject. However, a student has to score a 6 or 7 on the exam, which is almost perfect. A score of a 4 on these exams is a phenomenal student. SL is the same as AP, both one year of study in the subject, yet only AP credit is offered. It is not a reflection of the students talents, the students are ready and have the skills. Both schools stated that SL credit is key for change. Our state is losing out on our best students, because the students are savvy, the parents shop around, and out-of-state universities who offer full IB credit (HL and SL) are getting these students. The push has to start somewhere. If universities would offer more credit, more high schools would look at the IB program, and there would be more focus on funding. It is a domino effect. IB is growing so rapidly in the United States that if Oklahoma universities would reconsider their policies, Oklahoma would not only be retaining their top tier students, they would most likely be receiving other states top tier students too.

Review of Findings

This section is broken down into several groupings to assist with answering the overall research question and sub questions.

Primary research question: *Are Oklahoma high school students, who complete the International Baccalaureate Diploma Program (IBDP) receiving the academic credit deserved for the efforts put forth to complete the program?* (Academic Credit)

Sub questions include:

1. What do Oklahoma students perceive as the benefits of the International Baccalaureate Diploma Program (IBDP)? (Benefits)
2. What type of students do Oklahoma universities look for in their recruitment areas and what incentives do they offer? (Recruitment)
3. Why do Oklahoma high schools want to offer the International Baccalaureate Diploma Program, and how do they recruit students? (High School IB Program)
4. What types of IB programs are currently offered in Oklahoma? (Describe the IB programs)

Benefits of IB

Student Perceptions: There were several questions in the Student Questionnaire that related back to the perceptions students had about the IB program and the benefits they received.

- The students all perceived that the IB program is very hard, and challenging, however, they also perceived that the heavy workload and rigidness of the program would pay-off for them in the long run.
- The students perceived the IB program was preparing them for college.
- The students perceived that were being developed as better, well-rounded individuals.

The student questionnaire also offered a qualitative approach that allowed the students to comment on some of the benefits they perceived from the program. Table 4-2E.1 – 4.2E.4 outlined these benefits. A summary of these findings are paraphrased below in no apparent order.

Benefits

- Scholarship or College Credit
- Preparation for college.
- Knowledge and experience; high quality education.
- Coping with stress and learning - “who I am.”
- Pride in achievement - “feel proud of myself.”
- Building Work Ethics, Study Habits

- Ability to Write and Research.
- Time management skills.
- College Prep – “Allows you to start learning before college.”
- The depth and breadth of the Program
- The feeling of success, the prestige of the Program
- Creation of the well-rounded student, knowledge in many areas
- Acceptance in high-rated colleges / universities
- Unlike AP, IB creates well-rounded students who must have advanced knowledge in all areas as well as dedicating time outside of school to community works.

University Perceptions: During the university interviews, each Interviewee described his or her thoughts or perceptions of the IBDP. Those thoughts are summarized below.

- IB is the best program to prepare a student for college
- IB prepares students for all classes and subjects, not just one or two
- IB requires the course to be taken before the student can sit for the exam
- IB requires internal assessments, like mini thesis’, in each subject area
- IB asked students to prove what they know; the student has to understand how to use what they have learned
- Requires students to step outside their comfort zone
- IB teaches students how to write
- IB teaches research skills as seen with the extended essay

- IB teaches learning skills, students learn how to study

High School IB Program: The High School Interviewees who represented the IB schools expressed their thoughts related to the IB program. Their perceptions of the IB program are listed below.

- IB, in general, is harder than AP
- IB requires internal assessments, special projects, extra papers, and extra presentation including oral assessments
- Material covered in AP is just as difficult as IB, but AP does not expect students to personally do as much with it
 - Example given: History – Instead of asking students to know the dates, battles, places, they are asked to explain what caused the battle, what was learned from the battle, if there has been similar battles since then, whether or not history is repeating itself. IB focuses the student on thinking and analyzing what they have learned.
- The IB diploma forces strong Math and Science skills
- IB spells out the level of detail, the breadth, the depth, and defines for a teacher actually what needs to be covered. With AP, teachers do have to submit a syllabus for approval; however, it is high level and it does not detail how the teacher will teach the students. AP varies from school to school because of this. With IB there is no variation of teaching

- Students of IB invest wholly in the programmatic approach to developing themselves
- With IB there is no “lay-down” period; the student’s Senior year is the ultimate climatic experience of the overall program
- The students will almost break during IB. It is that difficult because of the late nights, the stress, and the workload; however, afterwards they have so much more pride in themselves and have such better learning skills. These students believe they can accomplish anything.
- The program is challenging and stressful, but the end reward is so great
- IB pre-plans for the students all things needed to be prepared for life

Summary of Benefits

From the findings in this study, the IB program is found to be a very rigorous, challenging program that prepares students both for college and life. The program teaches students skills such as research, writing, and communication. It aids in learning to deal with stress, learning how to study, and getting over those hurdles that will be found in both college and life in general. The students, for the most part, are aware of the difficulty of the program, and yet realize that being part of such an amazing program will benefit them so much with their future. Colleges tend to like IB students. These students are prepared for college, have the skills necessary to succeed, and are ready for the universities to further their knowledge. The high schools who sponsor this program believe they are offering universities and Oklahoma top tier students. They are providing

students who are motivated, willing to study and work hard, and students who are well rounded in most subject areas. Students who have an analytical ability to analyze a situation or problem are sought after in the industry. The earlier students are exposed to this program, the better their ability will be. These students are not only doing good in school, but they are leaders who are serving their communities too.

Recruitment of Students

Student Perceptions: From the students perspective, the most common theme was that the IB program would prepare them for college, and that they would have a much better chance of being accepted at their first choice school because of the program.

Basic Recruitment Policies of Universities: Recruitment of students was one of the areas discussed with Interviewees from the Universities. The findings are included below.

- Basic minimum requirements are published on University websites
 - At a minimum the requirements included:
 - Minimum ACT / SAT score
 - Minimum GPA
 - Writing ability
 - Recommendations
 - Basic preferences include:
 - Honor students, or those who are prepared for college

- Students who have learning skills already, those students who can tackle the hurdles
 - Students with extracurricular activities, not just school related
- Each university appeared to be using a holistic approach which looked at the following:
 - ACT/SAT scores, GPA, test scores, ranking, school, hobbies, extra activities, etc.
 - Prefer students who will be successful in college
 - Can definitely tell students who have taken advanced academic programs
 - Prefer to find students who will be successful in all areas, have had advanced academics in multiple areas

High School IB Recruitment: The Interviewees with the high school IB schools discussed recruitment of students coming into their program. The two schools interviewed differed on the grades and programs offered. However, their end goals were very much the same. Common preferences are listed below.

- Students who are willing to learn
- Students willing to go the extra mile
- Motivated students
- Student admission by application only
- Use of a rubric to accept students

- Students who are not absent much, good grades, no suspension, and teacher recommendation
- Students with hobbies and other interests
- Students recruited from their own districts only

Summary of Recruitment

Throughout the findings, a common theme has been high schools and universities want the best students. These are students who are motivated, want a challenge, want to push themselves, have ambitions in life, and believe in themselves. The IB schools are looking for those students who want to keep learning, want to excel early in their life, and are not afraid of a challenge. The IB schools know their program is challenging and difficult, therefore, they are looking for those students who can conquer this challenge. The universities like to see honor students because this is where they find the majority of students who will be able to make it through college. The universities tend to lean toward AP students since this is where they are most familiar. Those universities that understand IB tend to put these students at the top of their list even over AP students.

IB Programs

Currently in Oklahoma, there are two high schools which offer the IBDP. To understand the similarities and differences between these schools, each school is addressed separately and represented as school 1 and school 2

School 1:

- This school offers 4 academic programs
 - IB / IBDP
 - AP
 - Visual Performing
 - Regular
- School works with other middle schools to start the middle-years program
- School is actually a ninth through twelfth grade program

School 2:

- The school offers only two choices for students
 - IBDP
 - Visual Performing
- School includes a middle school program and contains sixth through twelfth grades

Summary of IB Programs in Oklahoma

Within Oklahoma, there are only two high schools that offer the rigorous IB program. These two schools have their own uniqueness within them which in their own eyes seems to work best for them. They both agree that starting in the middle school years is extremely important to the success of those students who will earn the IBDP. Both of the schools offer not only academic but an additional offering of visual performing arts within their schools. Both schools look at defining the well-rounded student who has been exposed to multiple areas and understanding how to overcome their weaknesses. The schools are producing Oklahoma's top students.

Academic Credit Offered

In Oklahoma the state Board of Regents does require universities to accept IB HL credit. From that point forth, any other consideration is left up to the governing universities. This difference varies greatly within the State and to other out-of-state universities in surrounding states. The actual credit currently offered by universities is outlined in APPENDIX H. As part of this study, this question was discussed with each of the groups researched. Each of their perceptions as to the academic credit offered is outlined by each group below. During all three testing phases, this subject became very emotional for the students as well as the university and high school interviewees. Opinions appeared to be very strong.

Student Perceptions: The students perceptions of the academic credit offered were viewed in two separate ways.

The first method asked question #17 in the questionnaire, “I feel that Oklahoma universities are offering the academic credit deserved for completing the IB diploma program”. The outcome of this question, 39% of the population strongly disagreed with the question, while another 30% disagreed with it. Only 6% of the population though that the academic credit offered was appropriate. The remainder was neutral to the subject.

The second manner was qualitative open-ended questions at the end of the survey. In addition to asking about the benefits that are offered, the questionnaire also addressed why the student selected IB and asked for additional comments. Findings in these two areas as it relates to academic credit are listed below.

- I started the program because I thought it would help me get into college
- I thought I would get more credit in college, I didn't realize Oklahoma universities perceptions and credit offering until it was too late
- It's the best school for an academic education
- Thought it would get me a lot of college credit
- A Scholarship
- If the universities in Oklahoma offered more credit it would have been more worth all the hard work
- With the credit Oklahoma offers currently, the most I can probably get is 3 class credits. (9 hours) for my HL; All my work in SL gets nothing (zero)

which is another 5 classes I had to take. These SL were hard classes;
Out-of-state universities look at SL, why does Oklahoma not consider it?

- I don't feel like Oklahoma really takes the IB program as seriously as the rest of the world.
- I wish Oklahoma would recognize all the hard work I went through
- IB is harder to complete than AP classes yet not reward from colleges

Universities Perceptions: Within the interviews conducted with the university admissions, each of the participants were asked the question, "Do IB students in Oklahoma get the credit for the rigorous program they complete". Their responses to this question are listed below.

- Agree that additional credit should be offered
- The university does not see many IB students
- There really has not been a push for us to offer additional credit above HL
- Majority of IB students are international
- Believes IB is about the learning experience, not about the credit
- Agree if the university offered more credit, than they would see more IB students
- Want students who are prepared, however, the university wants their time with them too
- Students and teachers have to believe that it is okay to study more, to read more, to write more, and that there is a reason to do it.

- For Oklahoma to support the IB program, culture has to change
- SL is key to starting this change, getting Oklahoma to recognize SL hours
- Education of the IB program and what it is all about, awareness has to occur

High School IB Perceptions: In interviewing the IB high schools, the respondents were asked the following question concerning the academic credit for IB, “In looking at the IB program – do you believe students should receive more college credit?”. Their comments are as follows:

- It is their schools biggest frustration
- For sure students should receive more credit for this rigorous program
- They advise students coming in, some schools give amazing credit and understand the IB program, some up to thirty hours; however, they tell students, do not do the program because of the credit, it is not enough to get you through the program
- It is sad when a student in the middle of the program decides to go to OSU or OU and they look at the credit offered and say “Why am I doing this?”
- SL is one year of a given subject, just like AP; however, Oklahoma universities recognize all AP classes and only a couple look at SL, why?
- The reasons thought by the high schools for the credit not given are two:
 - Deeper saturation of AP schools

- People tend to believe IB is a world curriculum versus a US curriculum – Again, they do not understand the program or the benefits it brings.
- It is not a reflection of the students talents, these students are more than ready, but sometimes the students feel bad that the universities do not believe they did enough, that they are not as good as AP students
- Most IB students receive good scholarships by the nature of they are good students
- The push has to start somewhere. If our universities would offer more credit, than more high schools would look at IB program. It is a domino effect.
- Our state is losing out on these top tier students, because kids are savvy, parents shop around, and out-of-state universities who offer this credit are getting these students.
- IB is growing so fast in the U.S. that if Oklahoma universities would reconsider their policies, Oklahoma would retain these amazing kids plus the state would most likely be receiving similar kids from other states.

Summary of the Academic Credit Offered by Universities

Through the research of this study, it appears that all three groups believe the credit offered by Oklahoma universities is not enough for completing the IB program. Education and awareness of the programs needs to occur. Students are not feeling valued for completing the IBDP. Admissions offices in some cases are not aware of the program

or what it offers. Accepting SL credit at the universities is key. Culture in Oklahoma has to change.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The findings of this research study provided a snapshot of the perceptions and benefits of the International Baccalaureate Diploma Program in Oklahoma. As Oklahoma grows in technical markets the need for new Science, Technology, Engineering and Math (STEM) educated individuals will continue to increase and the need for advanced academic students will rise with it. Oklahoma must begin assessing how they view these academic markets and the programs offered by state schools and universities in educating and developing students for the future Oklahoma technical market. In a review of advanced academic programs in Oklahoma, the most common programs covered are Advanced Placement (AP) and International Baccalaureate (IB), both of which provide accelerated coursework and/or college credit for academically advanced students. This study reviewed two academic programs, analyzed the differences; and examined recruitment policies of Oklahoma's major universities pertaining to students who pursue advanced programs. The study emphasized the

International Baccalaureate Diploma Program, which is very small in Oklahoma, to better understand the benefits of the program, the recruitment needs, the assessment of Oklahoma's IB programs, and whether or not universities are offering the credit deserved for the rigorous IB program.

Problem

As outlined in the introduction, the primary problem addressed in this study was that many Oklahoma universities are not recognizing the IB diploma and offering incentives for students to complete the program. Oklahoma universities voice their acceptance of the IB program; but in most cases, recognize only HL hours - treating HL the same as the AP program, and not accepting SL hours at all.

Review of Questions

This section is broken down into several groupings to assist with answering the overall research question and sub questions.

Primary research question: *Are Oklahoma high school students, who complete the International Baccalaureate Diploma Program (IBDP) receiving the academic credit deserved for the efforts put forth to complete the program?* (Academic Credit)

Through the research of this study, it appears that all three groups believe the credit offered by Oklahoma universities is not enough for completing the IB program. Education and awareness of the programs needs to occur. Students are not feeling valued for completing the IBDP. Admissions offices in some cases

are not aware of the program or what it offers. Accepting SL credit at the universities is key. Culture in Oklahoma has to change.

Sub questions include:

5. What do Oklahoma students perceive as the benefits of the International Baccalaureate Diploma Program (IBDP)? (Benefits)

From the findings in this study, the IB program is found to be a very rigorous, challenging program that prepares students both for college and life. The program teaches students skills such as research, writing, and communication. It aids in learning to deal with stress, learning how to study, and getting over those hurdles that will be found in both college and life in general. The students, for the most part, are aware of the difficulty of the program, and yet realize that being part of such an amazing program will benefit them so much with their future. Colleges tend to like IB students. These students are prepared for college, have the skills necessary to succeed, and are ready for the universities to further their knowledge. The high schools who sponsor this program believe they are offering universities and Oklahoma top tier students. They are providing students who are motivated, willing to study and work hard, and students who are well rounded in most subject areas. Students who have an analytical ability to analyze a situation or problem are sought after in the industry. The earlier students are exposed to this program, the better their ability will be. These students are not only doing good in school, but they are leaders who are serving their communities too.

6. What type of students do Oklahoma universities look for in their recruitment areas and what incentives do they offer? (Recruitment) and
7. Why do Oklahoma high schools want to offer the International Baccalaureate Diploma Program, and how do they recruit students? (Recruitment)

Throughout the findings, a common theme has been high schools and universities want the best students. These are students who are motivated, want a challenge, want to push themselves, have ambitions in life, and believe in themselves. The IB schools are looking for those students who want to keep learning, want to excel early in their life, and are not afraid of a challenge. The IB schools know their program is challenging and difficult, therefore, they are looking for those students who can conquer this challenge. The universities like to see honor students because this is where they find the majority of students who will be able to make it through college. The universities tend to lean toward AP students since this is where they are most familiar. Those universities that understand IB tend to put these students at the top of their list even over AP students.

8. What types of IB programs are currently offered in Oklahoma? (Describe the IB programs)

Within Oklahoma, there are only two high schools that offer the rigorous IB program. These two schools have their own uniqueness within them which in their own eyes seems to work best for them. They both agree

that starting in the middle school years is extremely important to the success of those students who will earn the IBDP. Both of the schools offer not only academic but an additional offering of visual performing arts within their schools. Both schools look at defining the well-rounded student who has been exposed to multiple areas and understanding how to overcome their weaknesses. The schools are producing Oklahoma's top students. Within Oklahoma, there are only two high schools that offer the rigorous IB program. These two schools have their own uniqueness within them which in their own eyes seems to work best for them. They both agree that starting in the middle school years is extremely important to the success of those students who will earn the IBDP. Both of the schools offer not only academic but an additional offering of visual performing arts within their schools. Both schools look at defining the well-rounded student who has been exposed to multiple areas and understanding how to overcome their weaknesses. The schools are producing Oklahoma's top students.

Conclusions

1. Oklahoma is no doubt losing some of its best students. Research shows that where students attend college is most of the time where they will enter the workforce. By losing students, Oklahoma is losing valuable professionals in an already inadequate workforce.
2. Oklahoma has two IB schools; they should at least retain those students with better incentives offered not only by improved Oklahoma recruitment and credit policies of Oklahoma universities but by all of the stakeholders including industry incentives. As Oklahoma grows technically, more schools like Classen SAS and Booker T Washington are going to be needed.
3. Evidence shows the IB program is producing well rounded, analytical students who have good study skills, learning abilities, and can get through those hurdles. Those students are just one example of potentially efficient resources which already exist in the state that need to be tapped to meet state needs. Better recognition and retention of those students is imperative to the health of Oklahoma.

Recommendations

After analyzing all the findings throughout this research study, the following recommendations have been outlined.

1. An emphasis on education and awareness of IBDP programs needs to be made to include all stakeholders in Oklahoma. A concerted effort to foster to plan for improved understanding of the IBDP program and its potential impact on state academic needs is imperative. That understanding and awareness needs to occur in numerous areas including at the university level, state level, and Oklahoma, in general. Many people tend to believe it is, because of the name, “International,” that the program is a global teaching. The actual program is not teaching really any different material than AP teaches; however, the method in which it is taught is much different. AP allows for many variations of teaching, AP material is inconsistently taught across the state. IB, however, by the nature of how the teacher has to teach, is consistent. The IB program is teaching the same AP material but instead of memorizing the material, IB is teaching how to adapt the material and apply it. This is what other countries are teaching their future leaders and an understanding of that emphasis is important to Oklahoma stakeholders.
2. Because of already identified educational deficiencies in Oklahoma’s academic pipeline vital to support its industries, it is recommended that the state of Oklahoma begin by enhancing its already existing programs

for advanced students. The IB program is a great place to start. Some of this could begin with a special Task Force of stakeholder assigned to plan and implement procedures for improved awareness and understanding of the program, the benefits it offers to the state, its industries and its students and the actions that can be taken to implement changes in recruitment policies of major universities. Though this awareness and subsequent program enhancements, not only students would feel valued for completing the program; but also high schools would see the support and benefit as well. Universities would feel pressure to support and retain these top tier students. Industry would be receiving more talented future employees.

3. Consideration should be given to the focus of the IB program which could possibly be limited to ninth through twelfth grade. Other middle school programs need to step up and engage with the IB Middle Years programs to better prepare students for the IB program.
4. A system for encouraging schools to work together and support the end goals is needed. The IB program is not necessarily supported among its District schools.
5. More focus needs to be placed on the actual experience and background as well as the credentials of the Teachers related to the curriculum they are assigned to teach. Universities and corporations / industry need to assist in the deficient areas to identify individuals who really understand

Physics to assist in teaching Physics. The schools cannot do it all by themselves.

6. Joint collaborative efforts and partnerships between schools, universities, regents, and industry are critical as they join together and help each other. All appear to be on their own track rather than collaborating to find common solutions. Workshops, symposiums, industry days, Regents Days and Career Days are all examples of opportunities for opening collaborative discussions which have to start somewhere. Some of these are offered but not with all the players. Industry and government entities should consider joining forces to better utilize such existing talent in the state in specific industries. In 2010 an Oklahoma Aerospace Skills Panel was formed by the Oklahoma Aeronautics Commission. The Panel crossed various levels of academic and industry organizations to identify educational gaps in the industry and potential resources available to fill those gaps. These kinds of organizations could prove valuable in enhancing existing programs to better match Oklahoma academic needs to student career and educational needs.
7. The state should evaluate the concept of regional schools to better utilize the money to support education and the learning concepts offered
8. Consideration should be given to funding for the IB program through state funding not District. This would allow for out-of-district students to benefit from the programs. In addition, maybe the IB schools should be

recognized as state schools similar to the Oklahoma School of Math and Science.

9. Additional academic credit needs to be addressed. Students are pursuing this rigorous program and not being recognized for it. However, the state universities do recognize AP, which in most circumstances is becoming a normal standard of learning. IB is a more advanced level of learning. SL credit should be recognized and accepted in Oklahoma universities the same as AP is accepted. HL is already recognized. Culture in Oklahoma has to change.
10. Future research on this subject could explore the comparable ACT and SAT scores from those students who have taken IB with those who have not. There are pockets of excellence students in most schools. However, the focus is how you enlarge that pocket. Another interesting study could be in analyzing test scores to school population and compare those ratios.

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APPENDICES

APPENDIX A

IRB FORM

Oklahoma State University Institutional Review Board

Date Friday, December 02, 2011 Protocol Expires: 12/6/2011
IRB Application No: ED1089
Proposal Title: International Baccalaureate Degree Programs in Oklahoma, A Mixed Methods Study

Reviewed and Expedited
Processed as: Continuation

Status Recommended by Reviewer(s) Approved

Principal Investigator(s)

Susan J. Hood Mary Kutz
1150 S. Douglas 6108 Winfield Dr.
Guthrie, OK 73044 Okla. City, OK 73162

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Approved for continued analysis of identifiable data only. Should any additional data collection be necessary or desired, a modification must be submitted to the IRB for review and approval prior to implementation.

Signature: 
Shelia Kennison, Chair, Institutional Review Board

Friday, December 02, 2011
Date

APPENDIX B

OKC RESEARCH APPROVAL



Oklahoma City Public Schools
Planning Research and Evaluation Department
413 NW 12th Street, Oklahoma City, OK 73103
Phone: (405) 297-6776 Fax: (405) 297-6723

Richard Weeter, Ph.D.

email: rdweeter@okcps.org

Tuesday, December 07, 2010

Ms. Susan Hood
1150 S Douglas
Guthrie, OK 73044

Dear Ms. Hood:

Your research project, "International Baccalaureate Degree Programs in Oklahoma" was approved by the district's ad hoc review committee.

As we understand it, you would like to survey 90 to 120 Classen IB students in the class of 2011 and the class of 2014. According to you, the survey should take no longer than 5 to 10 minutes to complete. Students and parents will participate in this research only under conditions of informed consent. You would also like to interview Classen administrators at their convenience.

On the basis of this district-level approval you have permission to contact the principal, Ms. Harris, at Classen. She will, of course, be able to determine whether she wishes her school to participate and may elect to discontinue *at any point*.

All data collected must follow the guidelines, conditions, and timelines described in your proposal. Should you determine that you require any substantive changes in these procedures, please contact me at the number above. Good luck in collecting your data.

Sincerely,

Richard Weeter, Ph.D

APPENDIX C

PARTICIPATION LETTER

HIGH SCHOOL

GROUPS I – 2009 Graduates

Email

Dear _____

Consent and Survey Link: <http://www.conti-creations.com/Hood.htm>.

I am currently working on my doctoral dissertation in the College of Adult Education, Applied Studies Aviation and Space Education, Oklahoma State University, where I am conducting research on the International Baccalaureate Diploma Programs (IBDP) in Oklahoma. You have been selected to participate in the study by virtue of being a graduate and key contributor to the International Baccalaureate program at Classen School of Advanced Studies (CSAS). I will be researching a number post graduate and current student from CSAS to obtain their unique perspectives on this important program. I plan to conduct this study through the form of a questionnaire. These questionnaires should not contain any identification or link back to you.

The purpose of this research is to explore the perceptions of International Baccalaureate Diploma Program (IDBP) students and other stakeholders regarding the success of the program as it relates to the Oklahoma Science, Technology, Engineering, and Mathematics (STEM) project. In addition, the study will address the perceptions of Oklahoma university officials regarding the need to continue or expand the program in the state and the options for improved support.

I am surveying you regarding your experiences in the International Baccalaureate Diploma Program. The **attached link** will take you to the survey. The questionnaire consists of 21 Likert Scale questions and seven open ended questions. The process should take approximately **5 to 10 minutes** to complete. No names or ID's are included on the questionnaire. Once you click the submit button, the survey will be complete. After the survey is submitted, you will no longer be needed for further study.

The Oklahoma State University Institutional Review Board has the authority to inspect consent records and data files to assure compliance with approved procedures. Once the questionnaires data has been analyzed, all original questionnaire forms will be destroyed. A copy of the final report will be available to you if you so desire, prior to submission to the graduate college. There are no known risks associated with this project that are greater than those ordinarily encountered in daily life.

Should you have questions concerning this research, you can contact Susan Hood, 405-823-5576, susan.j.hood@okstate.edu or Dr. Mary Kutz, OSU-OKC, 6420 S.E. 15th St, Tom Steed Bldg, Midwest City, OK 73110, 405-733-7940, or mary.kutz@okstate.edu. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

You are free to decline to participate, and you are free to stop the survey or withdraw from the study at any time. No penalty exists for withdrawing your participation. Feel free to ask any questions at any time about the nature of the research activity and the methods I am using. Your suggestions and concerns are important to me. Please contact me at the phone and / or email provided above.

Thank you in advance for your cooperation regarding my request for assistance with this research project.

Sincerely,

Susan J. Hood

Consent and Survey Link: <http://www.conti-creations.com/Hood.htm>.

APPENDIX D

CONSENT FROM PARENTS

HIGH SCHOOL

GROUPS II and III – 2011 and 2014 Graduates

Email

To the Parents of _____:

Please forward to your parents if received by the student.

I am currently working on my doctoral dissertation in the College of Adult Education, Applied Studies Aviation and Space Education, Oklahoma State University, where I am conducting research on the International Baccalaureate Diploma Programs (IBDP) in Oklahoma. Your child, _____, has been selected to participate in the study by virtue of being a key contributor to the International Baccalaureate program at Classen School of Advanced Studies (CSAS). I will be researching a number of students from CSAS to obtain their unique perspectives on this important program. With your consent, I plan to conduct this study through an electronic questionnaire during the English period your child has during the spring 2011 semester. This questionnaire will not contain any identification or link to your child.

The purpose of this research is to explore the perceptions of International Baccalaureate Diploma Program (IBDP) students and other stakeholders regarding the success of the program as it relates to the Oklahoma Science, Technology, Engineering, and Mathematics (STEM) project. In addition, the study will address the perceptions of Oklahoma university officials regarding the need to continue or expand the program in the state and the options for improved support.

The research will be conducted using the following procedures: The researcher will survey your child regarding their experiences in the International Baccalaureate Diploma Program. The questionnaire consists of 21 Likert Scale questions and seven open ended questions. The questionnaire will take place electronically. The process should take approximately 5 to 10 minutes to complete. No names or ID is included on the questionnaire. Once the student clicks submit, the survey will be complete. These students will no longer be needed for further study.

Attached is a hard copy of the assent form and survey questionnaire for you to review and understand what will be asked of your child. Upon your consent, your child will be asked to complete the assent form and survey electronically during a pre-set time in English Spring 2011. The Oklahoma State University Institutional Review Board has the authority to inspect consent records and data files to assure compliance with approved

procedures. Once the questionnaires data has been analyzed, all original questionnaire forms will be destroyed. A copy of the final report will be available to you if you so desire, prior to submission to the graduate college. There are no known risks associated with this project that are greater than those ordinarily encountered in daily life.

Should you have questions concerning this research, you can contact Susan Hood, 405-823-5576, susan.j.hood@okstate.edu or Dr. Mary Kutz, OSU-OKC, 6420 S.E. 15th St, Tom Steed Bldg, Midwest City, OK 73110, 405-733-7940, or mary.kutz@okstate.edu. If you have questions about your rights as a research volunteer, you may contact Dr. Shelia Kennison, IRB Chair, 219 Cordell North, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu.

You are free to decline to allow your child to participate or they can decline themselves. You are free to have them stop the survey or withdraw from the study at any time. No penalty exists for withdrawing their participation. Feel free to ask any questions at any time about the nature of the research activity and the methods I am using. Your suggestions and concerns are important to me. Please contact me at the phone and / or email provided above.

Thank you in advance for your cooperation regarding my request for assistance with this research project.

Sincerely,

Susan J. Hood

For parental consent, **reply to this email or susan.j.hood@okstate.edu** to indicate your willingness to allow your child to participate in this study. Please include your child's name in the reply. Thank you.

APPENDIX E

ASSENT FORM

HIGH SCHOOL

GROUPS II and III – 2011 and 2014 Graduates

ASSENT FORM FOR 2011 AND 2014 IBDP STUDENTS
CLASSEN SCHOOL OF ADVANCE STUDIES

Dear Student,

We are interested in learning about your perception of the International Baccalaureate Diploma Program. In order to understand this, we would like you to fill a questionnaire. Your parent/guardian is aware of this project.

Please understand that you do not have to do this. You do not have to answer any questions that you do not want to. You may stop at any time and go back to your classroom.

Your name will not be on the forms you complete, and the electronic survey will not keep track of who you are. This consent form will be the other document, which will be retained with your consent. If you have any questions with regard to the request, please contact me at susan.j.hood@okstate.edu or by phone at (405)823-5576. Thank you for your help.

Sincerely,

Susan J Hood

Graduate Student Oklahoma State University

By clicking on the submit button you are giving your consent to participate in this survey.

SUMBIT

APPENDIX F

SCRIPT FOR
HIGH SCHOOL
GROUPS II, AND III

**SCRIPT FOR 2011 AND 2014 GRADUATES
CSAS INTERNATIONAL BACCALAUREATE PROGRAM STUDENTS**

Hello, my name is Susan Hood and I am currently working on my doctoral dissertation in the College of Adult Education, Applied Studies Aviation and Space Education, Oklahoma State University, where I am conducting research on the International Baccalaureate Diploma Programs (IBDP) in Oklahoma. Some of you might recognize me as a mother of students here at Classen. I have two daughters who attend school here.

I am researching IB major students who plan to graduate in 2011 or 2014. In addition, I am also surveying post graduates from 2009. I want to obtain your perspectives on this important program. I plan to conduct this study through the form of an online questionnaire. These questionnaires should not contain any identification or link back to you. It will take approximately 5 - 10 minutes to complete.

Before we start, I want to read off the list of students who I have consent from your parents to participate in this study. If you are not included on this list and would like to participate, I will need to get consent from your parents. They should have received an email, but in case that did not happen, I have a sheet that you can take home to them, get their signature, and bring back tomorrow, or contact me directly. For those on the list, I'd like you to come with me. Your parents have already been contacted and provided their parental consent.

The purpose of this research is to explore the perceptions of International Baccalaureate Diploma Program (IBDP) students and other stakeholders regarding the success of the program as it relates to the Oklahoma Science, Technology, Engineering, and Mathematics (STEM) project. In addition, the study will address the perceptions of Oklahoma university officials regarding the need to continue or expand the program in the state and the options for improved support.

If you are willing to consent to take this online survey, I have an assent form that I will need you to read and sign. After I receive these back, I have several computers in this room. Just click on the link currently on the screen and it will take you to the survey. When finished, click the submit button and you are done. You can have a set until everyone has completed the survey.

As one last item before we get started, the Oklahoma State University Institutional Review Board has the authority to inspect consent records and data files to assure compliance with approved procedures. A copy of the final report will be available to you if you so desire, prior to submission to the graduate college. There are no known risks associated with this project that are greater than those ordinarily encountered in daily life.

If you have any questions about the project or about me, you may contact me at 405.823.5576. Thank you in advance for your cooperation regarding my request for assistance with this research project.

APPENDIX G

ONLINE

SURVEY

QUESTIONNAIRE

Student Questionnaire International Baccalaureate (IB) Diploma Program

Directions: In thinking about your decision to complete or pursue the International Baccalaureate (IB) Diploma Program, read each statement carefully and choose only one that best describes your feeling:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel the IB program is a good fit, academically, for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I find the IB program hard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I find the IB program very stressful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I feel the hard work and stress of this program have or will pay off in the end.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I find the IB program challenging.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6. I believe I will be or have been rewarded for taking the IB program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I believe the workload associated with the IB program is necessary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. In the end, I believe the IB program has been or will be worth all the hard work and effort I put into it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I would rather have taken another advanced academic program such as Advanced Placement (AP).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I feel that I missed out on some of my high school social life because of participating in the IB program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11. I feel the IB program is essential in meeting the needs to better prepare me for college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I believe that the IB program's success is due to the quality of its teachers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I feel it is a combination of both the teacher and the program that makes the program successful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. My decision to pursue or complete the IB program was influenced by someone other than myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I believe the State of Oklahoma is supporting the IB program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
16. I would like to see more high schools					

offer the IB diploma program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. I feel that Oklahoma universities are offering the academic credit deserved for completing the IB diploma program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I feel the academic credit offered by a given university for my work in the IB program has or will influence were I go to college.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. I feel that out-of-state universities are offering more academic credit for completing the IB diploma program than Oklahoma universities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I would encourage other students to complete the IB program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Complete the following items:

1. List your top three (3) career paths you would like to pursue.

First Choice: _____

Second Choice: _____

Third Choice: _____

2. List your top three (3) college/university choices.

First Choice: _____

Second Choice: _____

Third Choice: _____

3. Why did you choose the IB Diploma program?

4. What do you feel would be the biggest benefit to completing the IB Diploma program?

5. List your ACT score if you have taken the test? _____

6. List your SAT score if you have taken the test? _____

7. Is there anything you would like to add associated with the IB diploma program?

About You

The following information will help us better understand the information that you provide us.

Gender:

- Male
- Female

Your Age:

Race:

- African American
- Asian
- Hispanic
- Native American
- White
- Other

Current Level of Education (Please select one):

- 2009 Graduate
- 2011 Graduate
- 2014 Graduate



Thank you so much for taking time out of your busy day to assist with this study. Please click on **Submit** to send your responses.

Submit



APPENDIX H

PARTICIPATION

LETTER

UNIVERSITY

ADMISSIONS

OFFICE

PARTICIPATION LETTER

Dear Mr./Ms. _____

I am currently working on my doctoral dissertation in the College of Adult Education, Applied Studies Aviation and Space Education, Oklahoma State University, where I am conducting research on the International Baccalaureate Diploma Programs (IBDP) in Oklahoma. You have been chosen to participate in the study by virtue of being a member of admission's office for a key Oklahoma university. I will be interviewing a number of stakeholders from several Oklahoma universities to obtain their unique perspectives on this important issue. I would appreciate the opportunity to interview you in person (or by phone) sometime during the month of _____. I plan to conduct this part of study through the form of an interview. In addition, I will be studying students who have completed and are currently working on the IBDP.

The purpose of this research is to understanding the perception of International Baccalaureate Diploma Program in Oklahoma, understand the benefits of this program as it relates to the Oklahoma Science, Technology, Engineering, and Mathematics (STEM) project, and acknowledge the benefits and support Oklahoma universities see with continuing or widening this program in the state. Your assistance as a member of the IB program will aid in the development of a balanced approach to understanding the IBDP and the benefits it offers to Oklahoma education.

Attached are samples of the questions that will be used during the interview lasting approximately one hour. With your permission, an audiotape will be made of the interview to aid in the analysis of the data. Transcriptions of the tapes and notes will be identified by number only. The Oklahoma State University Institutional Review Board has the authority to inspect consent records and data files to assure compliance with approved procedures. Once the tapes are transcribed and the data analyzed, all tapes will be destroyed to protect confidentiality of the person being interviewed. A copy of the final report will be presented to you if you so desire, prior to submission to the graduate college. There are no known risks associated with this project that are greater than those ordinarily encountered in daily life.

I will work through the counselors at CSAS to communicate with you. In the meantime, if you have any questions about the project or about me, you may contact me at 405.823.5576.

Thank you in advance for your cooperation regarding my request for assistance with this research project.

Sincerely,

Susan J. Hood

APPENDIX I

INTERVIEW QUESTIONS

UNIVERSITY

ADMISSIONS

OFFICE

University Interview Questions

Name of University _____

State Funded or Privately Funded _____

Purpose of Interview: Doctoral student conducting research associated with Oklahoma's Advanced Academic Programs for High Schools, university perceptions of these programs, and the academic credit offered to them through the Universities and Colleges.

Comment: This interview is strictly voluntary and the information will be utilized in identifying the institutional name only. All other names and individuals will be held confidentially and shredded at the conclusion of the study. This interview will be taped; however, the tape will also be destroyed at the end of the study. Thank you in advance for your participation.

Begin Interview

- 1) What type of students do you like to see when recruiting?
- 2) Can you tell a difference with students who have completed Academic Advanced Programs versus regular high school programs? Explain.

- 3) What criteria do you use when looking for incoming students? Like test scores, community services hours, AP classes, etc.
- 4) How strong do you feel the Oklahoma High School programs are in Oklahoma?
- 5) Oklahoma legislation is focused on growing Science, Technology, Engineering, and Mathematics (STEM) education in the state. Have you seen a change in the students wanting to pursue STEM technical programs?
- 6) How do you feel Oklahoma is preparing their students for college, are they prepared as much as say kid from other states, countries?
- 7) In your opinion, what else could be done to better prepare our students for college?
- 8) Looking at advanced academic programs, our state currently has two primary focused programs. These included the AP (Advanced Placement) and IB (International Baccalaureate) Diploma Program.
 - a. Can you explain your perception of these programs?
 - b. Do you feel one better prepares students and how?
 - c. Do you feel one is harder than the other? Explain your reasons.
- 9) In looking at the at the IB Diploma program which includes intense courses in all areas of study including extended essay, and internal assessments, do you believe students should receive more college credit than just equivalent AP credit for receiving this diploma? Why or why not?

END OF INTERVIEW.

APPENDIX J

PARTICIPATION

LETTER

HIGH

SCHOOL

PRINCIPALS

PARTICIPATION LETTER

Dear Mr./Ms. _____

I am currently working on my doctoral dissertation in the College of Adult Education, Applied Studies Aviation and Space Education, Oklahoma State University, where I am conducting research on the International Baccalaureate Diploma Programs (IBDP) in Oklahoma. You have been chosen to participate in the study by virtue of being a member of Oklahoma high schools who sponsor the IBDP. I will be interviewing a number of stakeholders from several Oklahoma universities, high schools, and IBDP students to obtain their unique perspectives on this important issue. I would appreciate the opportunity to interview you in person (or by phone) sometime during the month of _____.

The purpose of this research is to understanding the perception of International Baccalaureate Diploma Program in Oklahoma, understand the benefits of this program as it relates to the Oklahoma Science, Technology, Engineering, and Mathematics (STEM) project, and acknowledge the benefits and support Oklahoma universities see with continuing or widening this program in the state. Your assistance as a member of the IB program will aid in the development of a balanced approach to understanding the IBDP and the benefits it offers to Oklahoma education.

Attached are samples of the questions that will be used during the interview lasting approximately one hour. With your permission, an audiotape will be made of the interview to aid in the analysis of the data. Transcriptions of the tapes and notes will be identified by number only. The Oklahoma State University Institutional Review Board has the authority to inspect consent records and data files to assure compliance with approved procedures. Once the tapes are transcribed and the data analyzed, all tapes will be destroyed to protect confidentiality of the person being interviewed. A copy of the final report will be presented to you if you so desire, prior to submission to the graduate college. There are no known risks associated with this project that are greater than those ordinarily encountered in daily life.

I will work through the counselors at CSAS to communicate with you. In the meantime, if you have any questions about the project or about me, you may contact me at 405.823.5576.

Thank you in advance for your cooperation regarding my request for assistance with this research project.

Sincerely,

Susan J. Hood

APPENDIX K

INTERVIEW QUESTIONS

HIGH

SCHOOL

PRINCIPALS

High School Interview Questions

Name of School _____

State Funded or Privately Funded _____

Purpose of Interview: Doctoral student conducting research associated with Oklahoma's Advanced Academic Programs for Oklahoma high schools, student's perceptions of these programs, and the academic credit offered to them through the Universities and Colleges. In addition, research is also being conducted at four Oklahoma Universities and two Oklahoma High Schools to assess the schools admissions into their programs, types of students they are looking for, and the academic credit offered to them.

Comment: This interview is strictly voluntary and the information will be utilized in identifying the institutional name only. All other names and individuals will be held confidential and shredded at the conclusion of the study. This interview will be taped; however, the tape will also be destroyed at the end of the study. Thank you in advance for your participation.

Begin Interview

- 1) Would you describe your advanced academic program?
- 2) What type of students do you like to see when recruiting for this program?
- 3) How do you recruit students for program?
- 4) What criteria do you use when looking for incoming students? Like test scores, references, etc.
- 5) How strong do you feel the Oklahoma High School programs are in Oklahoma with regards to advanced academic's and how do they compare to other surrounding state's programs?
- 6) Oklahoma legislation is focused on growing Science, Technology, Engineering, and Mathematics (STEM) education in the state. Have you seen a change in the students wanting to pursue STEM technical programs through your advanced academic program? How does this STEM interest compare with other programs you offer (non advanced academics)?
- 7) How do you feel Oklahoma is preparing their students for college as it relates to STEM areas? Are they prepared as much as say kid from other states, countries?
- 8) In your opinion, what else could be done to better prepare our children for college?
- 9) Looking at advanced academic programs, our state currently has two primary focused programs. These included the AP (Advanced Placement) and IB (International Baccalaureate) Diploma Program.
 - a. Can you explain your perception of these programs?

b. Do you feel one better prepares students and how?

c. Can you expand on the difficulty level of each programs?

10) In looking at the at the IB Diploma program which includes intense courses in all areas of study including extended essay, and internal assessments, do you believe students should receive more college credit from receiving the IB diploma? Why or why not?

END OF INTERVIEW.

VITA

Susan J. Hood

Candidate for the Degree of

Doctor of Education

Thesis: INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM IN
OKLAHOMA – A MIXED METHODS STUDY

Major Field: Applied Educational Studies, Aviation & Aerospace Option

Biographical:

Personal Data: Residence, Guthrie, Oklahoma

Education: Received a Bachelor of Science degree in Finance from Oklahoma State University, May 1987; Received a Master of Science Degree in Aviation and Space from Oklahoma State University in December 2008; Completed requirements for a Doctor of Education Degree in Applied Educational Studies with an Aviation & Aerospace Option, May 2012

Experience: The Boeing Company, Oklahoma City, Oklahoma
Manager from 2000 to present; Over twenty-five years of financial management experience working with U.S. Government managing over \$1B per year; Fifteen years of pricing, estimating, and negotiation experience; Over Fifteen years of financial planning and rate management experience; Business experience includes program management, earned value management, forecasting, government funding, and executive briefings and presentations.

Teaching Experience: Adjunct Professor at Oklahoma State University,
2010 to present

Name: Susan J. Hood

Date of Degree: May, 2012*

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM
(IBDP) IN OKLAHOMA – A MIXED METHODS STUDY

Pages in Study: 266

Candidate for the Degree of Doctor of Education

Major Field: Applied Educational Studies with an Emphasis on Aviation and Space
Science Options

Scope and Method of Study: As Oklahoma grows in technical markets, the need for science, technology, engineering, and mathematics (STEM) educated individuals will continue to increase. Our focus in aviation should be at focusing to attract students into STEM related fields, however, a stronger focus needs to be in retaining the top tier category of students and push them toward aviation and STEM. Top tier students are those students who are completing advanced academic programs such as Advanced Placement (AP) or International Baccalaureate (IB) Program. The focus of this study was to look at these advanced programs, especially the IB program in Oklahoma, and bring awareness of the program and assess the benefits of having this program in Oklahoma and the academic credit offered to students for completing the program. This explanatory design utilized a mixed method online survey with IB students coupled with qualitative in-person interviews with university and high school stakeholders. This data was then analyzed to understand the IB program, the benefits of IB program, the recruitment needs for both high schools and universities, and recognition for completing this rigorous program.

Findings and Conclusions: Results of this study indicated that Oklahoma is no doubt losing some of their best students to other states and institutions. Research shows where students attend college is most likely where they will enter the workforce. By losing students to other states, Oklahoma is losing valuable professionals in an already inadequate workforce. Oklahoma currently has two IB schools. The state should at least retain these students with better incentives offered not only by improved recruitment and credit policies of Oklahoma universities but by all the stakeholders including industry incentives. As Oklahoma grows technically, more schools like Classen SAS and Booker T Washington are going to be needed. Evidence shows the IB program is producing well rounded, analytical students who have good study skills, learning abilities, and understand how to apply what they have learned. These students are just one example of potentially efficient resources which already exist and need to be tapped to meet state needs. Better recognition and retention of those students is imperative to Oklahoma's health.

ADVISER'S APPROVAL: Dr. Mary Kutz
