

EA16-531-2

2015-16 Evaluation of Academic Competitions

Department of Evaluation and Assessment

*Dr. Michael Hinojosa
Superintendent of Schools*



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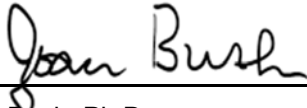
2015-16 Evaluation of Academic Competitions

Approved Report of the Department of Evaluation and Assessment

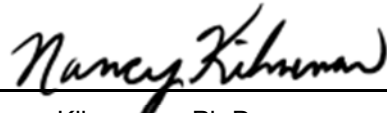
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2015-16 EVALUATION OF ACADEMIC COMPETITIONS

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ABSTRACT

The Student Activities Department facilitated a variety of academic competitions open to Dallas Independent School District (Dallas ISD) students in grades two through twelve during the 2015-16 school year. Student Activities staff members organized, conducted, and monitored each academic competition. Staff members also recruited and supported team coaches with training and resources. This report focuses on the context of the competitions and student and team coach perceptions of competitions.

- According to Student Activities staff, students at 90 percent of all Dallas ISD secondary schools and 75 percent of all elementary schools participated in at least one academic competition. Participation for individual competitions ranged from 18 to 89 schools (346 to 1,310 students) in 2015-16. Compared to 2014-15, school participation increased for all but one competition, and student participation increased for all competitions.
- More than half of the coach respondents attended training provided by Student Activities staff. Over 80 percent of coach survey respondents felt they received adequate resources and communication from the district to feel prepared to coach a team. Between 78 and 93 percent of attendees felt the training was relevant, high quality, well-organized, and adequate.
- Organizing competition practice was the most commonly reported obstacle for coach respondents. However, 89 percent of coach respondents and 91 percent of student respondents indicated they met with their teams at least once per week.
- According to coach respondents, self-esteem and perseverance were the largest areas of student growth. Coach respondents also noted improvement in student cognitive abilities (problem solving and creating thinking) and social skills (collaboration, leadership, and communication).
- The most widespread benefits of the competitions, according to student respondents, were that the competition allowed them to be academically recognized (90%) or raised their self-esteem (85%). Less than 30 percent of student respondents felt that the competition was too much of a burden or created excessive stress.
- More than 90 percent of student respondents felt motivated to participate in academic competitions for the challenge or experience. This was echoed in the open-ended survey questions, where students indicated that being competitive and challenged were the best parts of the competition.
- Coach and student respondents were very positive about their overall experience. More than 90 percent of coach respondents enjoyed coaching, wanted to coach again, and would recommend coaching to their colleagues. More than 89 percent of student respondents said they enjoyed participating in the competition, would compete again, and would encourage their peers to participate.

PROGRAM DESCRIPTION

The Student Activities Department staff facilitated a variety of academic competitions for students in grades two through twelve during the 2015-16 school year. Student Activities staff members organized, conducted, and monitored each academic competition. Staff members also provided student participants and coaches with training, support, and resources, including:

- preparation and study materials for student participants;
- transportation to competitions;
- meals at competitions;
- student participation incentives (i.e. competition giveaways like t-shirts);
- payment of competition registration fees;
- transportation and lodging expenses applicable with advancement to regional, state and national competitions; and
- training and stipends¹ for coaches.

The Student Activities Department mission for the academic competitions was to build student knowledge and character. Goals included: 1) increasing academic competition participation, 2) improving student achievement, 3) helping students become critical thinkers, and 4) team building. The academic competitions complemented the academic curriculum in Dallas ISD schools and also aligned with Goal 6 of the 2015-16 Dallas ISD Board Goals, which states, “All students will participate in at least one extracurricular or co-curricular activity each year.”²

A review of research revealed a number of benefits of academic competitions for students. According to several studies, academic competitions can create engagement and inspire motivation. Excitement around the event can help students perceive learning as fun and enjoyable (Ozturk and Debelak, 2008). Some students, particularly those that have a competitive nature, are very motivated when competing with their peers or working as a team, requiring them to push themselves to improve achievement and productivity (Kuech and Sandford, 2014). Students also get to experience a new, dynamic learning environment outside of school. Many competitions involve trips outside the students’ neighborhoods or even to other states.³

Academic competitions can create welcoming and positive learning environments, particularly for gifted students. Ozturk and Debelak (2008) note that “without the fear of being ridiculed for their interest or additional learning in academic topics, students easily can share their progress and ambitions for further

¹ Coaches were given a stipend (\$500-\$1,000) for coaching a team in any academic competition. An additional \$500 stipend was available for coaching a minimum of 4 academic events, one of which must include UIL. Additional stipends were also given to coaches when their teams progressed to state or national competitions. More information can be found at <http://goo.gl/6l6lmc>.

² All goals can be found at <http://www.dallasisd.org/visionandbeliefs>.

³ This is important in Dallas ISD because many Dallas ISD students have rarely been outside their own neighborhoods or to nearby cities.

work.” Competitions, therefore, can facilitate new friendships by bringing together diverse but academically ambitious students.

Academic competitions have the ability to teach character values, such as grit and perseverance, when students experience failure or success (Damon, 1995). Although academic competitions can evoke feelings of disappointment and failure, students have the opportunity to learn how to cope with failure and, most importantly, learn how to use it to improve their performance (Ozturk and Debelak, 2008).

In addition to perseverance, students learn to self-evaluate and reflect on their progress. Kuech and Sandford (2014) found that academic competitions created an “environment that causes students to reflect on their knowledge and abilities and self-evaluate their image, promoting improved personal growth and development for the participants.” During academic competitions, high-achieving students are exposed to other academically ambitious students and must learn how to assess their own performance and respect the work of others (Damon, 1995).

Finally, competitions allow students to broaden their knowledge of subject material in a unique way. In a competition setting, students can “explore subject areas far beyond the opportunities available in a regular classroom” (Ozturk and Debelak, 2008). Research on the impact of student competitions found a positive impact on participants’ college and career plans (Bishop and Walters, 2007). Other studies found that subject-specific competitions, such as science fairs, could improve student interest in those subject areas, encouraging students to pursue those interests in college (Sahin, 2013; Bishop and Walters, 2007).

PURPOSE AND SCOPE OF THE EVALUATION

The purpose of this evaluation was to provide context and process evaluation information on how participants perceived academic competitions. The evaluator surveyed coaches about the training and support received, the impact of the competitions on students, and the successes and obstacles they experienced while coaching. The evaluator surveyed students on the benefits, drawbacks, and overall satisfaction regarding competitions as well as the reasons they participated. The evaluation also included interviews and informal communication with Student Activities staff members.

MAJOR EVALUATION QUESTIONS AND RESULTS

What was the context of the Dallas ISD academic competitions?

Methodology

The evaluator evaluated all twelve⁴ academic competitions during the 2015-16 school year:

- Academic Decathlon
- Academic Pentathlon
- Lone Star Challenge
- High School University Interscholastic League (UIL)
- Middle School UIL
- Elementary UIL
- Texas Math and Science Coaches Association (TMSCA)
- Destination Imagination (DI)
- High School Dallas Urban Debate Alliance (DUDA)
- Middle School DUDA
- Chess
- Robotics

The context evaluation included a formal interview with Student Activities Department staff members and a review of internal documents. The purpose of the interview was to understand Student Activities Department organization and endeavors. The evaluator reviewed internal documents including the academic competition event calendar, descriptions of the academic competitions, and participation data. The evaluator also attended academic competitions, practice competitions, and coach meetings to gather additional information about the various competitions. Follow-up information was collected by email and phone.

Results

According to Student Activities staff, students at approximately 90 percent of all Dallas ISD secondary schools and 75 percent of all elementary schools participated in at least one academic competition sponsored by Student Activities. During the 2015-16 school year, participation for individual competitions ranged from 18 to 89 schools and from 346 to 1,310 students.

One of the goals of the Student Activities Department was to increase participation in academic competitions. As shown in Table 1, student participation increased for every competition and school participation increased for every competition except High School DUDA. The following sections describe the context, participation, and goals of each competition in detail.

⁴ Some competitions have been combined into one section; for example, the University Interscholastic League (UIL) section includes the High School UIL, Middle School UIL and UIL Cross-Examination (CX) Debate. Middle School and High School Dallas Urban Debate Alliance (DUDA) competitions are also combined into one section.

Table 1: School and Student Participation for District-Level Competitions

Competition	2014-15 School Year (N)		2015-16 School Year (N)		Change (N)	
	Schools	Students	Schools	Students	Schools	Students
Academic Decathlon	24	360	25	416	1	56
Academic Pentathlon	16	168	18	398	2	230
Lone Star Challenge	34	310	53	636	19	326
High School UIL	22	470	25	587	3	117
Middle School UIL	21	968	23	1,267	2	299
Elementary UIL	44	1,078	55	1,310	11	232
TMSCA	-	-	73	832	73	832
Destination Imagination	73	938	83	1,141	10	203
High School DUDA	31	416	29	594	-2	178
Middle School DUDA	18	336	20	346	2	10
Chess	-	-	83	1,250	83	1,250
Robotics	12	84	89	1,107	77	1,023

Source: Data were extracted from Student Activities internal records.

Note: Competitive chess and TMSCA were implemented for the first time during 2015-16. The three competitive robotics programs were expanded from pilot initiatives in 2014-15 to districtwide programs in 2015-16. Some schools and students participated in more than one competition.

Academic Decathlon

The Academic Decathlon was a two-day state competition where high school students matched their intellect with students from other schools in a series of ten events, including six Tests of Knowledge, an essay, an interview, a speech, and a Super Quiz event. The Tests of Knowledge were rigorous multiple-choice exams covering six subjects⁵ and the Academic Decathlon's annual theme.⁶ In the interview event, students had seven minutes to answer questions about themselves in front of a panel of judges. During the speech event, students gave a four minute prepared speech on a topic they had selected and a two minute impromptu speech on a topic they had not seen before. Finally, the Super Quiz event challenged the team as a whole to answer multiple choice questions on all seven subjects in front of a live audience.

The Academic Decathlon competition included students from all achievement levels. Teams consisted of nine students, who were divided into three divisions based on grade point average.⁷ Students with a grade-point average (GPA) of 3.75 or higher were in the Honors division, students with a GPA between 3.0 and 3.75 were in the Scholastic division, and students with a GPA below 3.0 were in the Varsity division. Each team had a coach committed to preparing students for the competition.⁸ In Dallas ISD, coaches received a \$1,000 stipend for participating in the district competition.

The mission of the Academic Decathlon organization was to "promote learning and academic excellence among students of varying achievement levels by developing and providing multidisciplinary academic competitions using Academic Decathlon curricula."⁹ The Tests of Knowledge focused on improving critical thinking and test-taking skills that would aid students on the *Scholastic Aptitude Test*

⁵ Academic Decathlon subjects include science, literature, art, social studies, economics, and mathematics.

⁶ The 2015-16 Academic Decathlon and Academic Pentathlon theme was India. Information on how the material related to the theme can be found at <http://bit.ly/1Uf3Qhg>.

⁷ Having nine members is not a mandatory requirement. Only the highest-scoring two students in each division count toward a team's total score, meaning teams can compete successfully with as few as six students.

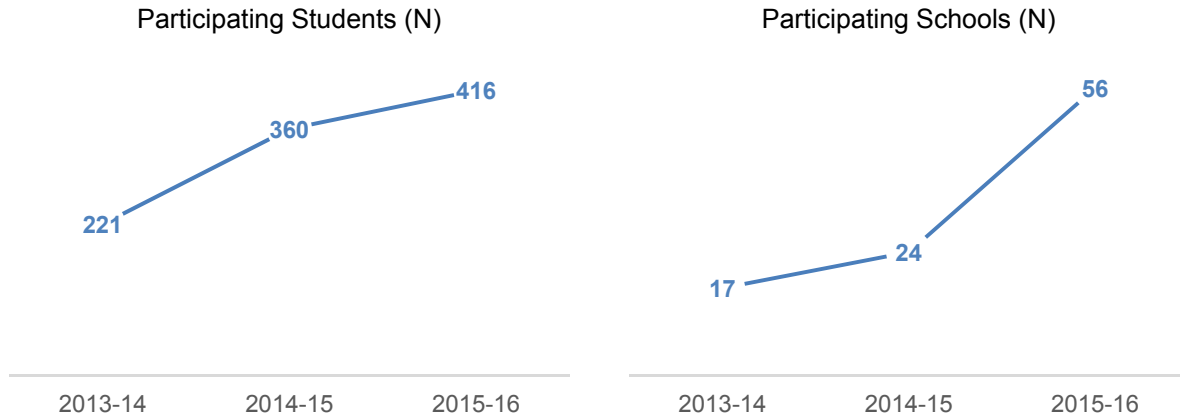
⁸ Coaches could be any school staff member (and occasionally parents), but Dallas ISD coaches were primarily teachers.

⁹ <http://www.usad.org/About/Mission-and-Vision.aspx>

(SAT). The interview event challenged students to listen closely and present themselves in a compelling manner. The speech event taught public speaking skills. The team aspect of the competition fostered cooperation and teamwork, particularly during the Super Quiz where students worked together to win.

A total of 416 students from 56 schools participated in the regional Academic Decathlon in 2015-16. As shown in Figure 1, student participation doubled and school participation tripled between 2013-14 and 2015-16. In the spring semester, two teams advanced to the State Academic Decathlon competition.¹⁰

Figure 1: Academic Decathlon Participation



Academic Pentathlon

The Academic Pentathlon was a shortened version of the Academic Decathlon for seventh and eighth grade students with five events instead of ten. Similar to the Academic Decathlon, teams were comprised of nine students with three Honors students, three Scholastic students, and three Varsity students.¹¹ Students took five rigorous multiple choice exams in mathematics, social studies, science, fine arts, and literature. Students finished with the Super Quiz, answering multiple choice questions as a team before a live audience. Both the exams and the Super Quiz were tied into the Academic Pentathlon’s annual theme.¹² The Academic Pentathlon was designed to improve students’ *State of Texas Assessments of Academic Readiness (STAAR)* achievement because test items were based on *STAAR* content. The competition also prepared students for the Academic Decathlon.

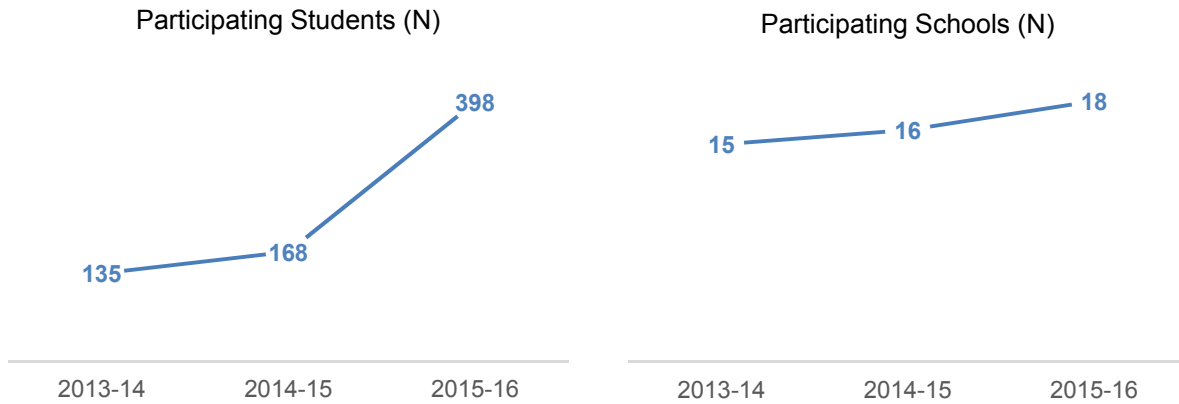
As shown in Figure 2, 18 schools and 398 students participated in the regional Academic Pentathlon competition on April 30, 2016. School participation slightly increased and student participation almost tripled from the 2013-14 to the 2015-16 school year.

¹⁰ The two advancing teams were from Seagoville High School and the Science and Engineering Magnet School.

¹¹ Students with a GPA of 3.75 or higher are in the Honors division, students with a GPA between 3.0 and 3.75 are in the Scholastic division, and students with a GPA below 3.0 are in the Varsity division.

¹² The 2015-16 Academic Decathlon and Academic Pentathlon theme was India. Information on how the material related to the theme can be found at <http://bit.ly/1Uf3Qhg>.

Figure 2: Academic Pentathlon Participation



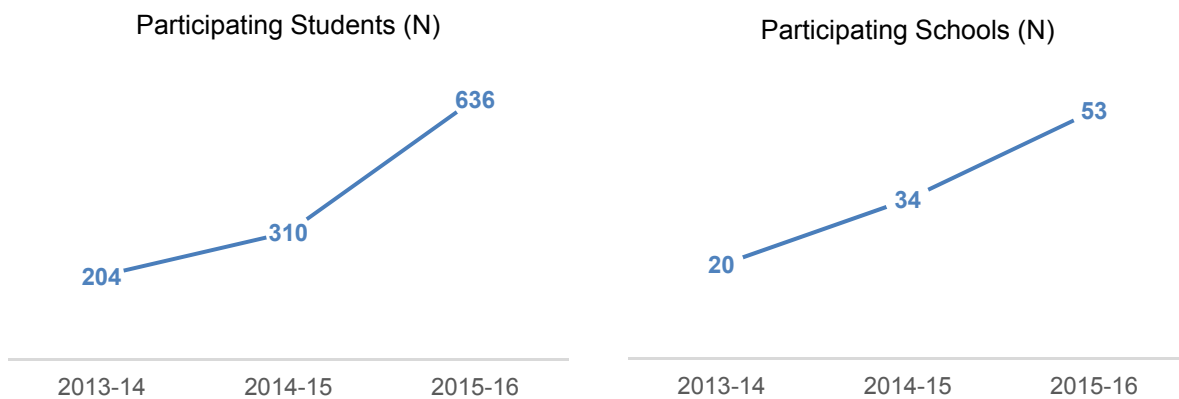
Lone Star Challenge

The Lone Star Challenge was the elementary-level equivalent of the Academic Decathlon and Academic Pentathlon. Similar to Academic Decathlon and Pentathlon, Lone Star Challenge teams included nine members; however, student divisions were classified by grade rather than GPA. Each team consisted of three fourth graders, three fifth graders, and three sixth graders. The Lone Star Challenge was designed to support elementary students in their mastery of the STAAR exam because test items were based on STAAR content.

Students were tested in mathematics, science, language arts, and social studies. Questions were based on the Lone Star Challenge’s annual theme.¹³ Students also participated in the Super Quiz at the end of the event. During the 2015-16 school year, students also wrote an essay over the book *The Wednesday Wars* by Gary D. Schmidt.

A total of 636 students from 53 schools participated in the Lone Star Challenge on May 7th, 2016. As shown in Figure 3, student participation tripled between 2013-14 and 2015-16, and the number of schools participating continued to steadily increase.

Figure 3: Lone Star Challenge Participation



¹³ The Lone Star Challenge’s 2015-16 theme was “The 1960’s.” Science and mathematics exam topics included the space race and introduction to astronomy. Social studies topics included presidents, protests, and politics while the Super Quiz topic was popular culture of the 1960’s.

University Interscholastic League (UIL)

UIL was created by the University of Texas at Austin in 1910 to provide educational extracurricular competitions for Texas students. UIL offered a variety of academic competitions to Texas students, including 23 high school events and 19 elementary and middle school events.¹⁴ The purpose of the competitions, according to the UIL website, was to “motivate students as they acquire higher levels of knowledge, to encourage students to confront issues of importance, and to provide students with the opportunity to demonstrate mastery of specific skills.”¹⁵ The competition also awarded college scholarships to winning participants.

Dallas ISD students participated in high school, middle school, and elementary school UIL competitions, as well as the UIL CX Debate competition. The High School UIL competition allowed students to compete in the following events: mathematics, number sense, calculator applications, current issues, science, accounting, social studies, computer applications, spelling, ready writing, literary criticism, feature writing, news writing, editorial writing, headline writing, and speech events. The format of each competition was unique; example formats included rigorous exams, skill tests, and essay writing. The Middle School UIL competition allowed students in sixth, seventh, and eighth grade to compete in the following events: mathematics, number sense, calculator applications, science, dictionary skills, social studies, oral reading, listening, chess, ready writing, impromptu speaking, feature writing, modern oratory, spelling, and a combined event of maps, graphs, and charts. The Elementary School UIL competition allowed students in fourth and fifth grade to compete in the following events: ready writing, number sense, spelling, social studies, dictionary skills, listening, chess, and a combined event of maps, graphs, and charts.

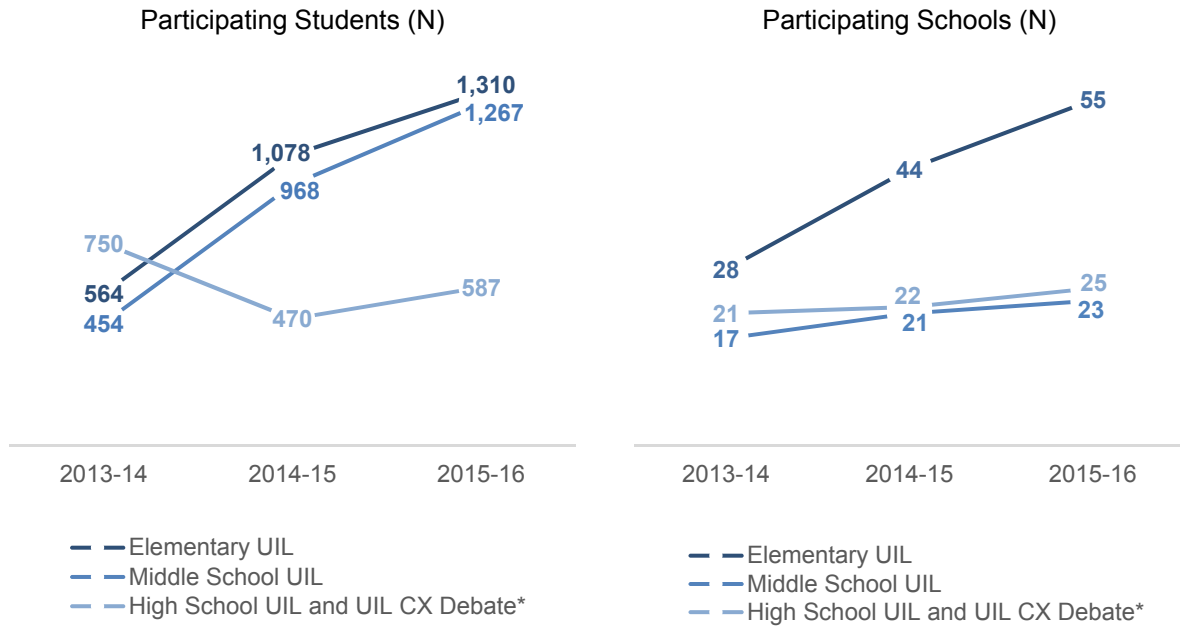
During the 2015-16 school year, 1,310 Dallas ISD elementary students from 55 schools, 1,267 middle school students from 23 schools, and 587 high school students from 25 schools participated in UIL competitions. As shown in Figure 4, 2015-16 UIL student and school participation increased steadily from the 2013-14 school year except for High School UIL which dropped in 2014-15 before increasing in 2015-16. Out of the 497 high school students that participated in the High School UIL competition, ten students from three schools progressed to the state competition at the University of Texas in Austin.¹⁶

¹⁴ A description of each event is available at www.uiltexas.org/files/academics/academics-brief-overview.pdf.

¹⁵ www.uiltexas.org/academics/academic-contests

¹⁶ The three qualifying schools were Carter High School, Law Magnet, and School of Science and Engineering at Townview.

Figure 4: University Interscholastic League (UIL) Participation



*19 schools and 90 students participated in UIL CX Debate.

The UIL CX Debate competition¹⁷ challenged high school students to research a policy issue, prepare persuasive speeches, and use critical and quick thinking to cross-examine their competitor’s evidence. The goal of the UIL CX Debate was to encourage students to understand and appreciate other points of view.

During the competition, two teams debated a specific policy issue; one team affirmed the policy while the second argued against the policy. Each debate team had two members from the same school. Debates lasted between 60 and 90 minutes and followed the schedule below:

Constructive speeches

- First affirmative (8 minutes)
- Cross-examination by negative (3 minutes)
- First negative (8 minutes)
- Cross-examination by affirmative (3 minutes)
- Second affirmative (8 minutes)
- Cross-examination by negative (3 minutes)
- Second negative (8 minutes)
- Cross-examination by affirmative (3 minutes)

Rebuttal speeches

- Negative (5 minutes)
- Affirmative (5 minutes)
- Negative (5 minutes)
- Affirmative (5 minutes)

¹⁷ www.uil texas.org/speech

A total of 90 students from 19 schools participated in the UIL CX Debate during the 2015-16 school year.¹⁸ This was an increase from the 2013-14 (80 students and 13 schools) and 2014-15 school years (72 students and 13 schools). Students from six schools advanced to the UIL state competition.¹⁹

Texas Math and Science Coaches Association (TMSCA)

TMSCA, formed by Texas mathematics and science educators in 1981, was created to prepare Texas students for UIL mathematics and science events. The TMSCA hosted competitions and offered coaches additional resources and support; only schools that are members of TMSCA could participate in the competitions. TMSCA hosted two state-wide competitions each year, but schools that were members of the organization could host invitational competitions using TMSCA-released tests throughout the school year. All competitions included four events: Calculator Applications, Number Sense, Mathematics, and Science.

According to the Student Activities staff, six schools were members of the TMSCA prior to 2015-16 through their own initiative, but TMSCA participation was not made a districtwide initiative until 2015-16. During the first year of districtwide implementation, 832 students from 73 schools competed in various invitational meets. Several students progressed to the TMSCA State Meet. One team placed fifth, and 14 students that competed individually placed in the top ten in their respective grade levels.²⁰

Destination Imagination

Destination Imagination (DI) was a national competition where student teams solved open-ended challenges and presented their solutions at tournaments. To solve the challenges, teams searched for creative solutions, used critical thinking, and worked cooperatively. Each team consisted of two to seven students and at least one coach. Coaches helped students stay on track but could not directly help the team develop a solution to a DI challenge. In Dallas ISD, the competition was open to students from prekindergarten to twelfth grade, but only had participants in second through twelfth grade during 2015-16.

Students were able to choose from an annually selected challenge from six areas of focus. Areas of focus included: Technical, Scientific, Fine Arts, Improvisational, Structural and Service Learning. Teams prepared for their challenge by designing, developing, and practicing their challenge solutions. For example, the 2015-16 challenge in the "Fine Arts" area of focus was to present a mystery story in a time period before 1990 and discover, live on stage, which of the three suspect characters was responsible for the mystery.

A total of 1,141 students from 83 schools participated in the regional DI tournament on February 20, 2016. As shown in Figure 5, student participation increased since the 2013-14 school year. School participation decreased slightly in 2014-15 but rebounded in 2015-16.

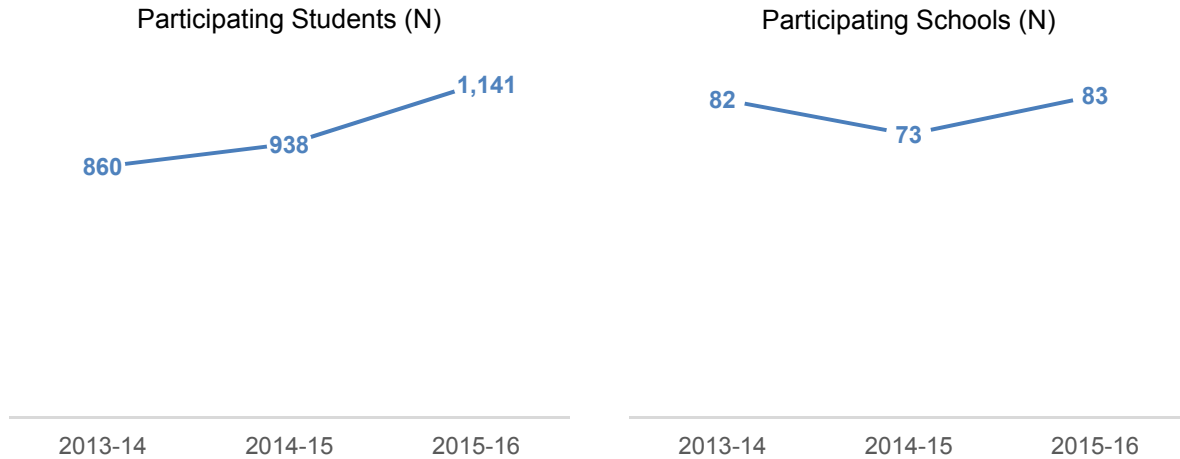
¹⁸ UIL CX Debate is included under High School UIL in Figure 4.

¹⁹ Teams were from the following schools: Rangel, Roosevelt, Samuell, School of Science and Engineering (SEM) at Townview, Seagoville, and Wilson.

²⁰ One student took first place in Calculator Applications and another placed second in Number Sense.

Out of the 83 Dallas ISD schools that participated in the 2016 regional DI competition, 18 teams advanced to the state competition. From regionals, four teams continued to advance to the global DI competition.²¹

Figure 5: Destination Imagination (DI) Participation



Dallas Urban Debate Alliance (DUDA)

DUDA was a nonprofit established in 2007 to bring competitive academic debate to Dallas students.²² DUDA conducted middle school and high school debates and provided participating coaches and students with resources²³ and training. DUDA aimed to help students be leaders in their communities and offered debate scholarships to participants. DUDA annually announced a new policy debate topic for the competitions.²⁴

During 2015-16, 346 students from 20 middle schools and 594 students from 29 high schools participated in DUDA competitions. As shown in Figure 6, student participation increased since 2013-14 for both middle school and high school DUDA competitions. Since 2013-14, school participation also increased, although two fewer middle schools competed in 2015-16 than in the 2014-15 school year. Two Dallas ISD 2015-16 debate teams qualified to compete at the National Urban Debate Championship hosted in San Francisco.²⁵

²¹ The four teams that proceeded to the global competition were from Cabell Elementary (one team), Bryan Adams High School (one team), and School for the Talented and Gifted (TAG) at Townview (two teams). At the global competition, teams from Cabell and Adams placed third and the TAG team took ninth place.

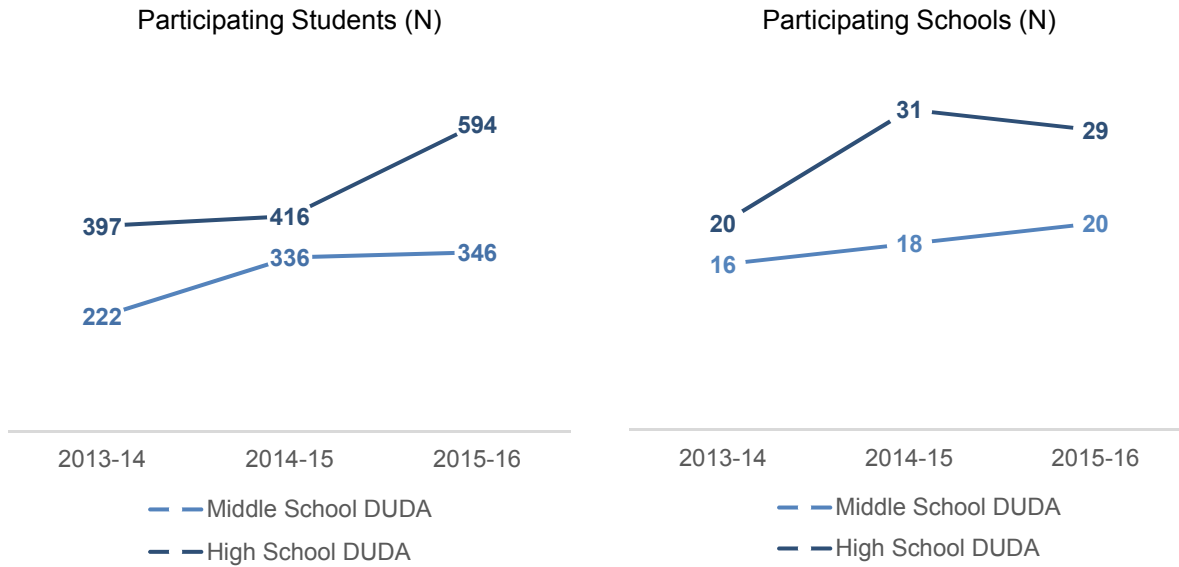
²² <http://dallasurbandebate.org/history-and-mission>

²³ According to the DUDA website, DUDA offers “evidence, topic summaries, curriculum and lesson plans” to participants for free (<http://dallasurbandebate.org/program/students>).

²⁴ The policy for the 2015-16 debate was the following: “The United States federal government should substantially curtail its domestic surveillance” (<http://dallasurbandebate.org>).

²⁵ The two teams were from Law Magnet High School and Woodrow Wilson High School.

Figure 6: Dallas Urban Debate Alliance (DUDA) Participation



Chess

Students in grades four through twelve could participate in competitive chess. Chess competitions allowed students to showcase their problem-solving and critical thinking skills at districtwide chess tournaments and at UIL Chess Puzzle competitions. Students competed with their peers at local, state, and national competitions.

The competitive chess program was implemented districtwide during the 2015-16 school year. Participation was high for the first year of implementation; a total of 1,250 students from 83 schools competed.

Robotics

During the 2014-15 school year, Student Activities staff piloted the new competitive robotics program. In 2015-16, the pilot expanded districtwide with the addition of a middle school computer science course elective. Staff from the Educational Technology department partnered with Student Activities staff to provide computer science and robotics professional development to coaches and to help facilitate competitions.

The goal of competitive robotics was to reinforce STEM curriculum in a fun, team-building environment. Students in grades four through twelve had the opportunity to participate in nationally-recognized tournaments. Robotics competitions varied by grade and division:

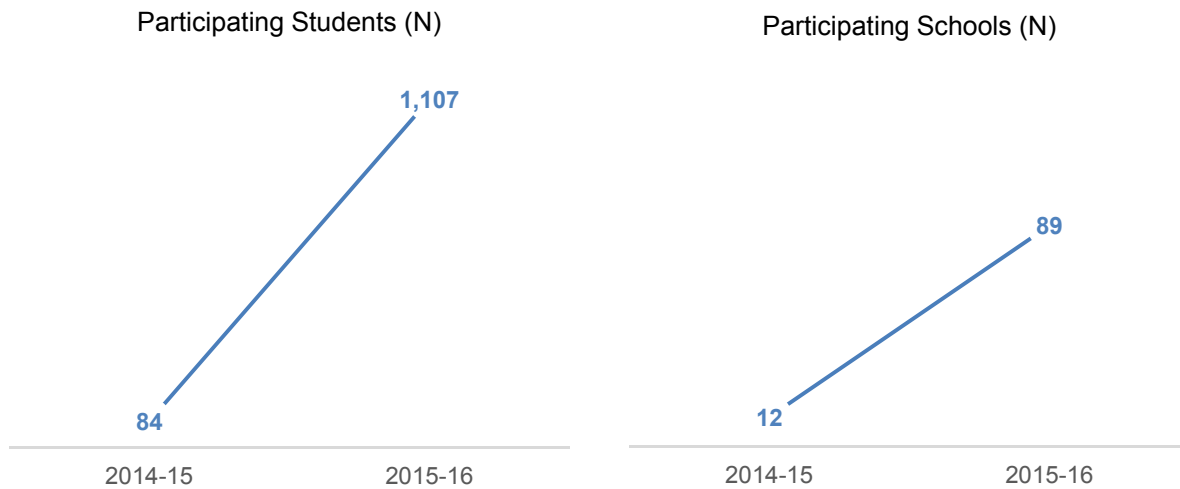
- The VEX IQ competitions challenged elementary and middle school students to design and build a robot to play against other teams in a game-based engineering challenge. VEX IQ featured robotic kits that allowed participants to snap and build robots for the competition without tools; however, students had to learn how to program the robot’s sensors.

- The FIRST²⁶ LEGO League (FLL) competition immersed fourth through eighth grade students in real-world science and technology problems (e.g. energy conservation, food safety, and recycling). Teams of up to ten members solved current scientific questions and built LEGO robots to complete a series of missions.
- The FIRST Tech Challenge (FTC) allowed seventh through twelfth grade students to design, build, program, and operate robots to perform in a game-based competition. Students participated in teams.

Attendance during the 2015-16 school year greatly increased from 2014-15 as the competitive robotics program was implemented districtwide. As shown in Figure 7, a total of 1,107 students from 89 schools participated in the three robotics competitions throughout the school year during 2015-16. Several teams advanced to regional and global competitions for all three – VEX IQ, FLL, and FTC – robotics competitions.

- VEX IQ: Seven schools advanced to the North Texas Regional VEX IQ Bank Shot Regional Championship. Of those seven schools, two schools progressed to the VEX IQ World Championships in Louisville, Kentucky.²⁷
- FLL: Two schools advanced to the FIRST LEGO League North Texas Championship Tournament.²⁸
- FTC: One school advanced to the FIRST Tech Challenge South Super Regional Championship in San Antonio, Texas.²⁹

Figure 7: Robotics Competition Participation



²⁶ FIRST (For Inspiration and Recognition of Science and Technology) is an organization started in 1992 that runs four competitive robotics programs (<http://www.firstinspires.org/about/history>).

²⁷ Winnetka Elementary, Caillet Elementary, Travis Academy, Hogg Elementary, Gaston Middle School, and Dealey Montessori advanced to the Regional Championship. Winnetka Elementary and Caillet Elementary advanced to the World Championship.

²⁸ Marsh Middle School and DeZavala Elementary School were the advancing schools. In addition, two teams from Winnetka Elementary qualified to participate in the United States Open Robotics Championship Tournament in Iowa.

²⁹ Sunset High School was the advancing team.

How did team coaches perceive the academic competitions?

Methodology

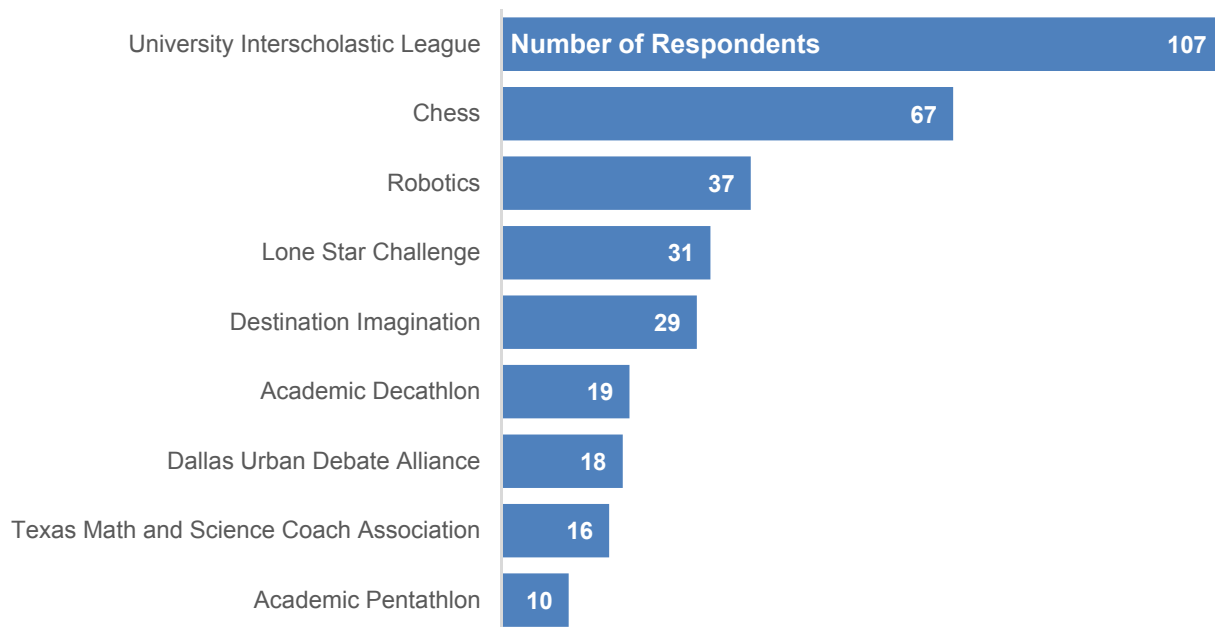
The evaluator designed surveys for team coaches to gather feedback about their experiences coaching the academic competitions. In most cases, the evaluator emailed an online survey link to team coaches³⁰ the week following the first district-level competition.

The purpose of the survey was to gauge the quality of training and support for team coaches and to gather insight about how the competition impacted both students and team coaches. The survey polled team coaches about their previous experience coaching, how coaching affected their regular academic duties, their satisfaction with the training and resources provided, the impact of the competition on student participants, and whether they enjoyed coaching a team. Coaches rated their level of agreement for each statement.³¹ In two concluding open-ended questions, team coaches were asked to describe the successes and challenges of the competition. The survey instrument is available in Appendix A.

Results

A total of 334 team coaches responded to the online survey between October 2015 and May 2016. As shown in Figure 8, a large portion of responses (n=107; 32%) came from UIL team coaches because the evaluator surveyed four different UIL competitions.³²

Figure 8: Number of Coach Respondents by Competition



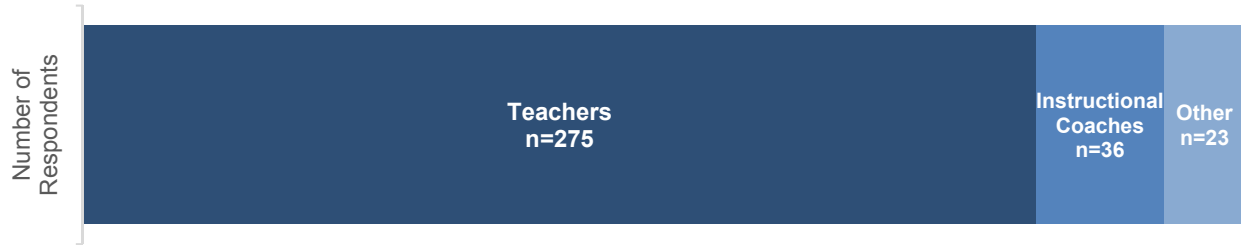
³⁰ All coaches on the email list received an invitation to the survey even if the coach's team did not progress to the next competition level.

³¹ For training, support, and overall statements, response options included: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, and Strongly Agree. For student outcome statements, response options included: Significantly Regressed, Regressed, No Change, Improved, and Significantly Improved.

³² The UIL category included elementary UIL, middle school UIL, high school UIL, and UIL CX Debate.

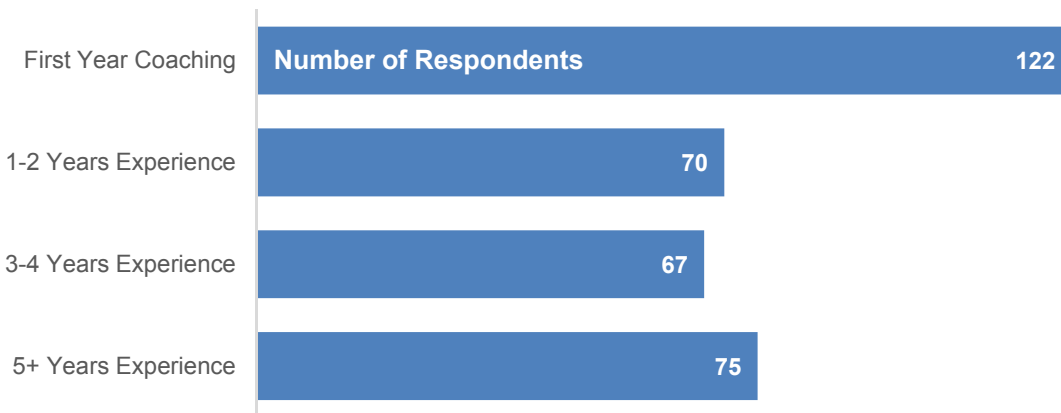
As shown in Figure 9, a large majority of coach respondents were teachers (n=275; 82%). More than half of the respondents (63%; n=212) had at least one year of experience while 37 percent of respondents (n=124) were coaching for the first time (see Figure 10).

Figure 9: Number of Coach Respondents by Role



Note: The “Other” category includes fifteen library media specialists, three counselors, two administrators, two parents, and one teacher assistant.

Figure 10: Number of Coach Respondents by Experience Level

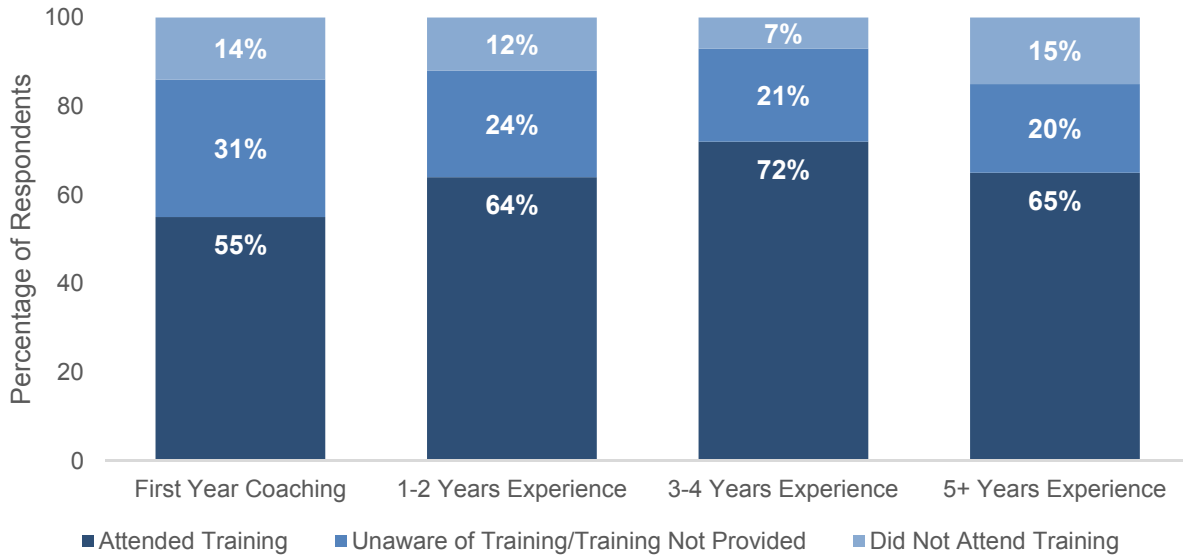


Training and Preparation

Student Activities staff reported providing more than 30 hours of training to equip coaches with resources and prepare them for the academic competitions. On the survey, coaches were asked if they attended training for the competition they were coaching. More than half of the respondents attended training (n=209; 63%). A quarter of respondents reported that training was not offered or they were unaware of available training (n=84; 25%). The remaining respondents noted they did not attend the training or were unable to attend (n=41; 12%).

Coaches of all experience levels attended the training. More than half of the new coaches (55%) and experienced coaches (64% to 72%) attended training, but fewer new coaches attended training or were informed about available training compared to experienced coaches (see Figure 11).

Figure 11: Coaches' Training Awareness and Attendance by Experience Level



Respondents that attended training were asked about their perceptions regarding the training. Overall, a large majority agreed or strongly agreed that the training was high quality (n=175; 84%), relevant (n=194; 93%), organized (n=176; 84%), and adequate (n=163; 78%).

As shown in Figure 12, perceptions of training did not vary much based on the coaches' experience level. Coach satisfaction varied by competition type; that is, coach respondents of certain competitions reported more satisfaction with the provided training than others. However, competitions were not evenly represented and data should be reviewed with caution. Appendix B presents coach satisfaction by competition.

Figure 12: Coaches' Training Satisfaction by Experience Level



Coaches were asked how often they were able to meet or practice with their student teams. As shown in Figure 13, a large majority of respondents met with their teams at least once a week (n=298; 89%). Only six respondents never met with their teams at all before the competition (2%). The amount of practice time was similar for coaches of all experience levels (see Table 2).

Figure 13: Coach Reported Competition Practice Time

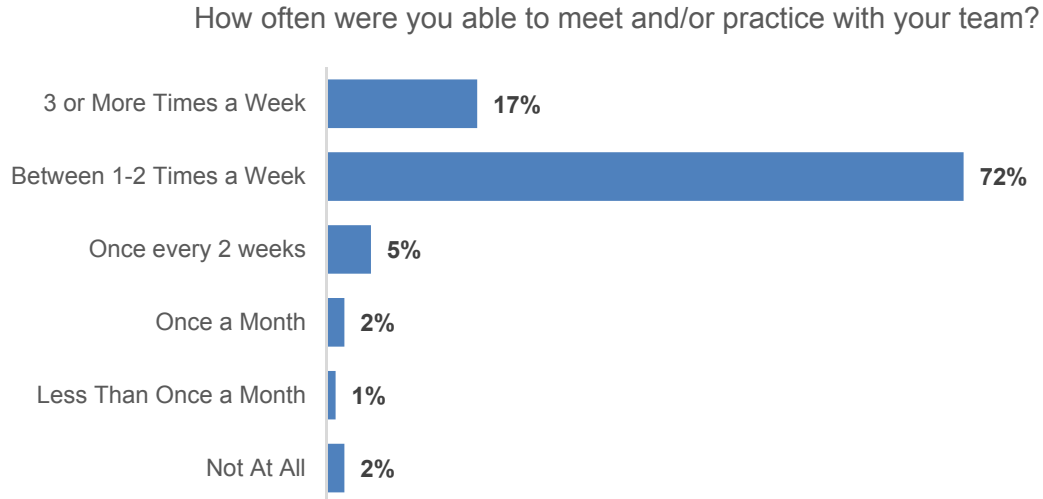


Table 2: Coach Reported Competition Practice Time by Experience Level

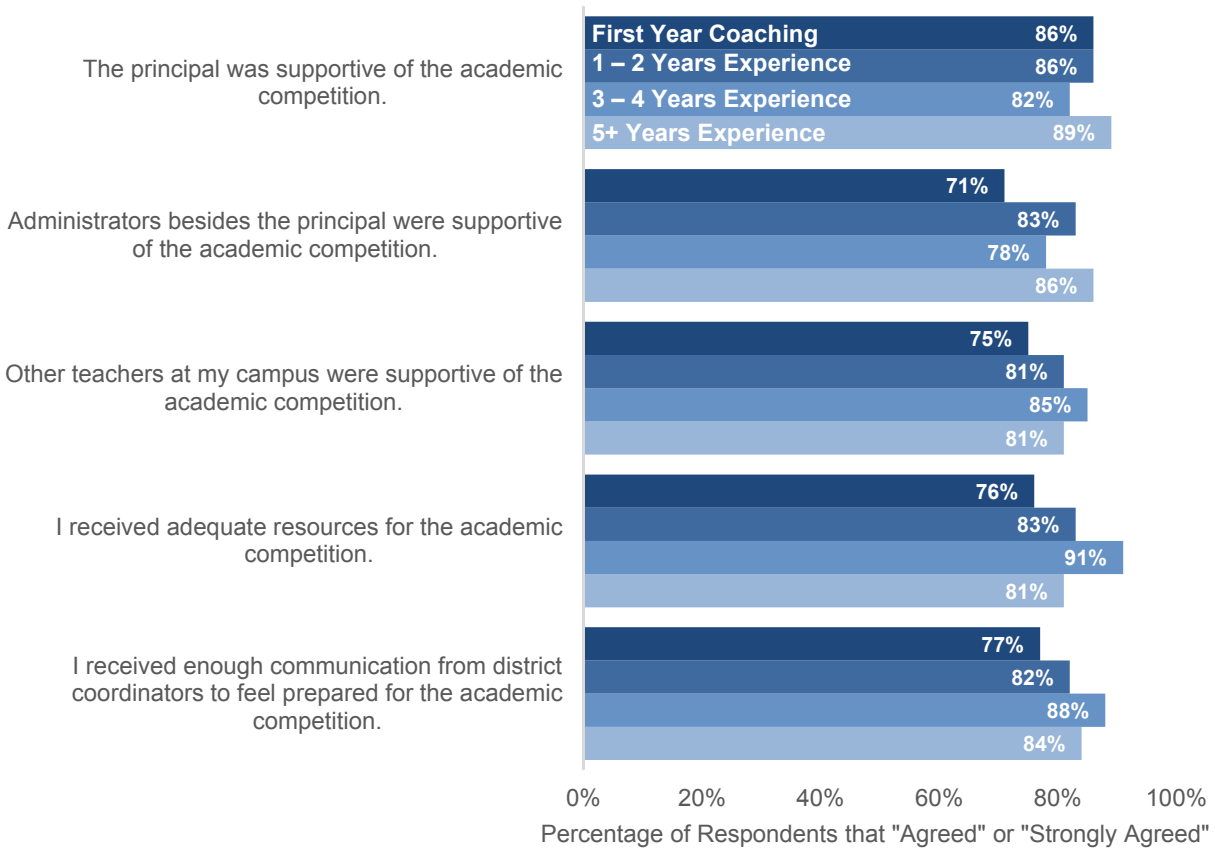
How often were you able to meet and/or practice with your team?	Percentage of Coach Respondents			
	First Year Coaching	1-2 Years Experience	3-4 Years Experience	5+ Years Experience
3 or More Times a Week	10	16	21	27
Between 1-2 Times a Week	79	69	70	68
Once every 2 weeks	5	12	5	2
Once a Month	2	1	3	2
Less Than Once a Month	2	1	0	0
Not At All	2	1	1	1

Resources and Support

Respondents were positive about the support they received from campus leadership and staff. A majority agreed or strongly agreed that the principal (n=287; 86%), other campus administrators (n=261; 78%), and teachers (n=266; 80%) were supportive of the academic competition. Respondents were also positive about district support. A large majority agreed they received adequate resources (n=273; 82%) and enough communication (n=274; 82%) to feel prepared for competition.

Figure 14 shows coach satisfaction with resources and support by experience level. Aside from principal support, experienced coaches were more positive about the resources and support they received (78% to 91%) than new coaches (71% to 77%). Appendix B shows coach satisfaction by competition.

Figure 14: Coach Support and Resources Satisfaction by Experience Level



Student Change Indicators

The coach survey included a series of student change indicators.³³ Coaches were asked if students, as a result of participation in academic competitions, improved or regressed in academic aptitude, cognitive skills, and other various capacities, such as creativity and independent learning. The survey also asked if students improved their social skills, including communication, collaboration, and leadership, as well as character values like confidence and perseverance.

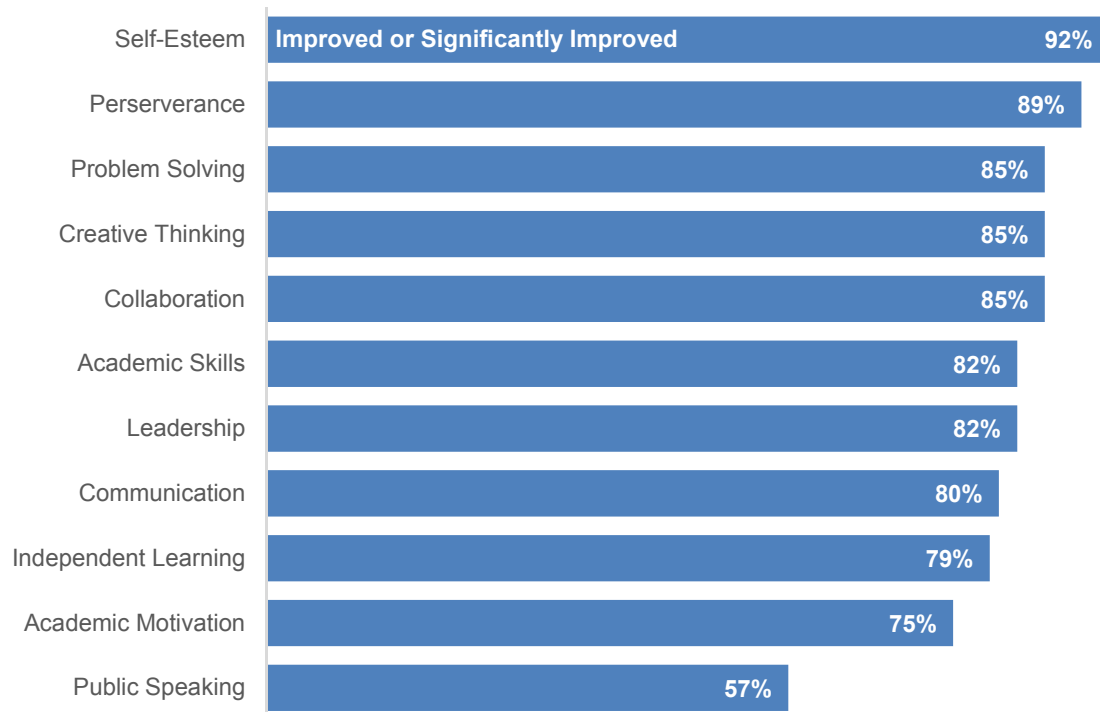
It is important to note that coaches may not have had knowledge of how the student performed or behaved in the classroom. Also, certain indicators were more relevant to specific competitions; for example, a debate competition like DUDA was more likely to improve public speaking than a robotics competition.

Figure 15 presents the percentage of coach respondents who reported improvement or significant improvement for the 12 indicators. Perseverance and self-esteem were the most commonly reported areas of growth (89% and 92%, respectively). Cognitive skills like problem solving and creative thinking were also commonly reported (85%), and at least 80 percent of respondents noted improvement in social skills like collaboration (85%), leadership (82%), and communication (80%).

³³ Coaches scored student change indicators on a scale from one to five with one indicating “Significantly Regressed” and five indicating “Significantly Improved.” Coaches could also select “I don’t know” on the survey.

Although more than half of the respondents reported improvements in public speaking (57%) and academic motivation (75%), improvement was not as prominent in comparison to other indicators.³⁴ It is possible that students who participated in academic competitions were already highly motivated in school, leaving less room for improvement in academic motivation. However, as mentioned previously, some competitions sought out students that were struggling in school. For example, the Academic Decathlon required each team to include three members who had a GPA below a 3.0.

Figure 15: Coach Responses for Improved Student Change Indicators



Student change indicator results also varied by coach experience level. As shown in Figure 16, new coaches reported fewer improvements in most student change indicators than experienced coaches, particularly for academic skills, creative thinking, independent learning, and collaboration skills. Appendix B shows indicator results by competition.

³⁴ As noted previously, many of the coaches were not the students' teachers and may not have had an opportunity to see growth. Also, certain competitions did not include public speaking components.

Figure 16: Coach Responses for Improved Student Indicators by Experience Level

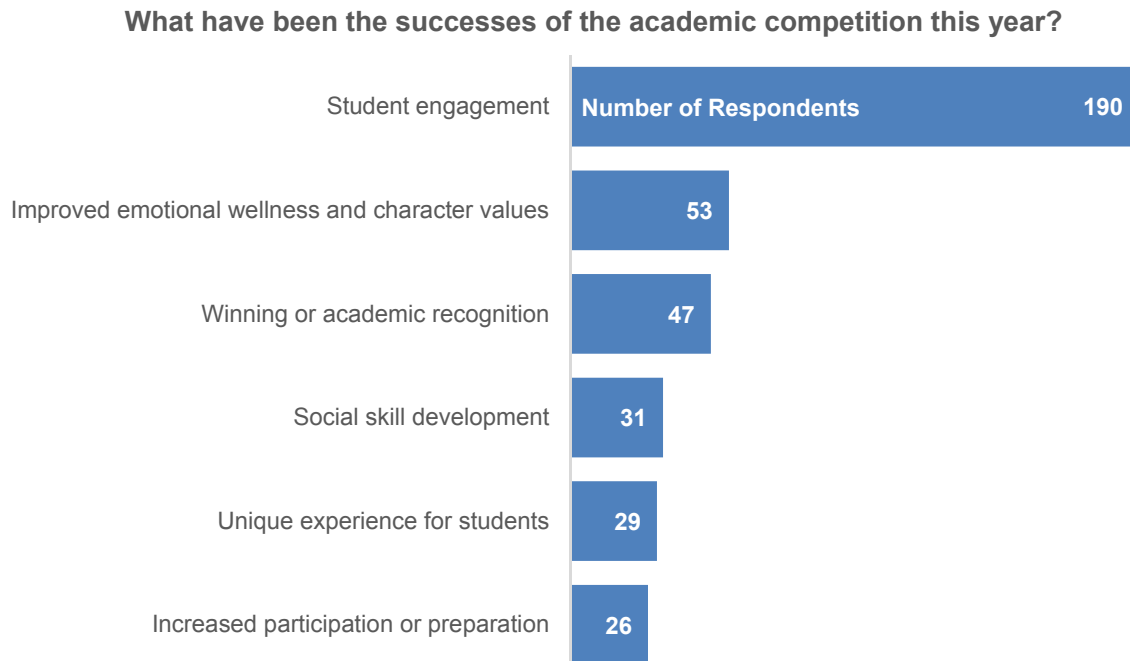
	First Year Coaching	1-2 Years Experience	3-4 Years Experience	5+ Years Experience
Academic Motivation	70%	71%	76%	82%
Problem Solving	80%	84%	88%	88%
Academic Skills	72%	84%	87%	93%
Critical Thinking	81%	89%	90%	95%
Creative Thinking	76%	86%	88%	92%
Public Speaking	48%	41%	72%	71%
Independent Learning	70%	81%	84%	89%
Self-Esteem	89%	91%	93%	96%
Perserverance	83%	91%	93%	93%
Collaboration Skills	77%	89%	92%	88%
Communication Skills	72%	79%	90%	88%
Leadership Skills	72%	79%	90%	92%

Note: Includes “Improved” or “Significantly Improved” responses.

Open-Ended Coach Responses: Successes of the Competition

Team coaches were also asked to describe any successful outcomes from the competition. In response to the question, “What have been the successes of the academic competition this year?” several themes emerged from the open-ended responses. Figure 17 displays the six most common themes.

Figure 17: Coach Responses for Successes of the Academic Competitions



Note: Numbers reflect the number of coaches that referenced the theme in their response. Some responses included multiple themes. 257 of all 334 coach respondents (77%) answered the optional question.

Student engagement was by far the most common theme among reported successes (n=190). Coaches noticed that students became more motivated or engaged in academics when they were competing in the competition. Coaches also mentioned that some students became more interested in academic activities or discovered a new passion as a result.

Another common success was improved emotional wellness or character values (n=53), which included self-esteem, perseverance, and self-discipline. Coaches reported that students developed more confidence in themselves, as well as in specific subject areas. Many coach comments in this category included instances where students stepped outside their comfort zone or persisted through obstacles.

Winning or academic recognition was the third most common theme (n=47). Coaches mentioned that students who did not participate in sports were able to be recognized by their school for academic achievement. Coaches also noted that students enjoyed showing school pride by representing their school in the competitions. Both new and experienced coaches also reported winning awards as a success, specifically when students won for the first time or teams improved from the previous year.

Since many of the competitions were team-based, another common success was social skill development (n=31). Coaches explained that students improved their ability to communicate, cooperate, and study with their team members and that some students took on leadership or teaching roles in their teams. They also noticed that students learned to appreciate different perspectives and cultures, particularly in debate competitions against other schools.

Several coaches recognized the novelty of the competition experience for students (n=29). Robotics and chess coaches in particular noted that students discovered new interests they might not have had a chance to discover in school. Other coaches mentioned that some students had never engaged in an academic activity outside of school or experienced academic competition before.

Finally, coaches cited instances of their own personal coaching improvement (n=26). Coaches mentioned they were able to recruit more students to participate, find more time to practice, or prepare students more successfully than in the previous year. Coaches that mentioned this success were often veteran coaches, but some were new coaches that reported great improvement between the fall and spring semesters.

Open-Ended Coach Responses: Competition Challenges

Team coaches were also asked to describe any challenges or obstacles they experienced. As shown in Figure 18, six themes emerged from the open-ended responses to “What have been the challenges of the academic competition this year?”

Figure 18: Coach Responses for Obstacles of the Academic Competitions



Note: Numbers reflect the number of coaches that referenced the theme in the response. Some responses included multiple themes. 265 of all 334 coach respondents (79%) answered the question.

Organizing practice for the competition was the most common obstacle for coaches (n=62). Coaches struggled to find a designated time to practice or to gather all students together at practice. Two common reasons for the struggle included aligning practice with the bus schedule and working with students' other after-school activities. Similarly, time was a personal challenge for 34 coaches. Some coaches struggled to balance coaching with their regular job duties or had trouble finding time in their own schedule to coach. Coaches also mentioned that the priority of preparing students for standardized testing or *Advanced Placement (AP)* exams made competition preparation particularly difficult.

Another obstacle included a lack of resources for both students and coaches and a lack of training for coaches (n=52). Coaches explained that students had inadequate, delayed, or outdated study resources for the competition, which made preparation difficult. They also cited difficulty finding study materials for students on their own. A few coaches mentioned that they did not receive any training for the competition, despite being new, and did not know what to expect, where to find resources, or how to prepare. Some new coaches that attended training felt the training was tailored for coaches already familiar with the competition and, therefore, found it insufficient. Finally, five coaches felt the stipend amount for coaching was inadequate for the workload.

Forming and maintaining a team proved to be a challenge for 28 coaches. Students left the team for a variety of reasons, including disinterest, other after-school activities, or changing schools. Motivating students to join the team and/or practice was also challenging for coaches. Some students were uninterested in the competition or were not fully committed to practice, which hindered their teammates.

Some coaches found the organization of the actual competition event to be lacking (n=26). Coaches mentioned instances of late buses, last minute room changes, and time schedule changes. Occasionally, the disorganization resulted in students missing meals or events when competition events

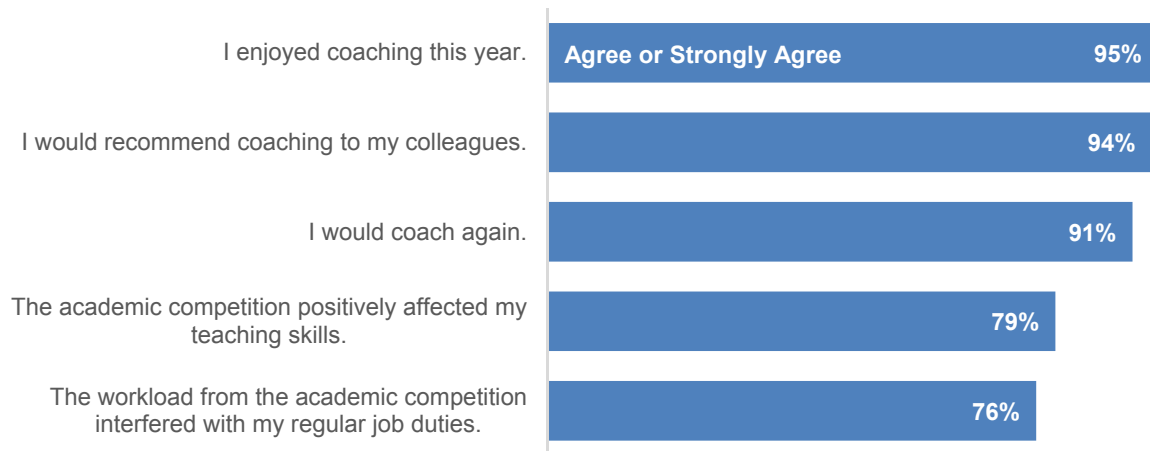
did not start on time or when there was an inadequate number of tests for participants. A few coaches noted that events were chaotic when locations were too small to host all of the participants or when there were not enough staff members to handle the number of participants. Registration errors were also cited as a challenge.

Finally, communication that was either inaccurate or inadequate was cited as a struggle for 24 coaches. For example, coaches mentioned delayed responses from district staff when they emailed or called with questions. Other coaches, particularly new ones, explained that communication was scarce or insufficient to prepare them for the competition. A few coaches cited specific instances of miscommunication or late communication regarding transportation, schedule changes, competition results, and registration.

Overall Coach Experience

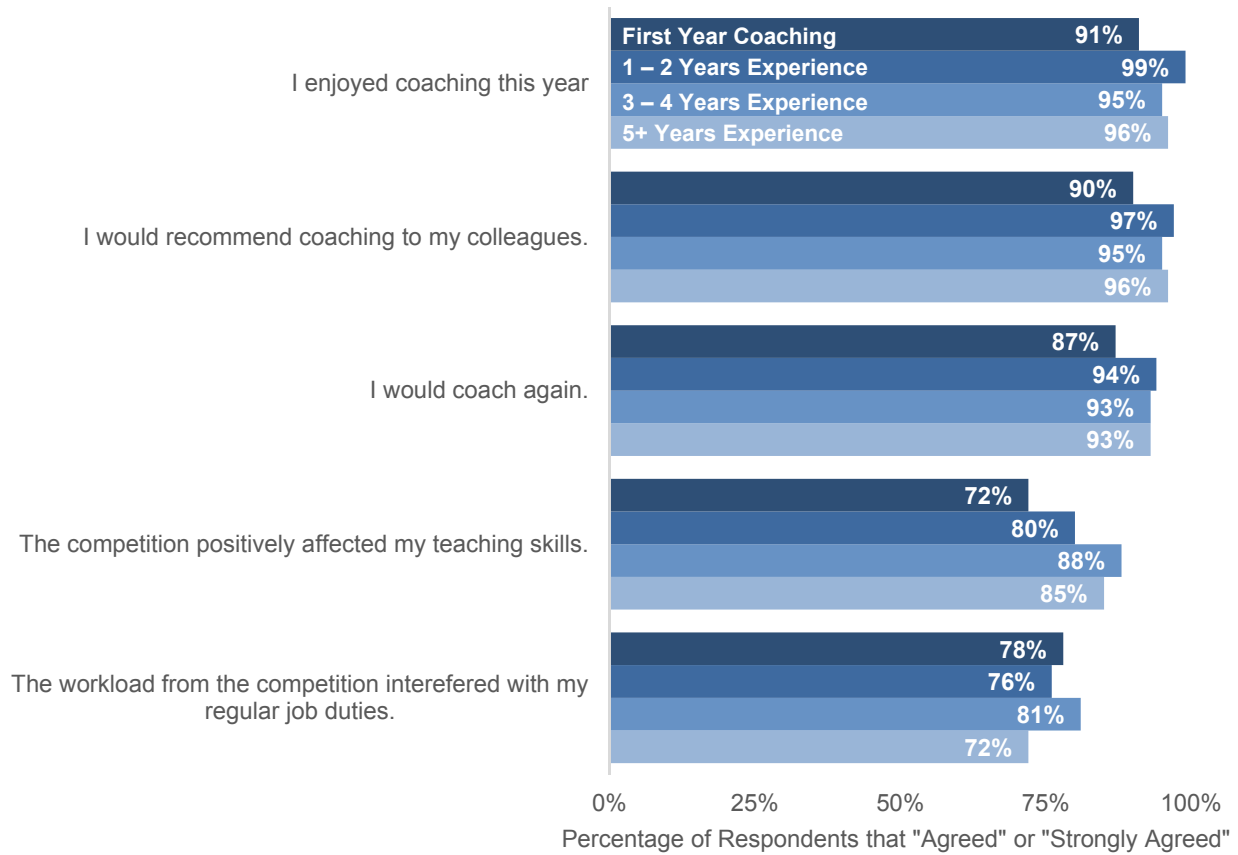
Overall, coach respondents were very positive about their coaching experience (see Figure 19). More than 90 percent of all respondents agreed or strongly agreed that they enjoyed coaching (95%), would recommend coaching to their colleagues (94%), and would coach again (91%). A majority of respondents also indicated that their teaching skills were positively impacted (79%); however, a similar percentage of respondents also indicated that the workload from the competition interfered with their regular job duties (76%).

Figure 19: Overall Coach Perceptions of Academic Competitions



As shown in Figure 20, coach respondents with at least one year of experience were slightly more positive than new coaches. Although still very positive, new coach respondents were less likely to coach again (87%) or recommend coaching to colleagues (90%) than experienced coaches (93% to 94% and 95% to 97%, respectively). New coaches also did not agree as often that their teaching skills were positively impacted by the competitions (72%) when compared to experienced coaches (80% to 88%).

Figure 20: Overall Coach Perceptions by Experience Level



How did student participants perceive the academic competitions?

Methodology

The evaluator designed surveys to gather feedback from students about their experiences participating in the academic competitions. After each district competition, the evaluator sent a web link to coaches that included the student survey. Coaches were asked to forward the link to their students through email or to allow students to take it during their next meeting or class period.

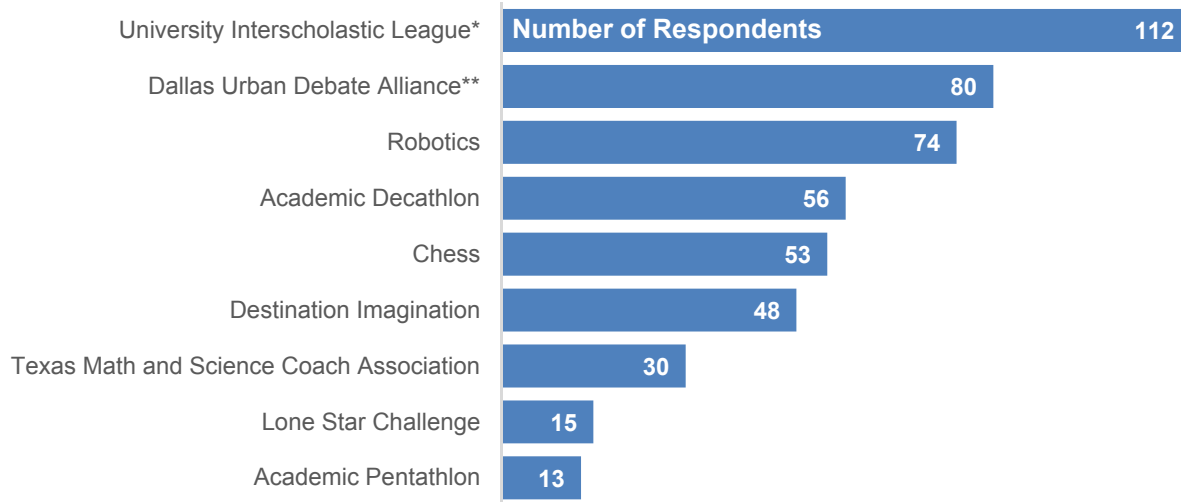
The purpose of the survey was to gather insight on what aspects of a competition encouraged student participation and how the competition impacted the students. The survey polled students about why they decided to compete, how often they practiced, how the competition impacted them, whether they enjoyed the competition, and if they would recommend participating in the competition to their peers. Students rated their level of agreement for each statement.³⁵ In two concluding open-ended questions, students were asked to describe what they liked and did not like about the competition. The survey instrument is available in Appendix C.

³⁵ Response options included: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, and Strongly Agree.

Results

Because many students did not have or use district email addresses, survey response rates were fairly low. A total of 481 students responded to the survey. As shown in Figure 21, respondent numbers ranged between 13 and 112 students for each competition.

Figure 21: Number of Student Respondents by Academic Competition

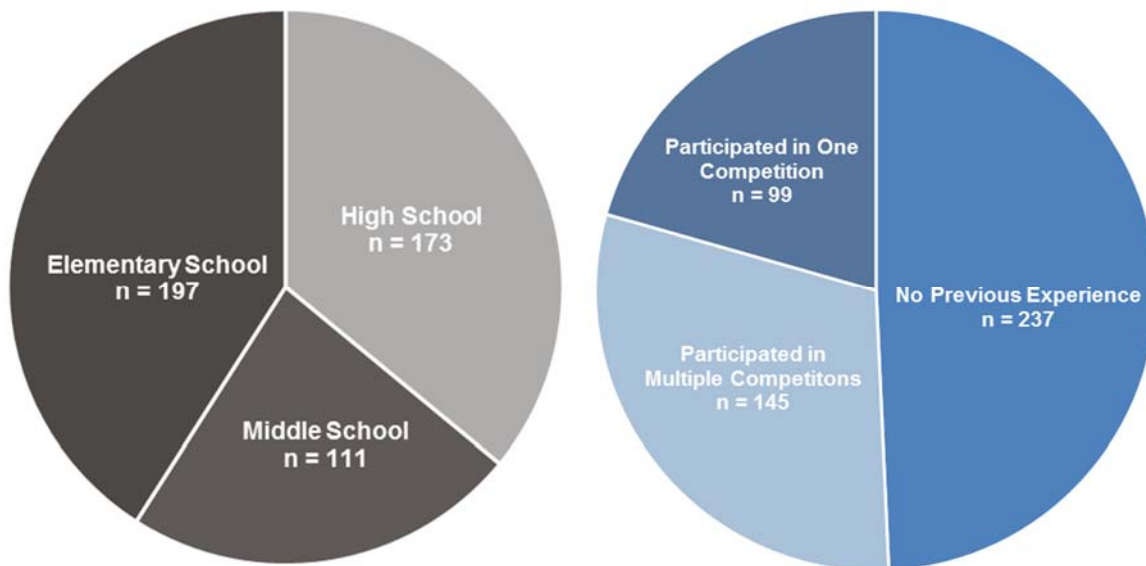


*Includes Elementary School UIL, Middle School UIL, High School UIL, and UIL CX Debate competitions

**Includes Middle School DUDA and High School DUDA

As shown in Figure 22, respondents represented elementary school (n=197; 41%), middle school (n=111; 23%), and high school (n=173; 36%) fairly evenly. Previous experience in academic competitions was evenly distributed between those that had at least one year of experience in academic competitions (n=244; 51%) and those that had no previous experience (n=237; 49%).

Figure 22: Grade Level and Competition Experience Level of Respondents



Motivation Factors Contributing to Student Participation

Almost all of the student respondents were motivated to participate in academic competitions for the challenge (94%) or for a fun experience (94%; see Figure 23). Relevance to the student also played a large role; more than 80 percent of students wanted to improve a certain skillset (86%) or felt that the competition reflected their interests (83%). Social factors, including being on a team (82%) or participating with friends (78%), also played a strong role.

Figure 23: Reasons that Students Participated in Academic Competitions



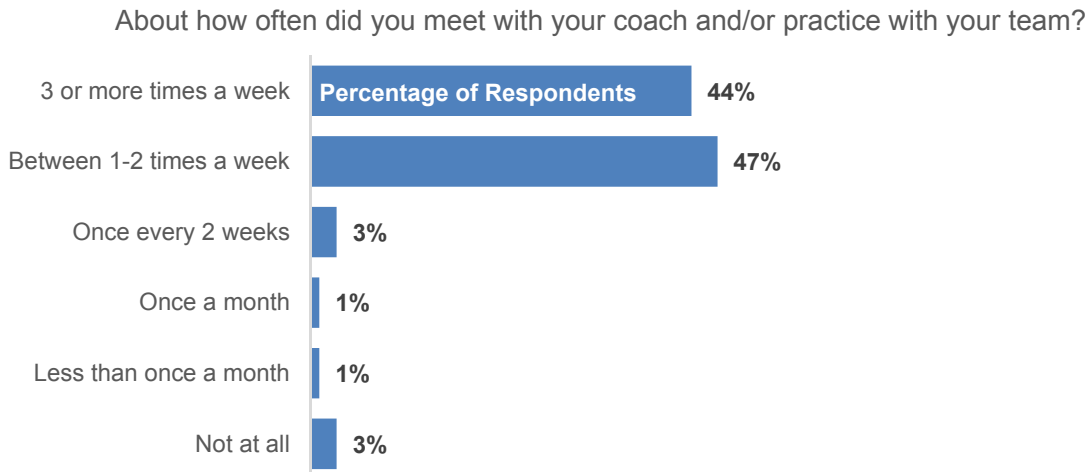
Fewer students cited parent encouragement as a reason for participation (66%). However, whether this means that students did not find their parents' encouragement to be a strong factor in their decision or that students did not receive much encouragement from their parents is unknown. Parent encouragement ranged between 43 and 81 percent across all competitions. Students seemed to be more motivated by a teacher recommending the competition (72%), but this percentage also varied by competition (63% to 87%).

Students were also invited to write in their own reasons for participating. A few additional reasons for participating included resume-building, character growth, and high school credit.

Preparation and Practice

Students were asked how often they met with their teams or coaches to practice for the competition. More than 90 percent of student respondents reported meeting at least once per week (91%), as shown in Figure 24. Interestingly, while 17 percent of coaches said they met with their teams more than three times a week (refer to Figure 13), 44 percent of students said they met with their coach or practiced with their team three or more times a week.

Figure 24: Student Reported Competition Practice Time



More high school respondents noted meeting consistently than elementary or middle school respondents. Between 92 to 100 percent of respondents in ninth through twelfth grade met at least once a week compared to 73 to 94 percent of respondents in third through eighth grade.³⁶

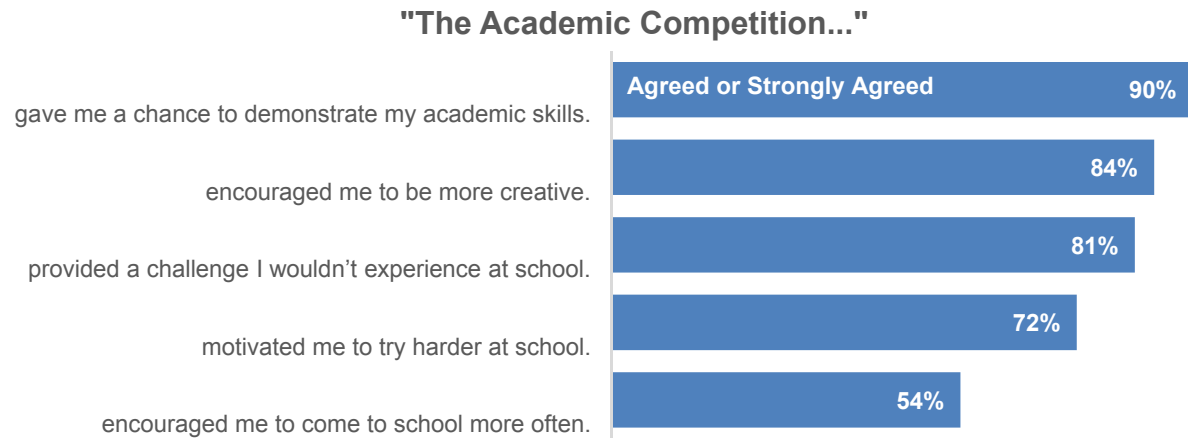
Regular weekly practice ranged from 81 percent to 100 percent across different competitions. All or almost all of Destination Imagination (100%), Academic Decathlon (96%), and Robotics (96%) student respondents met at least once a week; fewer UIL (81%) respondents met weekly.

Student Benefits and Obstacles of Competing

Benefits. To understand the perceived benefits of academic competitions, students were asked to rate their agreement with a variety of statements. As shown in Figure 25, 90 percent of respondents agreed or strongly agreed that the competition allowed them to be academically recognized or to prove their academic skills. More than 80 percent of respondents felt that the competition encouraged them to be more creative (84%) or offered a challenge they would not get to experience at school (81%). Over half felt the competition impacted their school activities by motivating them to try harder in school (72%) or improve their school attendance (54%).

³⁶ Second grade respondents were the one exception with 100 percent reporting that they met at least once a week; however, there were only four second grade respondents.

Figure 25: Student-Perceived Academic Benefits of Academic Competitions



The survey also captured five different social and emotional benefits³⁷ as shown in Figure 26. Across all student respondents, self-esteem was the most commonly reported socio-emotional benefit (85%). More than 80 percent of students also agreed or strongly agreed that the competition helped them to create new friendships (83%) or made them feel like a valued member of a team (83%). Student-perceived benefits by individual competitions are shown in Appendix D.

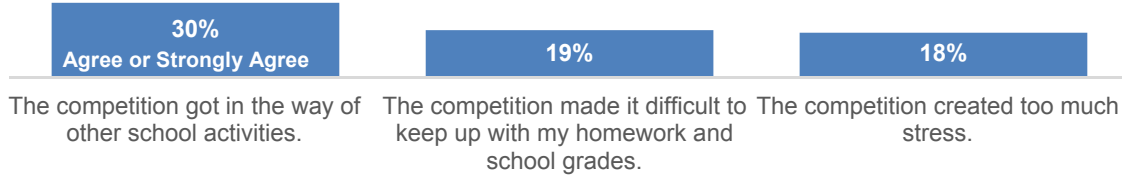
Figure 26: Student-Perceived Emotional and Social Benefits of Academic Competitions



Obstacles. Students were asked if the academic competitions limited their involvement in other school activities, impaired their ability to keep up with schoolwork, or produced excessive stress. As shown in Figure 27, few student respondents indicated being negatively affected by participating in academic competitions. Out of all the respondents, 30 percent or less agreed or strongly agreed that the competition got in the way of other school activities (30%), hampered their ability to keep up in school (19%), or created too much stress (18%). Student-perceived obstacles by individual competitions are shown in Appendix D.

³⁷ The five social and emotional benefits included new friendships, a sense of belonging, self-awareness, self-esteem, and self-discovery.

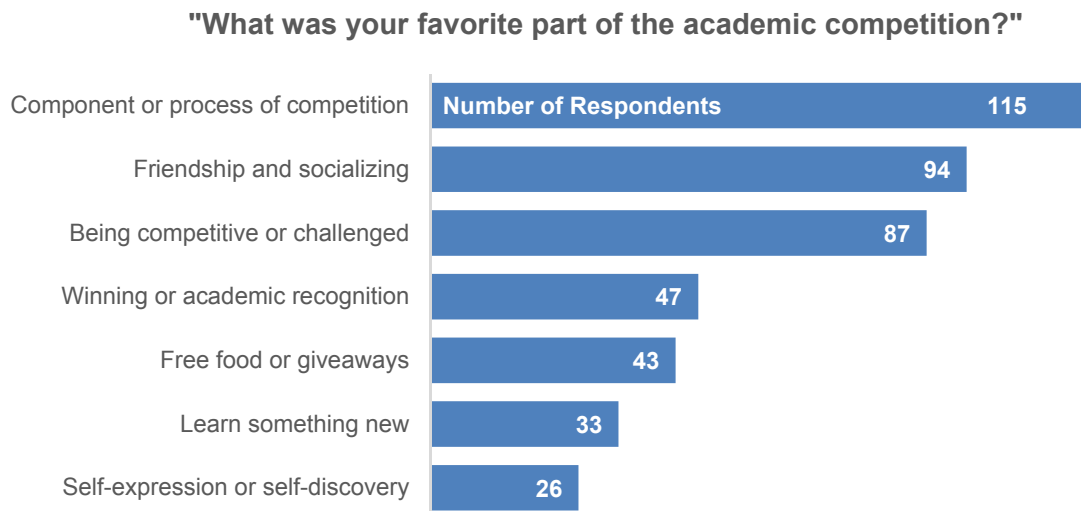
Figure 27: Student-Perceived Obstacles of Academic Competitions



Open-Ended Student Responses: Favorite Aspects of the Academic Competitions

Students were asked to list their favorite and least favorite part about the competition at the end of the survey. Figure 28 displays the seven most common themes to the question, “What was your favorite part of the academic competition?”

Figure 28: Students’ Favorite Aspects of Academic Competitions



Note: Number reflects the number of students that referenced the theme in the open-ended response. Some student responses included multiple themes. Not all student respondents wrote a response to the question; 426 of all 481 student respondents (89%) answered the question.

Many student respondents that answered the open-ended question mentioned that the process or a component of the competition is what they enjoyed most (n=115). Students that had a favorite subject area often noted that taking an interesting test in that subject was enjoyable. Debate competition participants often mentioned that their favorite part was cross-examining the evidence or giving their closing speech. Robotics students reported delight in building the robot and seeing it move. Some students mentioned that studying and preparing for the competition was exciting and helpful for their schoolwork.

Socializing was the second most common theme (n=94). Students mentioned excitement over meeting students from other schools, experiencing the competition with their friends, and working with their team. Students expressed positive feelings about teamwork and comradery with their teammates, and

some conveyed the satisfaction of hard work and goal achievement. They also enjoyed being surrounded by peers that had the same values or interests.

Many students enjoyed the thrill of being competitive or challenged (n=87). Students cited tension, adrenaline, and anticipation as positive aspects of the competition. Students also mentioned the novelty of putting their academic skills to the test against students from other schools in their district who had different perspectives.

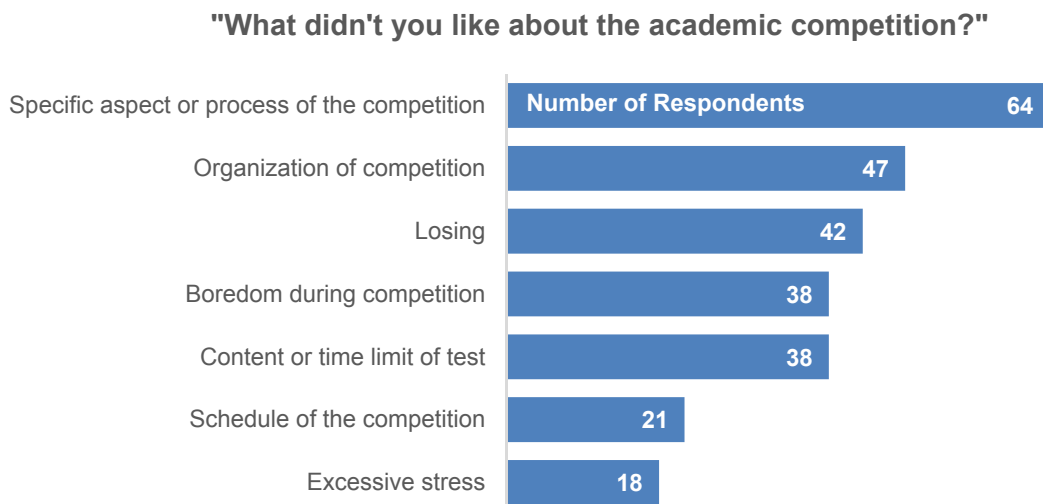
Winning or being academically recognized was also an emerging theme (n=47). Students not only enjoyed being recognized during the awards ceremony at the end of the competition but liked representing their school alongside their teammates.

Some students also enjoyed learning new things (n=33), explaining that the competition allowed them to learn material that they did not have an opportunity to learn in school. Chess and robotics participants, especially, referenced this theme. Some students found that the competition content was relevant to their lives, particularly in debate competitions where students discussed current policy issues. This theme was complementary to the theme of self-expression or self-discovery (n=26). Across all competitions, several students expressed delight when they realized they were smarter than they felt or when they discovered hidden talents. Some students explained they learned how to think outside the box and adopted strategies from fellow competitors.

Open-Ended Student Responses: Least Favorite Aspects of the Academic Competitions

Students were also asked to explain their least favorite aspect of the competition. Figure 29 displays the seven most common themes to the question, “What didn’t you like about the academic competition?”

Figure 29: Students’ Least Favorite Aspects of Academic Competitions



Note: Number reflects the number of students that referenced the theme in their open-ended response. Some student responses included multiple themes. Not all student respondents wrote a response to the question; 414 of all 481 student respondents (86%) answered the question.

A majority of the students mentioned aspects that were outside the control of the Student Activities Department, such as a specific aspect of the competition (n=64) or the tests' content or time limit (n=38). Students in these themes expressed disliking specific exam subjects like mathematics or competition components like cross-examination during debate. Other students described tests as too easy, too hard, or outdated.

The second most common theme was organization of the event (n=47). Students cited confusion during the competition about where they should be or when events would be starting. Some students felt events were rushed when the competition fell behind schedule and cited instances of events being delayed or starting early.

Unsurprisingly, losing was described as the least favorite part for 42 students. Students mentioned disappointment with themselves or their team when they did not perform as they had hoped. However, some students expressed hope despite their disappointment, mentioning they planned to study more or try harder the following year.

Students also referenced being bored (n=38) during the competition while they waited for their teammates to finish or when the competition got off schedule, creating periods with no activity. Students specifically mentioned frustration waiting for results to be tallied up so the awards ceremony could begin.

The competition schedule was another emerging theme (n=21). Complaints about the schedule ranged from dissatisfaction with the date of the competition, particularly when it fell on a holiday or weekend, the length of the competition, or how early the competition started.

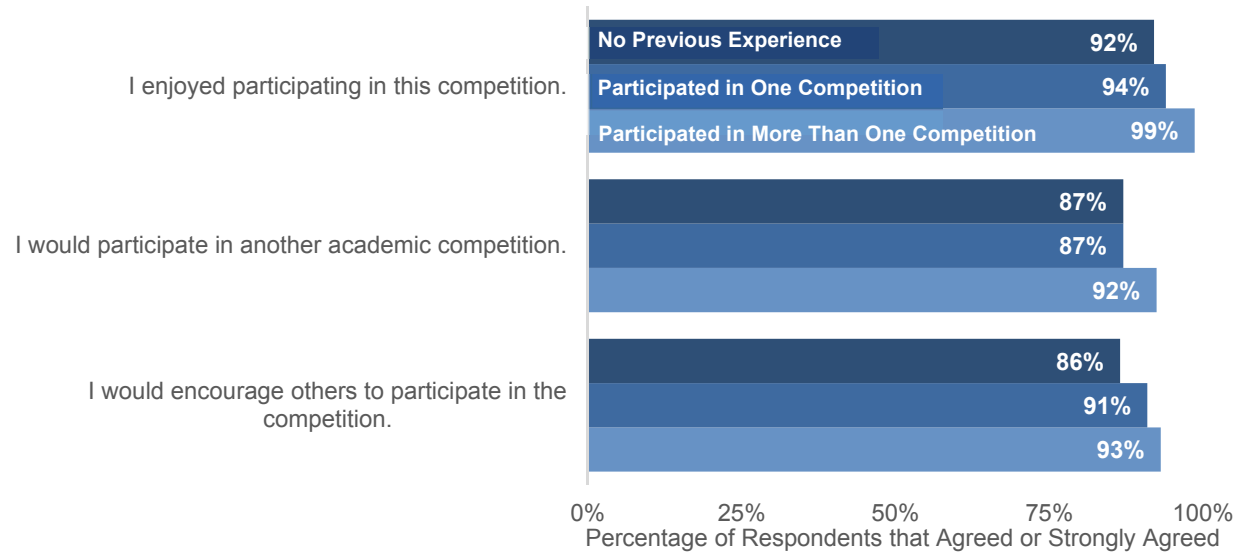
Finally, 18 students mentioned that the competition caused excessive stress and anxiety. Students, particularly those in rigorous school courses, explained that it was challenging trying to balance studying for both the competition and for school.

Overall Student Experience

Student respondents were positive about their overall experience in the academic competition. A large majority of respondents agreed or strongly agreed that they enjoyed participating in the competition (94%), would compete in another competition (89%), and would encourage others to participate (89%).

When broken down by experience levels, student respondents with more experience in academic competitions were slightly more positive than respondents with no prior competition experience on two of three items (see Figure 30). Respondents that had previously participated in at least one academic competition agreed or strongly agreed that they enjoyed the competition (94% to 99%) at a slightly higher rate than new competitors (92%). More experienced respondents were also more likely to encourage others to participate (91% to 93%) than those with no experience (86%).

Figure 30: Overall Student Perceptions by Experience Level



SUMMARY

The mission of the academic competitions was to build student knowledge and character. To accomplish this mission, Student Activities staff members facilitated a variety of academic competitions for students in grades two through twelve during the 2015-16 school year. Student Activities staff members organized, conducted, and monitored each academic competition. Staff members also provided competition coaches with support, resources, and over 30 hours of training. Academic competitions complemented the academic curriculum in Dallas ISD schools and aligned with Goal 6 of the 2015-16 Dallas ISD Board Goals, which states, “All students will participate in at least one extracurricular or co-curricular activity each year.”

According to Student Activities staff, students at about 90 percent of all Dallas ISD secondary schools and 75 percent of all elementary schools participated in at least one academic competition. Participation for individual competitions ranged from 18 to 89 schools (346 to 1,310 students) in 2015-16. Between the 2014-15 and 2015-16 school years, school participation increased for all but one competition,³⁸ and student participation increased for all competitions. The evaluator surveyed team coaches and students that participated in the academic competitions about their perspectives and experiences while competing.

Coach respondents were positive about the support they received from their principal, other campus administrators, and teachers. Most felt they received adequate resources and enough communication to feel prepared. More than half of coach respondents attended training offered by the Student Activities Department (63%). Of those attendees, between 78 and 93 percent felt the training was

³⁸ School participation declined by two schools for High School DUDA; however, student participation increased by 178 students.

relevant, high quality, well-organized, and adequate; however, fewer new coaches attended training or were informed about available training compared to more experienced coaches.

One of the most commonly reported obstacles for coaches was arranging practice around students' other activities or the bus schedule. However, a large majority of coach respondents reported meeting with their teams at least once a week (89%), and only six respondents never met with their teams at all (2%). Almost all student respondents also reported meeting with their team or coach at least once a week (91%).

According to many coach respondents, students improved in self-esteem (92%) and perseverance (89%) due to participation in academic competitions. At least 85 percent of coach respondents also reported that students improved their cognitive skills, such as problem solving (85%) and creative thinking (85%), and social skills, such as collaboration (85%). In the open-ended coach survey questions asking about successes of the competitions, one of the most prevalent themes was student engagement; respondents mentioned that many students who were not engaged in school were motivated to learn for the competition or became interested in new topics because of the competition. Coach respondents also noticed improvement in student persistence and confidence, often because students were being recognized as scholars and representing their schools.

More than 90 percent of student respondents felt motivated to participate in academic competitions for a fun experience (94%) or for the challenge (94%). This was echoed in the open-ended survey questions, where students indicated that being competitive and challenged was one of the best parts of the competition. Fewer, but more than half, of student respondents cited parent encouragement (66%) or teacher recommendation (72%) as a reason for participation.

The most widespread benefit of the competitions, according to student respondents, was that the competition allowed them to be academically recognized (90%) or raised their self-esteem (85%). Less than 30 percent of student respondents felt that the competition was too much of a burden or created excessive stress.

Overall, both coach and student respondents were very positive about their overall experience. More than 90 percent of coach respondents enjoyed coaching, wanted to coach again, and would recommend coaching to their colleagues. More than 89 percent of students said they enjoyed participating in the competition, would compete again, and would encourage their peers to participate.

RECOMMENDATIONS

The evaluator strongly recommends that Student Activities staff construct and maintain a registration database, which would allow for evaluation of participants' academic achievement and attendance between the fall and spring semesters. A database has been in the process of being built since the 2013-14 school year, but was not ready for use in the 2014-15 or 2015-16 school years.

Student Activities staff offered more training during the 2015-16 school year than in the 2014-15 school year. However, according to new coaches, the availability of training was not always communicated

clearly and the training was more appropriate for experienced coaches. The evaluator recommends either tailoring training to meet the needs of both experienced and new coaches or offering tiered training. Improving communication, especially for new coaches who may be unaware of informal information channels, would also help increase the number of coaches attending training.

Recommendations to improve future evaluation include improving survey administration for students. During the 2014-15 school year, students had to take paper surveys because computer labs were not guaranteed at the competition events and the wireless internet prevented students from using their mobile devices. The format of the survey also made it difficult to fit on a scantron, requiring the evaluator to enter data from the surveys by hand. In 2015-16, the evaluator requested that coaches administer or forward the survey to students in an effort to reduce the complications of paper surveys. However, many students either did not have email or did not have a class period with their coaches. Therefore, finding a new way to administer the survey to students would be ideal.

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APPENDICES

Appendix A: Coach Survey

Coaches/Team Managers,

Thank you very much for taking the time to complete this survey! The purpose of this survey is to improve the academic competition process for the 2016-2017 school year so your feedback is very important.

The survey should only take 10 or 15 minutes of your time. Please note that your responses are confidential and will be aggregated and presented as part of a group (not individually). If you have any questions about the survey, please contact Sarina Rapini at srapini@dallasisd.org or call 972-925-6417. Thank you so much for your help!

In order to progress through this survey, please use the following navigation buttons:

*Click the **Next button** to continue to the next page.*

*Click the **Previous button** to return to the previous page.*

*Click the **Submit button** to submit your survey.*

1. Which of the following best describes your role?

- Teacher
- Teacher Assistant
- Instructional Coach
- Librarian/Media Specialist
- Administrator
- Counselor
- Parent
- Other (Please specify):

2. How many years have you coached an academic competition team?

- This is my first year coaching
- 1-2 years
- 3-4 years
- 5+ years

3. Which academic competition did you most recently participate in?

- Academic Decathlon
- Academic Pentathlon
- DUDA Debate
- Destination Imagination (DI)
- Lone Star Challenge
- Robotics
- Texas Math and Science Association (TMSCA)
- University Interscholastic League (UIL or UIL CX Debate)
- Chess

4. Which grade level was the competition for?

- Elementary
- Middle School
- High School
- Mixed

5. Please rate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
The principal was supportive of the academic competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Administrators besides the principal were supportive of the academic competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other teachers were supportive of the academic competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I received adequate resources for the academic challenge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I received enough communication from district coordinators to feel prepared for the academic competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If I had questions, I knew who to contact for assistance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The workload from the academic competition interfered with my regular job duties.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The academic competition positively affected my teaching skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. How often were you able to meet and/or practice with your team?

- 3 or more times a week
- Between 1-2 times a week
- Once every two weeks
- Once a month
- Less than once a month
- Not at all

7. Did you attend any coach training for this competition?

- Yes, I attended training.
- No, I was unable to attend the training provided.
- No, training was not offered or I was unaware of available training.

8. Please rate your level of agreement with the following statements regarding the academic competition training you received.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
The training was high quality.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The training was relevant to the academic competition I am coaching.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The training was well organized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I received enough training to feel prepared as a team coach.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. To what extent did students change in the following areas as a result of the academic competition?	Significantly Improved	Improved	No Change	Regressed	Significantly Regressed
Academic motivation (school attendance, homework completion)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic skills (mathematics, vocabulary, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Critical thinking (ability to sort and evaluate information)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creative thinking (ability to generate many varied, unusual options)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Independent learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Self-esteem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Perseverance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Collaboration skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communication skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leadership skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Please rate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I plan on coaching another academic competition next year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would recommend coaching academic competitions to other teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I enjoyed coaching the academic competitions this year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. What have been the successes of the academic competition this year?

12. What have been the challenges of the academic competition this year?

Appendix B: Coach Survey Responses by Competition

Coach Training Satisfaction by Competition

	Lone Star Challenge (n=32)	Academic Pentathlon (n=10)	Academic Decathlon (n=18)	UIL (n=108)	TMSCA (n=17)	DI (n=30)	DUDA (n=18)	Chess (n=68)	Robotics (n=37)
The training was high quality.	83%	50%	60%	85%	77%	80%	82%	92%	97%
The training was relevant to the academic competition I am coaching.	88%	100%	87%	93%	92%	92%	82%	97%	100%
The training was well organized.	92%	50%	73%	88%	77%	72%	82%	90%	94%
I received enough training to feel prepared as a team coach.	88%	50%	53%	78%	69%	68%	91%	90%	82%

Note: Includes "Improved" or "Significantly Improved" responses.

Coach Support and Resources Satisfaction by Competition

	Lone Star Challenge (n=32)	Academic Pentathlon (n=10)	Academic Decathlon (n=18)	UIL (n=108)	TMSCA (n=17)	DI (n=30)	DUDA (n=18)	Chess (n=68)	Robotics (n=37)
The principal was supportive of the academic competition.	90%	95%	100%	82%	88%	79%	83%	90%	84%
Administrators besides the principal were supportive of the academic competition.	74%	95%	100%	75%	88%	69%	83%	75%	84%
Other teachers at my campus were supportive of the academic competition.	77%	74%	90%	69%	88%	97%	94%	85%	78%
I received adequate resources for the academic competition.	90%	79%	100%	76%	88%	79%	78%	87%	81%
I received enough communication from district coordinators to feel prepared for the academic competition.	94%	79%	100%	71%	88%	79%	78%	90%	89%

Note: Includes "Improved" or "Significantly Improved" responses.

Coach Responses for Improved Student Indicators by Competition

	Lone Star Challenge (n=32)	Academic Pentathlon (n=10)	Academic Decathlon (n=18)	UIL (n=108)	TMSCA (n=17)	DI (n=30)	DUDA (n=18)	Chess (n=68)	Robotics (n=37)
Academic Motivation	74%	67%	84%	80%	94%	69%	94%	75%	86%
Problem Solving	81%	67%	84%	82%	81%	97%	94%	89%	97%
Academic Skills	94%	100%	95%	81%	88%	83%	100%	90%	78%
Critical Thinking	87%	89%	95%	84%	81%	97%	100%	89%	97%
Creative Thinking	84%	78%	84%	81%	88%	97%	100%	86%	92%
Public Speaking	68%	33%	58%	50%	44%	93%	100%	45%	58%
Independent Learning	94%	78%	100%	83%	69%	86%	100%	69%	69%
Self Esteem	97%	89%	95%	92%	100%	100%	100%	91%	92%
Perseverance	90%	89%	95%	89%	88%	93%	100%	91%	92%
Collaboration	94%	89%	84%	83%	75%	100%	100%	80%	94%
Communication	87%	100%	74%	78%	88%	100%	100%	72%	86%
Leadership	87%	78%	89%	81%	88%	97%	100%	71%	89%

Note: Includes "Improved" or "Significantly Improved" responses.

Appendix C: Student Survey

Students,

We need your help! The purpose of this survey is to help your teachers and other staff members improve the academic competition process for next year. Your opinions and experiences are very important to us. This survey should only take 10 to 15 minutes to complete. Your survey responses will be completely anonymous (no one will know what you said). If you are participating in multiple academic competitions, this survey is about your most recent academic competition. Thank you so much for your help!

Any questions marked with an asterisk (*) require an answer in order to progress through the survey. In order to progress through this survey, please use the following navigation buttons:

- Click the **Next** button to continue to the next page.
- Click the **Previous** button to return to the previous page.
- Click the **Submit** button to submit your survey.

1. **Which grade are you in?** (Drop-down menu for grades 2 through 12)

2. **Which academic competition did you just finish competing in?**

- Academic Decathlon
- Academic Pentathlon
- DUDA Debate
- Destination Imagination (DI)
- Lone Star Challenge
- Robotics
- Texas Math and Science Association (TMSCA)
- University Interscholastic League (UIL or UIL CX Debate)
- Chess

3. **Have you ever participated in an academic competition prior to this year?**

- No, this is my first competition
- Yes, one competition
- Yes, more than one competition

4. **About how often did you meet with your coach and/or teammates for the competition?**

- 3 or more times a week
- Between 1-2 times a week
- Once every two weeks
- Once a month
- Less than once a month
- Not at all

5. I participated in the academic competition because...	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I enjoy being challenged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I found it relevant to my life or interests.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I wanted to improve a certain skill (mathematics, problem solving, speech, etc).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I wanted to be on a team.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
my teacher recommended it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
my parents encouraged me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
it seemed like a fun experience.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
my friends were participating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: (Please specify)					

6. The academic competition...	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
gave me a chance to demonstrate my academic skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
strengthened my problem solving skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
got in the way of other school activities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
encouraged me to come to school more often.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
motivated me to try harder at school (finish more homework, earn better grades, etc).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
made it difficult to keep up with my homework and school grades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
helped me create new friendships.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
made me feel like an important member of a team.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
created too much stress.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
provided a challenge I wouldn't otherwise experience at school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
encouraged me to be more creative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
taught me something new about myself.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
helped me feel good about myself and my abilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
helped me discover a new interest or passion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Please rate your level of agreement with the following statements.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I enjoyed participating in this competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would participate in another academic competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would encourage others to participate in the competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. What was your favorite part of the academic competition?

9. What didn't you like about the academic competition?

Appendix D: Student Survey Responses by Competition

Student-Perceived Benefits by Competition

The academic competition...	Lone Star Challenge (n=32)	Academic Pentathlon (n=10)	Academic Decathlon (n=18)	UIL (n=108)	TMSCA (n=17)	DI (n=30)	DUDA (n=18)	Chess (n=68)	Robotics (n=37)
encouraged me to come to school more often.	67%	54%	45%	62%	67%	48%	41%	51%	65%
motivated me to try harder at school.	93%	62%	68%	71%	93%	60%	65%	66%	84%
provided a challenge I wouldn't experience at school.	87%	69%	80%	83%	77%	81%	78%	83%	85%
encouraged me to be more creative.	87%	77%	68%	84%	87%	94%	80%	85%	95%
gave me a chance to demonstrate my academic skills.	100%	92%	86%	96%	100%	83%	88%	87%	89%
taught me something new about myself.	87%	62%	68%	83%	80%	67%	81%	83%	77%
helped me discover a new interest or passion.	80%	62%	68%	80%	83%	71%	75%	85%	86%
made me feel like an important member of a team.	100%	92%	82%	82%	87%	85%	75%	83%	85%
helped me create new friendships.	87%	85%	82%	80%	77%	75%	84%	89%	89%
helped me feel good about myself and my abilities.	87%	85%	71%	93%	100%	79%	80%	83%	86%

Student-Perceived Obstacles by Competition

The academic competition...	Lone Star Challenge (n=32)	Academic Pentathlon (n=10)	Academic Decathlon (n=18)	UIL (n=108)	TMSCA (n=17)	DI (n=30)	DUDA (n=18)	Chess (n=68)	Robotics (n=37)
The competition got in the way of other school activities.	40%	23%	32%	37%	27%	29%	31%	28%	19%
The competition made it difficult to keep up with my homework and school grades.	13%	23%	21%	22%	27%	21%	16%	17%	12%
The competition created too much stress.	13%	15%	21%	20%	27%	19%	19%	15%	9%