

ASTRAL DRIVE JUNIOR HIGH SCHOOL
PFI/Accreditation

The Seven Questions

QUESTION #1: What are we doing well?

Using various sources of data, the ADJH PFI/Accreditation Team determined that our school is doing well in a number of areas including **numeracy, literacy, communication, and school climate.**

Numeracy

The 2006-07 CAT3 mathematics assessment administered to grade 9 students provided much data related to numeracy. The results of that assessment showed that 90% of students were in the competent to proficient range with *order of operations*; 88%, with *algebraic number operations*; 96%, with *integer operations*; 91%, with *algebraic patterns*; 84%, with *data analysis and probability*; and 86%, with *geometry and spatial sense*.

The 2006-07 HRSB Surveys provided some data related to numeracy. For example, 76% of students reported that they felt confident in the area of mathematics, and 84% of students agree that teachers provide help when students need it. Related to achievement in all subject areas is the evidence provided by teachers. 100% of teachers agreed that our school has a clear vision related to student achievement, and 83% indicated that teachers support a problem solving approach to learning.

Our final marks over the years provide additional information. In 2005-06 the percentage of grades 7-9 students who had a final grade of **B** or better was 62%. Last year 78% of our grade 7 and 8 students demonstrated achievement of “most of the expected learning outcomes addressed...with students’ work meeting program expectations” in mathematics. In grade 9, 44% of students had a minimum average of 80% which meant that they had at the very least a “very good performance in relation to the expected learning outcomes” for math.

A myriad of other factors should also be considered when we examine achievement of our students in the area of mathematics. For example, in last year’s Math Olympiad our school placed first among six junior high schools in the Dartmouth Zone to go on to regionals where we came first in grade 8 and sixth overall. Also noteworthy to mathematics achievement is that all students are participating in daily mental math, all classes get the required one hour per day of uninterrupted instruction, and about half of our math teachers have common meeting times in our timetable. We have begun to use common assessments and plan to build on this and the implementation of PLCs in the 2008-09 school year. Although we see math as a strength, we realize that there is always room for improvement.

Literacy

Literacy has been an area of focus for the past four years at Astral Drive Junior High. We began in 2004-05 by looking at board results stemming from the grade 9 literacy assessment. At that time we determined that just under 70% of students did not have reading as a regular habit and about the same percentage did not use reading strategies competently. We immediately developed goals around these issues and currently have 100% of English language arts classes having daily reading as part of their program. Students not only read, but also engage in “pre” and “post” activities with their peers and their teachers. Our school budget supports reading to the extent that in the last three and one half years, we have allocated over \$4 000 of our school based account to purchase print materials for our library and classrooms. Thanks to additional board monies, in 2006-07 alone we spent \$10 563 to supplement our literary resources. Among other items, this money supported the purchase of 46 new sets of novels (5 copies each) to facilitate literature circles in the classroom. It also supported our school’s first Book Club which began in 2006-07. This year it has doubled in the number of participants and the students have read seven classic novels and seven contemporary ones.

Library circulation is a testament to the degree to which literacy is valued at ADJH. We have been gathering circulation data and have determined that although our student population has decreased over the past three years, our library circulation has increased. For example, during the first four months of 2005-06, the library circulated 700 books among a student population of 652. This year, that number rose to 979 with a student population of just 575. That represents a 40% increase in circulation even though the student population decreased by 12%. The data collected in the spring shows a similar trend. From January to June in 2005, the library circulated 876 books; that number increased to 1150 during 2006, and continued to climb during 2007 to 1614 books.

Individualized student literacy data was collected in 2007 from an online survey that involved the whole school. Among the findings, 76% of our students reported having Halifax Public Library cards and 36% of these reported that they had used their card within the previous month. This library use was evenly split across the grades. In a separate component of the online survey, results on the ESTES Reading Attitude Scale showed that a significant percentage of our students had positive attitudes towards reading, with only a small variation in average scores among our top three classes, one at each level.

To document the extent of self-selected reading at ADJH, we have been collecting data for the past three years on the number of books and total pages read by our students. We used a standard period of time, provided directions on what could be included and asked students to keep written records of their reading. Overall, we were struck by the amount of reading being done by our students. Although there was a dip among grade 8 and 9 students after the initial survey three years ago, the average totals for grade seven students have increased markedly over the three years, and we are analyzing the data to identify factors that may be applicable to other classes or grades.

With regard to reading strategies, the literacy team developed a goal focusing on “pre”, “during”, and “post” reading strategies and organizers that students should be able to identify and use. A survey in 2006 revealed that 72% of teachers employed these strategies in their practice. In a reading assessment focusing on reading tools in May of that year, 78% of students showed that they were competent.

Additional assessments support our strength in literacy. One example is a grade 9 literacy assessment issued in November 2006. On that persuasive writing assessment a high percentage of students met or exceeded the outcomes in the following traits of writing: *organization (81%)*, *ideas (84%)*, and *matters of correctness or conventions (79%)*. Results from the Grade Six Literacy Assessment are a second example. In our building we have only 5% of the student body on Literacy Support Plans for reading and only 6% for writing.

Contrary to the grade 9 persuasive writing results in 2007, a Student Self-Evaluation of Write Traits in the spring of 2008 revealed that confidence among students in grades 7-9 is low in the area of *matters of correctness* compared with the other traits of writing. This appears to be founded when we look at the data from students in grade 7, for example. Grade 7 marks in several writing assignments indicate that students typically do much better with content than they do with writing conventions. In a couple of classes the evidence showed that as many as 72% of students scored better in the content area than in the matters of correctness category. For some students this translated into getting an **A** for their content and a **B** for writing conventions – certainly not alarming, but worth noting nevertheless. Among grade 8 students in three classes, between 31% and 43% of students scored low (in conventions) on a writing assessment in September, but improvements were noted in January when the percentage of students scoring low dropped to between 21% and 30%.

Information also obtained from the Write Traits Student Self-Evaluation was the percentage of students who rated themselves low (1 or 2 on a four point rubric) in the *main ideas* trait of writing. Between 6.5% and 18% of grades 7 and 8 students viewed themselves as having little confidence in three sub categories (*creating effective main ideas*, *using supporting ideas effectively*, and *using concluding sentences*) but the grade 9 students were much harder on themselves with between 30% and 40% of students rating themselves 1 or 2 on the rubric.

An additional source of information came from the Junior High Literacy Assessment from May 2007. Overall, 94% of our students met expectations in reading. In writing, over 90% of students met expectations in all four writing traits, with the exception of *ideas* in the essay component whereby only 80% met expectations.

In conclusion, the 2006-07 HRSB survey results also provided some valuable information with regard to literacy. 61% of students reported that they liked language arts (ELA and FLA), and 73% said they feel confident about their abilities in those subjects. 84% of parents reported that they were satisfied with their children’s progress in language arts.

Communication

This is an area wherein we have made tremendous strides over the past few years. We have implemented a number of strategies to improve communications. All teachers have access to computers in their classrooms and all use email as a means of communicating with parents. 94% of our teachers maintain a homework web page and 100% use email as a communication tool. 100% of our teachers have telephones in their rooms with voicemail features.

We feel strongly that parents have many opportunities to access teachers to find out about their children's achievement. In last year's HRSB survey (2006-07) 91% of parents indicated that they knew who to contact at school when they have concerns, and 77% reported that they receive regular information from school. Also worth mentioning is the fact that for a school with a student population of 575, the newsletter link on our website had 831 hits from September to November 2007, and 1690 hits as of mid April 2008.

Meaningful data is derived from attendance at school functions. At our Curriculum Night in September 2007, the number of students who had parents/guardians attend were 42.4%, 27.6%, and 24.5% respectively for grades 7, 8, and 9. During this evening, all parents received *Teachers' Plans for Communicating Student Learning* and copies were sent home with students for parents who did not attend. The participation numbers for Curriculum Evening may be considered low, but the rate of participation at the first Parent/Teacher Conference was considerably higher at 76.3%, 65.8%, and 64.3% respectively for grades 7, 8, and 9. Our staff considers communication with parents so important that they agree to do a Parent evening in February to bridge the board mandated sessions scheduled in November and April.

Additional communication tools employed at ADJH include a monthly newsletter posted on our website, distributed in print to students, and sent electronically to 40% of homes. Last year we installed an electronic bulletin board in our main foyer, and we have excellent parent representation at other school events including Band concerts, Student Showcase, Literary Evening, and School Closing ceremonies.

School Climate

A myriad of factors contribute to the school climate at Astral Drive Junior High. From the attitudes towards school leadership to the number of students involved in extra-curricular activities, we are encouraged by the data we have to support a positive school climate.

In the 2006-07 teacher survey, 100% of respondents reported that our school has a clear vision focused on student achievement and that administrators and teachers work together to make the school run effectively. 96% of teachers indicated that the administration encourages teachers to take in leadership roles, and 100% of teachers and

91% of parents believe that our school has a positive learning environment. To support the positive learning environment at ADJH we are pleased that 42% of our students made the Honour Roll during the first term of 2007-08, which translates into grade 9 students having a minimum average of 80%, and grade 7 and 8 students having no mark below B. 80% of parents say they are satisfied with the school's efforts to meet the academic needs of their children and 83% of students report trying their best in school.

In terms of having inviting classrooms environments at Astral Drive, 70% of students reported that staff treat them with respect, and 72% say that they learn about different cultures in school (28% were neutral on this point). 80.7% of students also felt that people of all races and ethnicities are treated fairly and 81.9% agreed that they were treated the same as others regardless of their ethnicity. The rationale behind these figures is worth investigating because ADJH has relatively few people who are racially visible.

How safe and comfortable students feel in our building is reflected in the number of students who report that they do not get bullied, teased or picked on. That number is 71% but 14% remained neutral. We are pleased that the majority of students are not subject to ill treatment, but we recognize that this number is not high enough and that there is work to be done. Beyond the efforts put forth by classroom teachers, administration, and guidance to address issues of safety, we have all grade 7 students participate in a HRSB Safe Schools Bullying Workshop in the fall, and we have the *U Matter Conflict Intervention* program in place for the second year.

Our final category relating to school climate is student participation in extra-curricular activities. This year we offer at least 40 clubs, sports teams, and organizations. 58% of students participate in at least one school based extra-curricular activity. Astral Drive often places at or near the top in zone, regional, and provincial competitions. To date, our teams have brought home 13 trophies, awards, and plaques for 2007-08. Students are to be commended as well on the support they show for the community beyond the school. For example, they have donated over 1100 food items to Feed Nova Scotia at Christmas, over 500 pairs of socks to community shelters, Christmas gifts to support 28 families, and several hundred dollars to World Vision. We are very proud of the benevolent spirit that is evident among our 575 students.

QUESTION #2: What trends do we see in the data?

Having reviewed the HRSB Survey results from students, teachers, and parents, over the years (2004-05 to 2006-07), we have been able to identify a number of trends, but we have not seen significant changes in any one indicator over the three year period.

Teacher survey results suggest that teachers are acquiring a better understanding of curriculum outcomes across grades and levels going from a mean of 3.70 in 2004-05 to 4.13 in 2006-07. This increase might be a result of the increase in the number of grade level and curriculum teams embedded in our school timetable. More teachers have scheduled times to align curriculum with colleagues. Also noteworthy is the increase in

the mean from year one (3.58) to last year (4.32) in terms of teachers reporting that the staff takes time to plan and learn together by subject, grade and/or level. Results from all three years were high for teachers reporting that they take time to plan so that students can successfully meet provincial outcomes. We have not seen any substantial increase, however, in the mean dealing with the number of teachers reporting that they use curriculum materials that reflect diversity (3.96 last year) and that they know how to identify bias in materials (3.75 in 04-05 and 3.78 in 06-07). This is an area in need of our attention.

Assessment has been a focus of both our board and our school over the past few years. The teacher surveys show an increase in the mean dealing with assessment information being used to plan for instruction. It has gone from 4.0 in 04-05 to 4.35 last year. As teachers embrace a PLC model, their understanding of the different types of assessments and their purposes increases, and it impacts positively on student achievement. Students have reported favorably over the years that they know what good work looks like (4.11 in 06-07) and that they know what teachers are looking for when they evaluate students' work (3.68 in 04-05 to 3.85 in 06-07).

In the area of communicating curriculum outcomes, the parent survey results over the course of three years reflect a marked change for the better. The mean in 2004-05 was quite high at 4.25, but dipped the following year to 3.80. This past year it climbed to 4.40. A couple of factors may account for this increase. Teachers have for the past two years been providing *Teachers' Plans for Communicating Student Learning* during the Curriculum Nights in the fall. Last year, teachers were encouraged to send these brochures home to parents if the parents were not in attendance at curriculum night. Also significant is the number of teachers using websites as a communication tool which is 96% this year.

Another positive trend deals with the environment. We've seen teachers go from 3.61 to 4.08 in their reports regarding students learning to take care of the environment. The students were less enthusiastic with their responses, but we do see growth with the mean being 2.98 in 2005 to 3.41 in 2007. Possible factors influencing this trend could be the emphasis placed on three stream waste management and the very active school based "recycling agents" introduced in 2006-07.

An area needing to be addressed would be that dealing with the Inviting School Success indicator and specifically "learning rarely...interrupted due to non-instructional activities." This item was introduced in the teacher and student surveys in 2006-07 and the mean reported was 2.95 by students and 2.92 by teachers. It is clear that students and teachers alike view non-instructional activities as interruptions to learning. We have attempted to address some disruptions – the number of announcements, for example, but clearly more work is to be done.

Also in the Inviting School Success category is the response by parents regarding their beliefs that students can be successful in school. Parents feel strongly about this and have reported so every year; the mean from the parents is approximately 4.5. Interestingly though, confidence among students in particular subjects as reported in the

Academic Success category is not quite as strong. Over the years the mean reported by students was close to 4.0 in all areas, but in social studies for whatever reason, it appeared to drop significantly from 3.98 to 3.93 to 3.67. Physical education remains high at about 4.5.

In mathematics, the student average mean for being confident about their abilities in math was 3.94 over three years (or 73%). The parent survey showed that satisfaction with their child's learning in math increased over this time from 3.84, 4.00 to 4.08 (or 77%) in the 2006-07 survey. The grade 9 CAT3 assessments from 2005-06 and 2006-07 also provided some interesting information regarding mathematics achievement. Over 90% of grade 9 students were competent or proficient with integer operations, order of operations and algebraic patterns. Over 80% of grade 9 students were competent or proficient with geometry and spatial sense as well as data analysis and probability. Number concepts and measurement improved from 76% and 75%, respectively, in 2005-06 to 81% and 78% in 2006-07. With problem solving, there were only 10% of students who scored *inadequate*. However, there were 27% of students who scored *low* in this area. As well, only 65% were competent or proficient with fraction operations. While this is 7% higher than the HRSB mean for 2006-07, it is a relative low for Astral Drive Junior High School with respect to academic achievement in numeracy.

When we look at data related to RCH we see that students are quite confident that racism is not a problem with marginal increases reported over three years by students (from 3.82 to 4.11). Teachers' attitudes are equally strong, but parents do not seem quite as confident although they do average 3.85 over three years. When questioned whether they are treated the same as other parents regardless of race or ethnicity, however, parents reported quite favourably that they are – from 4.0 in 2005 to 4.12 in 2007.

Apart from the HRSB survey results, it is important to consider other data when looking for trends. First let us consider literacy data. Results from board assessments indicate from the beginning (2003-04) that our most of our students are regular readers who feel competent about their reading and who are able to problem solve well enough to achieve the levels of accuracy necessary for successful reading. To increase the number of students who read regularly, we introduced daily reading in ELA classes and spent substantial amounts of money on the purchasing of resources. We have tracked students' reading annually and have seen an increase in the amount students were reading from our first year of data collection in 2004-05, and we have also seen a significant increase in the number of books circulated through our library.

The HRSB grade 9 literacy assessment in 2004-05 showed that students were able to process grade 9 level texts easily enough so that they read fluently. In those first couple of years, however, students scored low when it came to using text features. Only about half could use text features effectively in non-fiction during the first year of the assessment, and about the same number could use them effectively the second year in fiction. Identifying and using text features became a focus of our content and ELA teachers as they began to introduce strategies such as chapter tours, and began to ask students to develop their own "textbook" pages related to content areas and using specific text features. Most recent board results on this topic, unfortunately, show that using text

features continues to presents challenges to students as only 35% of the 10% sample of students are able to use them successfully.

Data from the 2006-07 HRSB literacy assessments show that students need continued support in using text features and in identifying main idea. The majority of students read accurately and fluently with self-selected texts and with grade level fiction and non-fiction. Most students make personal connections with text, and according to HRSB survey results, most report liking ELA and FLA and feeling confident in those areas. Parents tell us that they are satisfied with students' learning in language arts.

Last year's classroom data with writing showed us that grade 9 students were competent in the three identified traits of writing: *developing ideas*, *organization*, and *matters of correctness*, although the final trait scored lower than the others in a baseline assessment (79%) and will become the focus of a literacy goal. Supporting this is a self-assessment done by students on the traits of writing which showed that students are not quite as confident in the area of writing conventions as they are with other traits.

Finally, results from the Junior High Literacy Assessment (May 2007) showed that within "writing" some students experienced challenges in the areas of *ideas*, *organization*, and *matters of correctness*. Weaknesses were more evident in the non-fiction writing whereby 20% did not meet expectations in *ideas*, and 9% did not meet expectations in *organization*. In the story writing 9% of students did not meet expectations in *matters of correctness*. Teachers recognize that this data supports what they see in their classrooms and support our plan to make writing a priority. .

QUESTION #3 What improvements will make the most difference to increased student achievement?

A number of initiatives will make a difference to increased student achievement. The implementation of professional learning communities began this year and has given a number of teachers time within the timetable to meet to collaboratively plan curriculum, develop assessment tools, and reflect on best practice. We need to build on this next year so that more teachers are included. Related to this are common assessments. Again, we have done some of this in math and language arts the past two years, but we have not had it embedded as part of regular practice in grades 7-9.

In language arts we plan to make writing a focus with emphasis on the six traits but with a particular focus on **ideas**, **organization** and **matters of correctness** (writing conventions). We need to extend the teaching of writing to the content areas so that teachers across the board see the teaching of writing as part of their responsibilities. Common rubrics must be developed as part of assessment for learning. Our literacy coordinator will be key to supporting literacy initiatives.

In mathematics we will be focusing on increasing student competency in the area of fraction operations and fraction number sense. We feel that providing students with experiences using each of the five modes of representation - *verbal*, *symbolic*, *pictorial*,

contextual and *concrete* - both in everyday practice and in assessment items, students with different learning styles will be more likely to have success. Strategies and resources will be discussed and shared with colleagues in PLCs. As well, specific professional development will be offered to support staff with certain items. Data will be gathered using common rubrics and assessments at each grade-level for all specific outcomes related to fractions. This will be used by teachers and discussed in PLCs to inform teaching practice – assessment *for learning*.

In summary, we plan to strengthen our PLC model, fine tune assessment practices, and participate in professional development opportunities such as learning cafés so that we may positively impact student achievement.

QUESTION #4: Of the challenges the school identified, which ones will be targeted as areas of improvement?

- √ Non-fiction writing in the areas of ideas, organization and matters of correctness
- √ Fraction operations and fraction number sense in mathematics

QUESTION #5: What does the school plan to do?

Literacy Goal: Students will demonstrate improvements in non-fiction writing in the areas of *ideas, organization and matters of correctness*.

STRATEGIES:

1. PLCs will focus on writing with an emphasis on *ideas, organization and matters of correctness*.
2. Teachers will develop a common rubric at each grade-level for tracking individual student progress with *ideas, organization and matters of correctness*.
3. Students’ progress will be assessed using common rubrics. Data will inform teaching practice.
4. Teachers will meet regularly in PLCs to address the needs of students not meeting expectations.
5. Students will participate in *Writer’s Workshop* with a focus on *ideas, organization and matters of correctness*.

Professional Learning to Support Achievement of Goal

<p>Staff will engage in the following learning activities:</p> <ul style="list-style-type: none"> • PLC meetings • Professional readings focusing on best practice • Consultations with literacy coordinator • P.D. on implementing Writer’s Workshop 	<p>Staff will learn the following from engagement in the professional learning activities (knowledge, skills, and professional practice).</p> <ul style="list-style-type: none"> • How to engage students in the writing process • Creating effective writing assessments • Creating effective rubrics • Implementing Writer’s Workshop • Teaching students to generate and
--	---

<ul style="list-style-type: none"> Developing an inventory of resources 	<p>narrow topics, clarify ideas, expand sketchy writing, and develop concise writing</p> <ul style="list-style-type: none"> Teaching students to distinguish between revising and editing, to spot and correct errors, to understand and use editor's symbols and to develop and use an editor's checklist
--	---

Data sources used to monitor progress	Timeframe(s) for data collection	Responsibility for data collection – who will be collecting?
Baseline Common Assessments at each grade level	During first month of school	Literacy Coordinator
HRSB literacy assessment	October 2008	Literacy Coordinator
Writing portfolios	End of Term One and Two	Mrs. Burgess (7) Ms. DeCoste (8) Ms. Elms-Wood (9)
Second Writing Assessment	January 2009	Literacy Coordinator
Third Writing Assessment	April 2009	Literacy Coordinator
CAT3 Grade 8 Literacy Assessment	May 2009	Literacy Coordinator
JHLA	May 2009	Principal

QUESTION # 6a: How will we know what is being done is making a difference for student achievement?

We will collect data from of variety of sources including teacher developed, board and provincial assessments. Refer to school goals.

Numeracy Goal: Students will improve in the areas of fraction operations and fraction number sense

STRATEGIES:

1. Develop common rubric(s) to assess students in the areas of fraction operations and fraction number sense.
2. Develop common assessment activities at each grade-level.
3. Analyze data regularly in PLCs to inform on-going instruction.
4. Meet regularly in PLCs to address the needs of struggling students.
5. Meet regularly in PLCs to develop and implement strategies which have students representing fractions in a variety of ways.

6. Provide opportunities for students to communicate their understanding of fraction operations and number sense using appropriate terminology/vocabulary through oral and writing activities.

Staff will engage in the following learning activities	Staff will learn the following from engagement in the professional learning activities (knowledge, skills and professional practice)
Explicit instruction on the five modes of representation: <i>verbal, symbolic, pictorial, contextual</i> and <i>concrete</i> .	Knowledge of the five modes of representation and strategies for implementing them into professional practice.
Collaborative creation of rubrics and common assessment tools for gathering information on specific outcomes at each grade-level.	Meaningful data to inform classroom teaching and focus school-wide plan for improvement.
Specific PD related to manipulatives, resources and teaching strategies (I.e. Fraction Factory, 24 Fraction Game, etc.)	New and common understanding and experience with specific resources.
Technology Carousels	Exposure to software and online resources available to teachers.

Data sources used to monitor progress	Timeframe(s) for data collection	Responsibility for data collection - who will be collecting?
Grade 9 CAT3 Assessment	Occurs annually in January. All grade nine students participate.	HRSB - results sent to schools in spring
School-Based Common Assessments: Grades 7, 8 & 9	At least once annually – possibly more often. (Winter & Spring)	Teachers collect information and submit to VP for compilation and analysis. Results shared with staff.
School-Based Classroom Data	On-going All fraction-related outcomes will be reported on by all math teachers for all students by an agreed-upon date.	Teachers collect formative, outcome-specific data using common rubrics. Results shared in PLCs and SOME submitted to VP for compilation and analysis. Results shared with staff.

