An Evaluation of the "Alternative to Academic Suspension Program" at Brock University

Prepared by Brock University Student Development Centre
for the Higher Education Quality Council of Ontario

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Executive Summary

The Alternative to Academic Suspension Program (AASP) ran as a pilot program in fall 2009 to address the skill development of students facing suspension at Brock University. Initial results of the program indicate positive results with students persisting in their programs. In total, there were 445 students facing academic suspension, and 42 per cent of those students participated in the AASP pilot. Participants in the AASP were required to successfully complete the program, pass all credits taken during the academic year (maximum of three) and achieve an overall session average of at least 60 per cent to be eligible to continue studies. Failure to meet any of the conditions resulted in academic suspension at the end of the academic year.

Of the 187 students participating in the AASP pilot, 50 per cent returned to studies in the fall of 2010, compared to only 17 per cent of those students facing suspension who did not to participate. When considering all students facing suspension, AASP participants represented over two-thirds of the returning students in fall 2010. Not only are the participants persisting with studies, but the participants are improving their overall averages as well.

While overall academic averages can be difficult to change, of the 94 AASP participants returning to studies in 2010, 92.5 per cent of them were able to increase their overall average. Considering that AASP participants were limited to a maximum of three credits, it is encouraging that so many of the returning AASP participants were able to achieve this result. The participants are moving from being at risk of not completing their programs to completion with improved overall averages.

The current analysis reflects a positive short-term impact on retention. Continued analysis would examine a long-term assessment of the program and whether students can maintain their initial success as they continue in their studies at Brock. Other key findings from the report include:

- In 2009, students within two years of entry into Brock and facing suspension participated at a higher rate than those students facing suspension who had entered prior to 2007.

- Although 94 AASP participants returned to studies in 2010, there were 116 AASP participants (62 per cent of total AASP enrollment) eligible to continue studies at Brock University in 2010. We are unable to track whether the eligible participants not returning to Brock have gone to other institutions or chosen to end their postsecondary studies. Surveys and focus groups from eligible AASP participants not returning to studies at Brock would be beneficial to understand what choices these students made and why they made them.

Further study needs to be completed to understand the longer-term impact of the AASP. In addition to driving internal program improvements, further study could also help develop strategies to identify and support at-risk students at other universities.

Introduction

In November 2010, the Higher Education Quality Council of Ontario (HEQCO) released a Request For Proposals (RFP-025) to Ontario colleges and universities interested in early identification of students at risk of not completing their programs, and in particular the insights this approach can provide for implementing and evaluating policies and programs to reduce dropout rates. Brock University's proposal was focused on its Alternative to Academic Suspension Program (AASP) and proposed a detailed analysis of the AASP and its impact on students facing academic suspension.

Analysis of the AASP would focus on administrative and qualitative data to determine the initial impact of the program on the pilot participants. While anecdotal evidence indicated that the program was positively impacting students and their persistence in studies, analysis was required to understand the true impact. Research findings would be centred on the data available from the AASP's pilot start date in September 2009 through the end of the 2009/10 academic year. Key deliverables outlined in the agreement were an interim report to be submitted by March 31, 2011, and a final report to be submitted by April 21, 2011.

This final report documents the evaluation of Brock University's Alternative to Academic Suspension Program. Details regarding the process of student identification, Brock University policy, and a summary of program content are included as background for the analysis. This report examines student participation and performance to evaluate the impact that the AASP is having on measurables related to student retention and student success. The analysis leverages academic records as well as qualitative data available

Program Background

Identifying At-Risk Students

Following the fall term at Brock, if students' marks suggest they are at risk of not achieving a minimum 60 per cent overall average, they receive notice they are at risk of academic probation from the Registrar's Office. These students are then encouraged by the Office of the Registrar to seek appropriate resources such as Learning Skills workshops and academic advising.

Final notification of academic probation occurs at the end of the academic year (late spring). Brock University policy states that students whose overall academic average falls below 60 per cent will be placed on academic probation. While on probation, students must pass all courses for which they are registered and achieve a minimum average of 60 per cent for these courses. If at the end of the academic year these students do not meet the requirements of probation, they are informed by the Registrar's Office that they face academic suspension. Students are placed on suspension for one full calendar year. Suspension can occur at any point in an academic career, and many students elect to not return to studies after being placed on suspension.

Students do have the option to appeal their academic suspension if they can demonstrate extenuating circumstances affecting their academic performance. Students must provide documentation, and those students granted their appeal will be readmitted as if they had served the one-year suspension.

Recognizing a Need

Prior to 2009, staff in Brock University's Registrar's Office became aware of a trend in students facing suspension. The majority of students being placed on academic suspension tended to be in their first two years of study at Brock. Anecdotal evidence suggested that although students were being encouraged to seek academic support while on academic probation, students felt that they would be able to make the required changes on their own to prevent academic suspension.

In the spring of 2009, the Registrar's Office approached the Student Development Centre's Learning Skills Services group with a request to develop a program to specifically support students facing academic suspension.

Responding to a Need

With a goal of enhancing student academic performance, increasing student engagement and establishing higher retention and graduation rates, the Learning Skills Services group developed a unique pilot program which was introduced in the fall of 2009. Students at Brock University who were facing academic suspension now had the option of participating in a pilot Alternative to Academic Suspension Program (AASP) and taking a reduced course load (maximum of three credits), rather than not attending school that year.

Requirements for students taking the AASP option are:

- successful completion of the non-credit AASP course
- a passing grade on all undergraduate credit courses for which they are registered
- a minimum 60 per cent average for these courses

Failure to meet these conditions results in academic suspension at the end of the fall/winter session. Students are not eligible to take the AASP more than once.

Alternative to Academic Suspension Program (AASP) Overview

Course Overview

The goals of the AASP are to enhance student academic performance, increase student engagement and establish higher retention and graduation rates through helping participants:

- reflect on past academic experiences and build new strategies to help achieve goals

- examine motivation, strengths and learning styles
- set and achieve realistic goals
- enhance those skills required for academic success
- identify and address individual development areas through consultations, referrals and supplementary workshops

The AASP is a non-credit course that runs on a pass/fail basis to provide mindset and academic skills training using the following approaches:

- in-class instruction
- reflective journal writing
- small group interaction
- oral presentations
- personalized consultation
- at-home assignments
- peer support
- online learning

Active participation, including attendance at each class and completion of assignments and presentations, is a course requirement. The program is composed of 90-minute sessions, focusing on skill development in the following areas:

- critical thinking
- time management
- university-level reading
- university-level writing
- note-taking
- handling stress
- making presentations
- identifying needs
- problem solving
- seeking and using resources
- preparing for tests and exams
- taking responsibility

Classes are kept small in order to provide a seminar-like atmosphere that is conducive to interactive discussions and small group activities. Each session includes individual and group learning opportunities for all participants.

The AASP uses the textbook *Soaring to Success* (Steingass and Sykes, 2006). The textbook provides a diagnostic tool called the MINDSET Inventory to measure participant attitudes toward seven components shown to affect academic success: motivation, initiative, navigation, direction, study skills, expectations and time management. A copy of the MINDSET Inventory has been included in Appendix A.

The AASP has been offered in two types of time frames: a concentrated 15-day format in August and an eight-week program in the fall. Programming for both time frames is identical in content and delivery.

Student peers are an important program component. A peer panel is used to provide a student perspective on issues and questions, and peers are made available as resources for students in four of the modules. In the program's first year, the panel was made up of student leaders working within Student Services. In the second year, the panel was composed of "graduates" from the initial AASP. This modification was met with enthusiasm from both the peers and the program participants. Graduates of the program asked to become involved in upcoming sessions. The student peers answered questions from the class, participated in discussion and shared their experiences after they left the AASP.

While program content has remained the same, in the second year some changes were made with respect to class size, group forums and use of student peers based on instructor feedback and logistical needs. For example, average class size increased from 14.8 in fall 2009 to 27.8 in fall 2010. While grade data are not currently available to assess the impact of these changes, participant impact will be assessed at the end of the academic year when the required data become available.

AASP participants who meet all course requirements, including attending all classes, attending a consultation with the instructor and completing all assignments successfully, must then pass all of their courses and complete the academic year with at least a 60 per cent average for their current courses in order to be eligible to continue their studies at Brock University. These students remain on academic probation until their overall average exceeds 60 per cent. The amount of time AASP graduates remain on academic probation is difficult to determine as the number of previous credits attempted, the number of current credits and the degree of change in grades affect the rate at which the overall average changes.

Research Overview

While the goal for the AASP is ensuring that a higher percentage of students facing academic suspension persist in their programs of study through graduation, the data required for this analysis are not yet available. Fall 2009 participants are now completing the second academic year after facing academic suspension, and final grade results will not be available until late spring for the 2010/11 academic year. This report will use the rate at which students facing academic suspension in 2009 returned to study at Brock in the fall of 2010 as its primary measure of success. Other measures examined will include AASP completion, grade improvement and mindset changes.

These measurements will be used in the analysis of two focus areas:

- Focus one: AASP effectiveness
- Focus two: AASP participant success

Research Sources

Academic records provided by the Registrar's Office were analyzed to assess the impact of the AASP on the return rate of students facing academic suspension. For AASP participants, the records provided included the overall average of students pre- and post-AASP, identified their entry year at Brock and indicated whether these students opted to return to study at Brock in fall 2010. Although some students elected not to return to Brock University in fall 2010, we have no records to say whether these students have chosen to study elsewhere.

To assess the impact of program variations on participant success, academic records were linked, merged and anonymized with AASP program data, including class section, class size and attendance. Regression models were used to determine any significance in program variables on return rate.

To assess the impact of the AASP on participant attitudes, data from a MINDSET Inventory pre- and post-assessment (Appendices A and B) were analyzed, and student comments were assessed to determine any indications toward what students saw as important components of the AASP.

Profile of Students Facing Academic Suspension

Brock University policy dictates that when a student's overall average drops below 60 per cent, the student is placed on academic probation. While on academic probation, if the student fails to pass all credits with a minimum 60 per cent average on these courses, he/she is placed on academic suspension. Prior to 2009, no skill development or support was offered to students placed on academic suspension. Students would simply sit out the required one academic year and then make a choice about returning to studies.

In 2009, the Registrar's Office began the process of addressing the need for a program that focused on the academic skills of those students facing academic suspension, the majority of whom had entered Brock in 2007. Table 1 breaks down the year of entry for all students facing suspension in fall 2009.

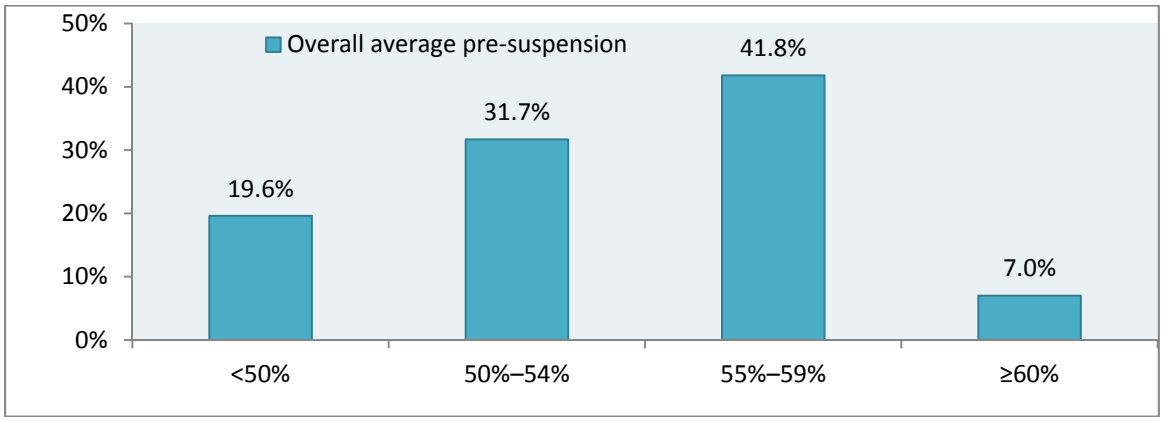
Table 1 – Year of entry for students facing academic suspension in fall 2009

Entry year	Number of students facing academic suspension	Percentage of total group facing academic suspension
1999	1	0.2%
2002	1	0.2%
2003	4	0.9%
2004	13	2.9%
2005	27	6.1%

Entry year	Number of students facing academic suspension	Percentage of total group facing academic suspension
2006	55	12.4%
2007	316	71.0%
2008	28	6.3%
Total number facing suspension in 2009	445	100.0%

Table 1 confirms that the majority of students facing academic suspension in 2009 (71 per cent) had been admitted to Brock University in 2007. It is likely that these students struggled from the onset of their postsecondary career and were not able to change their skills and/or habits in order to avoid academic suspension. The overall academic averages of those students facing academic suspension in fall 2009 further illustrates the degree to which these students were struggling, as illustrated in Figure 1:

Figure 1 – Distribution of overall academic averages for students facing academic suspension in fall 2009



n = 445; total adds to >100% due to rounding

Ninety-three per cent of students facing academic suspension had overall academic averages below 60 per cent. It should be noted that even if students on academic probation manage to raise their average above 60 per cent (of which 7 per cent did), they will still face academic suspension if they fail a course while on probation. While students on academic probation are made aware of the requirements to avoid academic suspension, some may lack the strategic navigation skills required to realize the impact that a failing grade can have on their standing within the university.

In fall 2009, students facing academic suspension were given the alternative of participating in the AASP to develop their academic skills rather than sitting out the required one academic

year. Table 2 illustrates that students within two years of entry were more likely to participate in the AASP program.

Table 2 – Choice of participation in the AASP vs. sitting out the academic year in fall 2009

Entry year	Number of students facing academic suspension	Number of students electing to participate in the AASP	Percentage electing to participate in the AASP	Percentage electing to sit out academic year or alternative route
1999	1	0	0.0%	100.0%
2002	1	1	100.0%	0.0%
2003	4	0	0.0%	100.0%
2004	13	2	15.4%	84.6%
2005	27	9	33.3%	66.7%
2006	55	18	32.7%	67.3%
2007	316	133	42.1%	57.9%
2008	28	24	85.7%	14.3%
Total	445	187	42.0%	58.0%

Only 15.4 per cent of students from the entry year 2004 facing academic suspension elected to participate in the AASP, while 85.7 per cent of those entering university in 2008 chose to participate. Further research would be required to understand why students who have invested a significant amount of time and money in their postsecondary career would not pursue options to assist in the completion of their degree. The total number of students includes part-time and full-time students.

Participant Demographics

In 2009, 187 students participated in the AASP. Participation increased to 271 students in 2010. For the 2009 participants, 41.2 per cent were female and 58.8 per cent were male. Although the majority of students facing academic suspension in 2009 entered Brock in 2007, these students may not have enough credits to be officially considered second-year students, hence the focus on entry year for students facing suspension. Analysis of the differences in participant and non-participant profiles and demographics may provide insight into the differences in return rates for these two groups as well.

Analysis of AASP Effectiveness

In analyzing the effectiveness of the AASP, research focused on answering five key questions:

- Did participants complete the AASP?
- After AASP completion, were participants able to pass their courses and achieve a minimum 60 per cent average on these courses so they could continue?
- Were AASP participants eligible to return to studies the following year?
- Of AASP participants eligible to return to study the following year, how many did?
- How did the return rate of AASP participants compare to those students who elected to take their suspension in the form of a year off from studies?

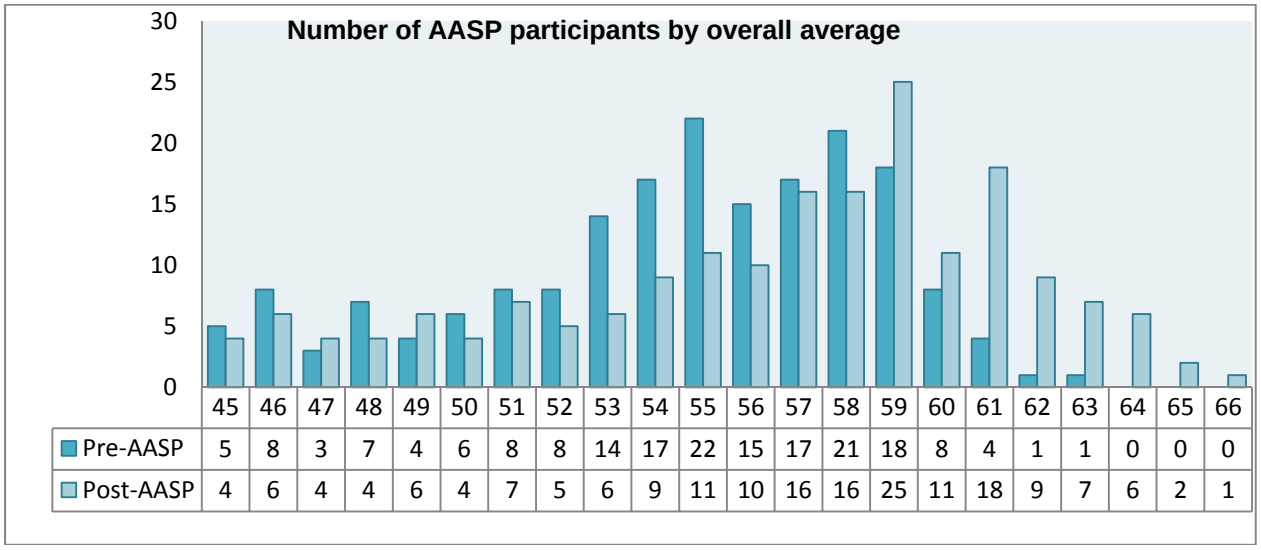
For students electing to participate in the AASP, the first step in avoiding academic suspension and remaining on academic probation is successful completion of the AASP. Successful completion involves leading an in-class seminar presentation, completing reflective journals, attending all classes, attending a consultation with the instructor, completing an academic writing assignment and completing the MINDSET Inventory pre- and post-assessment. The summary of successful completion of the AASP can be seen in Table 3:

Table 3 – AASP successful completion summary

AASP 2009 participant summary	Number of students participating in the AASP	Percentage of students participating in the AASP
Successfully completed the AASP	180	96.3%
Did not successfully complete the AASP	7	3.7%
Total	187	100.0%

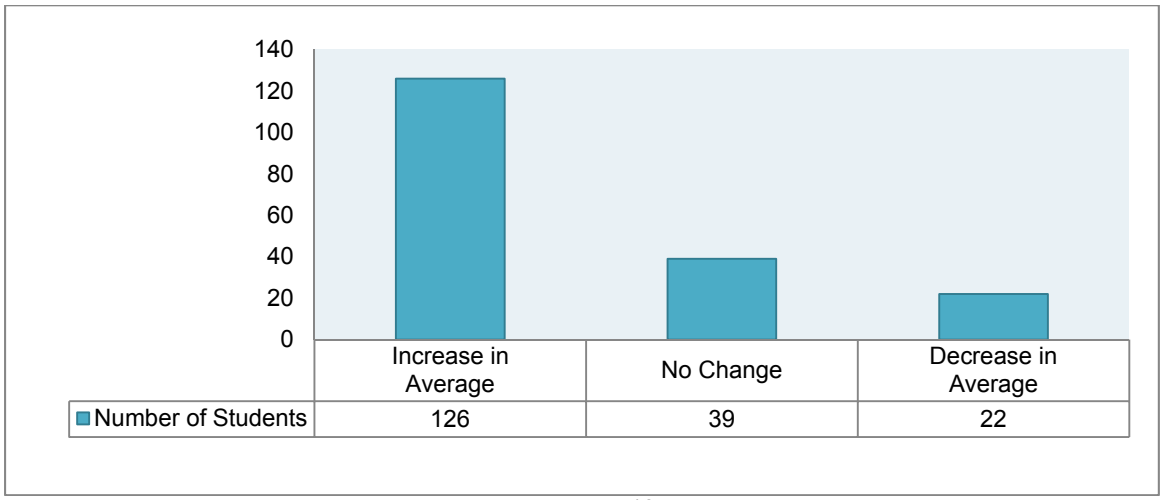
Ninety-six per cent of the 187 students participating in the AASP in 2009 completed the program successfully. Students who did not complete the program generally failed to submit multiple assignments or stopped attending the AASP after a few sessions. Throughout the AASP, instructors encouraged participants to take responsibility for their actions and consider the impact of their choices on their studies. In order to continue their studies in the fall of 2010, in addition to successfully completing the AASP, participants were also required to pass all of their courses and achieve a fall/winter-session average of at least 60 per cent on all courses taken during the academic year. Participant performance related to overall academic averages is illustrated in Figures 2 and 3 below.

Figure 2 – Distribution of overall averages for 2009 AASP participants pre- and post-AASP



	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
Pre-AASP	5	8	3	7	4	6	8	8	14	17	22	15	17	21	18	8	4	1	1	0	0	0
Post-AASP	4	6	4	4	6	4	7	5	6	9	11	10	16	16	25	11	18	9	7	6	2	1

Figure 3 – AASP participant change in overall academic average after AASP 2009



	Increase in Average	No Change	Decrease in Average
Number of Students	126	39	22

n = 187

AASP participants were limited to a maximum of three credits, and the impact on the overall average post-AASP was anticipated to be negligible. However, the majority of participants were still able to improve their overall average despite a reduced course load and likely a heavier weighting on credits taken prior to participation in the AASP. The exact number of credits taken pre-AASP and during the AASP had not been considered for this report but would allow for a more thorough analysis of the impact of the AASP on grades in future analysis. Although participants may have experienced an increase in their overall average, following successful completion of the AASP they needed to achieve a minimum 60 per cent session average and

pass all courses taken in the session in order to be eligible to continue their studies at Brock. Table 4 illustrates the eligibility to continue of AASP participants.

Table 4 – 2009 AASP participants' change in overall academic average post-program summary

Change in overall academic average post-AASP	Increase	No change	Decrease
A. Number of participants	126	39	22
Percentage of AASP participants (n = 187)	67.4%	20.9%	11.8%
B. Number of all AASP participants eligible to return in 2010 (n = 116)	104	11	1
Percentage of those experiencing grade change eligible to return (B ÷ A)	82.5%	28.2%	4.5%
C. Number of AASP participants returning in 2010 (n = 94)	87	6	1
Percentage of those experiencing grade change returning in 2010 (C ÷ A)	69.0%	15.4%	4.5%
Percentage of returning AASP students (C ÷ 94)	92.5%	6.4%	1.1%

Of the students participating in the AASP, 67 per cent saw their overall academic average increase following the program. Of the participants whose averages increased, 69 per cent returned to studies the following year. Participants with no change or a decrease in their average had a very small return rate. Further research would help us better understand the participants who returned despite no change or a decrease in their average and what motivated them to continue with their studies. There were no commonalities in entry year, faculty or gender within this group of participants to suggest any trends.

Essentially, 93 per cent of the returning AASP participants experienced an increase in their averages. Of the students with no change in average, only 28 per cent were eligible to continue in 2010 and only 15 per cent chose to return to studies. These results seem to illustrate that students whose averages do not change are at risk of not continuing, whether due to eligibility or choice. It could be difficult to increase the overall average depending on the number of credits already achieved and the number of credits (up to three) taken while participating in the AASP. Instructors, advisors and the Registrar's Office can try to educate students about

expected results after the program to improve the return rates for students not increasing their overall academic averages.

The focus of the AASP, however, is not just to raise student averages, but also to help students develop their skills for long-term success in their studies. Although 126 students (Figure 3) increased their overall academic average, students needed to pass all credits and achieve at least a 60 per cent session average to be eligible to continue studies in 2010. Table 5 illustrates the eligibility of 2009 AASP participants to return to studies in fall 2010, as well as their choice of whether to return.

Table 5 – Fall 2009 AASP participant eligibility to continue studies and return rates in fall 2010

AASP 2009 participant summary	Number of AASP participants returning in fall 2010	Number of AASP participants not returning in fall 2010	Total number of AASP participants	Percentage of AASP participants
Eligible to continue studies	94	22	116	62.0%
Ineligible to continue		71	71	38.0%
Total	94	93	187	100.0%
Percentage of total AASP participants	50.3%	49.7%	100.0%	

There is a possibility that some of the 22 students who were eligible to return but chose not to may have elected to take time off from studies or pursue studies at another postsecondary institution. As an anecdotal aside, it is encouraging to note that two AASP participants applied to graduate in fall 2010 following successful completion of the program, and these students would be accounted for in the eligible group not returning to studies.

In order to truly measure the effectiveness of the AASP, in addition to assessing the return rate of program participants, we compared the return rate with those students facing academic suspension who elected to take their suspension in the form of a year off from studies. Table 6 breaks down the choices that students facing academic suspension in 2009 made regarding the 2009/10 academic year.

Table 6 – Fall 2009 summary of all students facing academic suspension

2009 summary of students facing academic suspension	Number of students	Percentage of students facing academic suspension	Number of students returning to studies in fall 2010	Return rate as a percentage of the specific group facing suspension
Participating in the AASP	187	42.0%	94	50.3%
Alternative route	8	1.8%	5	62.5%
Not attending/ "sitting out" academic year	250	56.2%	39	15.6%
Total	445	100.0%	138	31.0%

Only 42 per cent of students facing suspension from Brock elected to participate in the AASP. The majority of the students, just over 56 per cent, elected to sit out the academic year. The "alternative route" category represents a small group of students who did not participate in the AASP but took their cases to appeals and were authorized to take courses in the 2009/10 academic year. A total of 31 per cent of those facing suspension in 2009 registered for courses in fall 2010. Over two-thirds of those returning from suspension in 2010 were participants in the AASP in 2009. Only 17 per cent of students opting not to participate in the AASP returned to studies in 2010. While the data illustrate a higher initial rate of return for AASP participants, comparisons will need to be made over time to determine whether the skill support in the AASP improves the long-term persistence of participants compared to the persistence of students who decide not to participate in the program. Students participating in the AASP are making progress toward completion of their university program whereas students opting not to participate in the AASP are not progressing for one year. It may be difficult to quantify the psychological impact on overall persistence that the additional credits obtained during the AASP have for participants as they have already moved closer to completion than non-participants.

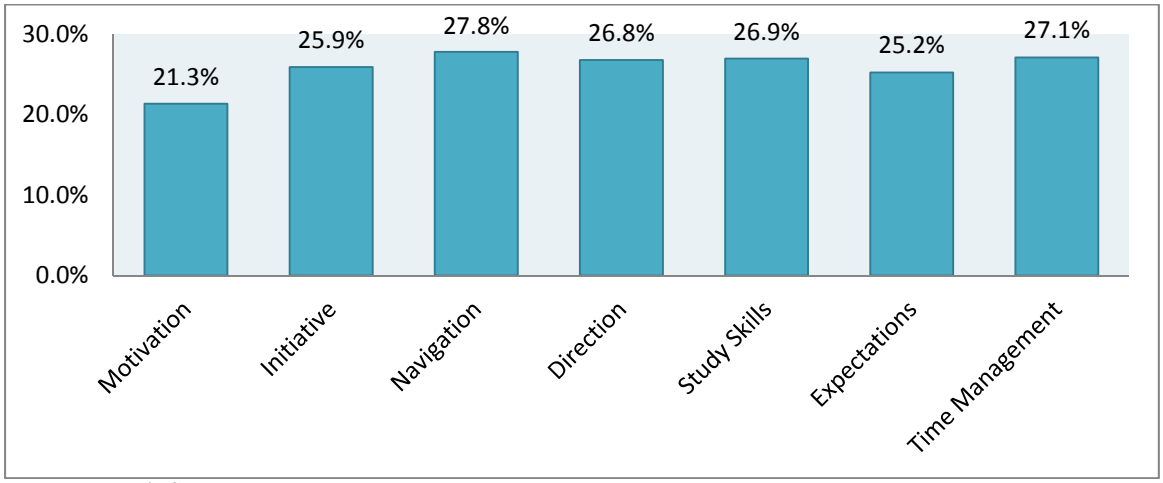
Participation in the AASP is voluntary. Students facing suspension are given the option of participating in the AASP rather than serving the suspension. There may be some bias in comparing return rates for students opting to participate versus those not participating. Participants choosing the AASP option may have increased motivation to continue with studies while some of those opting not to participate may have already decided not to continue their university education. However, anecdotal evidence indicated that some participants in the AASP were attending both the program and university because of parental influence or pressure.

Analysis of AASP Participant Success

While the analysis of AASP effectiveness focused on participant completion, eligibility to continue studies and rate of return to studies, analysis of participant success is focused on assessing changes in student mindset that have occurred as a result of participation in the AASP.

The MINDSET Inventory (Appendix A) is a self-assessment completed by AASP participants at the beginning and end of the program. The attitudinal scores give students an indication of their potential problem areas and possible obstacles to academic success. Students rank themselves using a five-point scale, with a higher score translating to a higher priority for further development by the student. At the end of the AASP, an improvement in student mindset would be marked by a decrease in score in the post-assessment. A maximum score for any component would be 35, and a minimum would be 7. Figure 4 shows the average MINDSET Inventory score percentage improvement across the seven categories in 2009.

Figure 4 – MINDSET Inventory scores percentage improvement for 2009 AASP participants



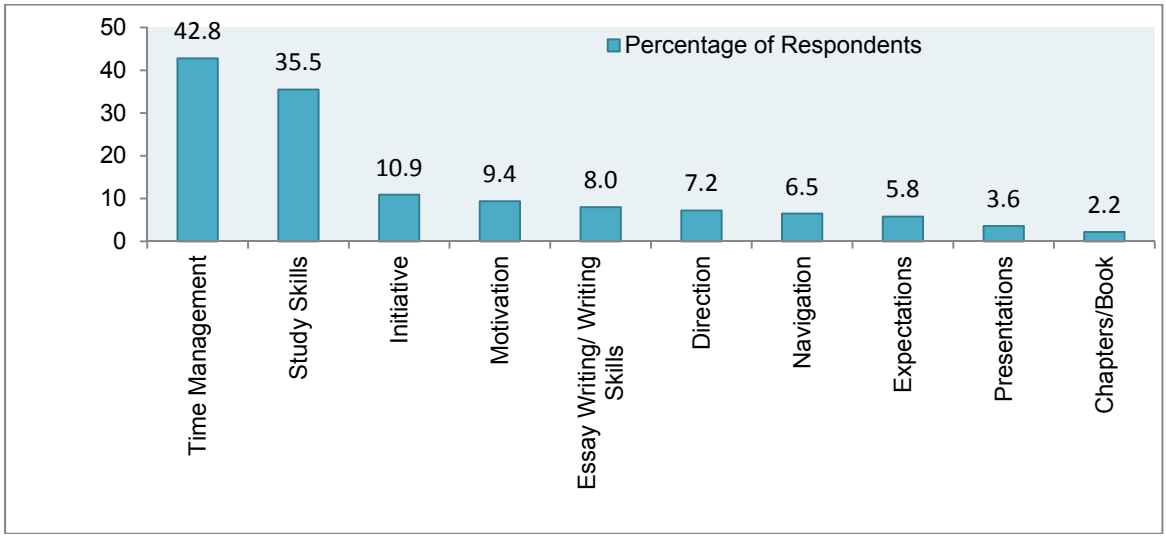
n = 153

Although there were 187 AASP participants in 2009, some did not submit scores but rather a ranking of components (i.e., time management was the highest-ranked, followed by study skills). Some response sheets were not complete with scores for each component. Both of these groups of scores were excluded from the calculation of the average MINDSET scores for the group. The August participants were not able to complete the pre- and post-assessment due to technical difficulties. Scores were submitted anonymously, so we were not able to link the individual scores to student academic records. In the future, it would be beneficial to determine whether MINDSET score improvement is correlated to academic improvement or return rates for students.

The largest improvements in scores occurred in the areas of navigation, time management and study skills. Coincidentally, time management and study skills were two areas students found most valuable, as seen in Figure 5, while navigation and direction were not areas that students appeared to value. Appendix B includes a copy of the handout students were required to submit.

At the bottom of the handout, students were given an opportunity to include comments regarding areas that students felt were particularly helpful. Figure 5 includes a summary from the AASP post-assessments of the 10 most common areas of the program that students felt were helpful. In total, 138 students took the time to include some type of response. Responses were not mandatory from students, and due to the anonymity of the form students were encouraged to be as honest as possible with their responses.

Figure 5 – Top 10 responses for "Areas I feel were particularly helpful"



n = 138

The majority of the responses from participants related specifically to the MINDSET Inventory. Since the comments were submitted on the same form as the MINDSET scores, there may be a degree of response bias where students may have felt prompted to include one of the seven MINDSET components. Although initiative was considered a priority from an assessment standpoint, participants did not necessarily value that as the most helpful component of the program. The writing skills component was noted by 8 per cent of respondents, and a small percentage even indicated the textbook was most useful. In the future, conducting surveys or focus groups would be beneficial to understand why participants listed certain components and how they feel they have benefited from the skills addressed in the program.

In addition to the MINDSET Inventory, 2009 AASP participants were asked to complete four reflective journals throughout the program. Comments from program participants captured from these journals and through emails with instructors provide encouraging evidence not only that

the course is appreciated by students, but that they feel it will make a difference in their academic experience:

- "This program taught me a lot about myself."
- "This course was a big help. Really glad Brock offered it instead of suspension. Great learning experience"
- "This course has helped me get back on track with my marks and my goals."
- "This class has helped me study properly and have priorities in my life. Thank you!"
- "The scare of failing this course or missing one class has spilled over into other classes, causing me to be more punctual and efficient."
- "… has changed my point of view and encouraged me to work harder for my goals."
- "… the course has honestly been the best thing I've taken in university to realize what I have done wrong and how to improve as a student."
- "It helped me realize that success is my job, not someone else's. I learned a lot about myself."
- "Great class. Helped a lot. Made me think a lot about my future."
- "Made me realize that I can succeed."
- "Good course, helped set priorities straight."
- "It helped me rethink my academic approach. Thank you!"
- "Course was very helpful! Made me realize what I need to be to be successful."
- "I definitely recommend it to anyone who is going through academic difficulties."
- "… has been great and I am going to continue to break bad habits and visit with Academic Advisors frequently."

In 2009, one section of the AASP was offered in August and 12 sections were offered beginning in September. Classes were run at a variety of times of day and days of the week. Table 7 shows the sizes and return rates for participants in each of the sections.

Table 7 – 2009 AASP return rate summary by section

2009 class summary	Type of class per week	Number of students in section	Percentage of participants returning in fall 2010
August	5 × 90 minutes	12	33.3%
Group 3	2 × 90 minutes	20	50.0%
Group 4	2 × 90 minutes	15	60.0%
Group 5	2 × 90 minutes	8	50.0%
Group 6	1 × 180 minutes	20	55.0%
Group 7	2 × 90 minutes	8	62.5%
Group 8	2 × 90 minutes	20	30.0%
Group 9	2 × 90 minutes	22	72.7%
Group 10	2 × 90 minutes	18	55.6%

2009 class summary	Type of class per week	Number of students in section	Percentage of participants returning in fall 2010
Group 12	2 × 90 minutes	10	50.0%
Group 13	2 × 90 minutes	9	44.4%
Group 14	1 × 180 minutes	19	36.8%
Group 15	1 × 180 minutes	6	50.0%

Initially, it was thought that students participating in the August section were students who would be most keen to develop new skills and that their initiative would transfer to their academic studies. While this may still be the case, this section had a lower-than-average return rate, as did groups 8 and 14. Understanding which factors impact return rates for program participants can help instructors and coordinators modify approaches or change organization to improve student performance.

In order to assess differences in return rates across the sections, a few key areas were examined. Initially, return rates were examined across several variables to determine if there were differences in return rates, prior to assessing whether there was a statistical correlation between return rates and the different groupings. Type of class, size of class, student absence and student average entering the AASP were analyzed for return rate differences. Although the return rates were compared for the single and double sessions, they were not analyzed further since there are currently no plans to continue with the 180-minute format. There was a slight difference in return rates favouring the 90-minute sessions, but this has not been assessed for statistical significance at this time. Table 8 illustrates the comparisons across the different variables.

Table 8 – 2010 return rates for AASP participants by class type, size, pre-AASP grade range and absentee rates

	n = 187	Number of students returning	Total number of students in group	Return rate 2010
AASP class type	Single (90 min sessions)	73	142	51.4%
	Double (180 min sessions)	21	45	46.7%
AASP class size (students per class)	less than 10	20	43	46.5%
	10 to 19	31	62	50.0%
	20+	43	82	52.4%
Student absence	No absence	83	156	53.2%

	n = 187	Number of students returning	Total number of students in group	Return rate 2010
– AASP	1 missed class	7	14	50.0%
	2+ missed classes	4	17	23.5%
Pre-AASP overall average	≤50	3	33	9.1%
	51 to 53	16	30	53.3%
	54 to 55	24	39	61.5%
	56 to 57	19	32	59.4%
	58 to 59	22	39	56.4%
	60+	10	14	71.4%

As indicated previously, the single/double sessions were not assessed further since there are currently no plans to continue with the 180-minute format. The groups were divided into small (under 10 students), medium (10 to 19 students) and large (20+ students) classes. There appeared to be a slight improvement with return rates for the larger class sizes. It is important to understand if there is any significant difference in return rates across class sizes as planning continues since the average class size increased from 14.8 in 2009 to 27.8 in 2010. Due to the small sample size for students with class absence, correlation was examined only for absent or not absent. Although attendance was mandatory, students were excused with doctor's notes and makeup assignments to cover the material missed. There was a large difference between return rates for groupings by pre-AASP average, and the initial analysis focused on whether there was a correlation between pre-AASP overall averages and return rates and not by specific groups. Class size remained coded as small (under 10 students), medium (10 to 19 students) and large (20+ students). Table 9, the initial correlation table, indicates a weak or directional relationship between variables and the return rate of students.

Table 9 – Correlation between return in 2010 and class size, pre-program average and student absentee rates

	Return 2010	Class size groups (small/ medium/large)	Overall average pre-AASP	Absent (yes/no)
Return rate 2010	1.0000	0.0459	0.3315	-0.1318
Class size groups (small/medium/large)		1.0000	0.0963	-0.0630
Overall average pre-AASP			1.0000	0.1088
Absent (yes/no)				1.0000

There appeared to be some directional correlation between pre-AASP overall averages and student AASP absenteeism. These two areas were carried forward to binomial logistic regression to determine the statistical significance on student return rates. Four groups were entered into the backward stepwise analysis to determine which variables were most significant to the model. The variable groups used were:

- pre-AASP average ≤50 (grades ≤50 = 1, otherwise 0)
- pre-AASP average 51 to 53 (grades 51 to 53 = 1, otherwise 0)
- pre-AASP average 60+ (grades 60+ = 1, otherwise 0)
- student absence (yes = 1, no = 0)

The dependent variable was student return (yes =1, no = 0). A constant was included in the model. At each step of the modelling, variables were removed from the model if their effect was not significant on the return outcome. Table 10 includes the final model details.

Table 10 – Binomial logistic regression model for AASP return rates

Parameter	Effect coefficient	Standard error	Significance
Marks ≤50	-2.724	0.631	.000*
Absence	-0.863	0.430	.045**
Constant	0.518	0.182	.004*

Dependent variable: 2010 Return. R^2 = 0.227, n = 187.

* p < 0.01

** p < 0.05

In predicting the likelihood that an AASP participant returns to studies the following year, the constant indicates a baseline expected return rate. Because the regression model is not linear, the coefficient is not read as a percentage. Missing even one AASP class has a negative effect on the likelihood that the participant will return, although not to the same degree of a pre-AASP average less than or equal to 50. Participants with a pre-AASP average less than or equal to 50 have a significantly decreased likelihood of return the following academic year.

It is important to note that student pre-AASP marks of 60+ are also an important indicator of student return, though not at a statistically significant level. Student absence may be an indicator of student attitude throughout the program. With the knowledge that repeated absences can be linked to a decreased likelihood of return to studies, instructors can discuss the issue with students proactively, to allow students to make informed decisions about their commitment to the AASP and their academic classes. Students opting to enter the program with an overall academic average at or below 50 per cent have a statistically significant smaller likelihood of returning and could be offered additional support from academic advisors or instructors.

Conclusions

In setting out to assess the effectiveness of the AASP, our primary goal was to answer the question, “Is the program making any difference?” The return rate for AASP participants was 50 per cent, versus 16 per cent for those opting to not participate. Furthermore, 93 per cent of the returning AASP participants were able to increase their overall average despite a reduced course load. These findings, among others, suggest the AASP is indeed having a positive impact on students at risk of not completing their programs.

- Self-assessment of student mindset indicators at the beginning and end of the AASP indicated the following improvements:
- Motivation: 21.3 per cent improvement
- Initiative: 25.9 per cent improvement
- Navigation: 27.8 per cent improvement
- Direction: 26.8 per cent improvement
- Study skills: 26.9 per cent improvement
- Expectations: 25.2 per cent improvement
- Time management: 27.1 per cent improvement

An interesting finding related to the impact of student mindset, specifically initiative, on performance surfaced through the analysis of AASP attendance records. Students who missed even one AASP class were less likely to return to studies in the following academic year.

In addition to determining whether the program is having a positive impact on participant performance and mindset, data analysis also uncovered interesting findings about who is electing to participate in the program. With only 15.4 per cent of students facing suspension from the entry year 2004 electing to participate in the AASP, versus 85.7 per cent from entry year 2008, the data suggest that students who entered Brock more than two years prior to facing suspension could be less likely to participate in the AASP based on current results. Academic advisors and the Registrar’s Office can analyze whether students are full- or part-time and whether this status could impact a student’s persistence when facing suspension.

Students opting to participate in the Alternative to Academic Suspension Program with overall academic averages of 50 per cent or less are less likely to return to studies the following year. Instructors and advisors may need to provide additional support for these students to increase the return rates for this group.

While 62 per cent of AASP participants were eligible to continue their studies following their year of suspension, only 81 per cent of those eligible chose to return in 2010. Although many students have been successful in avoiding suspension, some students are still choosing to pursue other options rather than return to studies at Brock. Perhaps some students wanted to leave by choice rather than being asked to not return. It will be difficult to assess the impact of the program on students choosing other avenues of education such as college, trade school or another university.

From a planning and logistics perspective, there was concern that larger classes might be less effective in helping students. On the contrary, the initial data showed that students in the large classes (20+ students) had a slightly higher return rate of 52 per cent versus those in the small classes (less than 10 students) with 46.5 per cent of those students returning. There is almost no statistical correlation between class size and return rates of students. This fact is particularly relevant since the class sizes were all greater than 20 students in 2010.

Research indicates that students had a better return rate in the 90-minute sessions versus the 180-minute sessions. Much of the logistics with scheduling is dependent on the number of students opting to participate in the program and facilities available. While class size does not appear to negatively affect return rates, it is imperative to continue to measure the impact as student dynamics change each year and with increased participation, results may change. Scheduling should continue to use the twice-weekly 90-minute sessions rather than the weekly 180-minute sessions whenever possible from the standpoint of return rates.

Recommendations

Leverage Current Report Findings

Students are interested in the experiences of other students, and we will miss out on an opportunity if the findings are not shared. Arming AASP instructors and academic advisors with key findings related to AASP participant success may help motivate participants to attend and complete the program. For example, when telling students facing academic suspension about the AASP, the conversation can include facts like 67 per cent of 2009 AASP participants experiencing an increase in their overall grade average after completing the program. In the first AASP class, the instructor can share the findings that correlate absences from the AASP classes with decreased likelihood of continuation in studies beyond the participation year.

Continue and Enhance Program Assessment

While we are pleased with the initial results of the AASP, we are even more encouraged by the opportunities that exist to improve the program through continued and enhanced assessment.

Collect additional qualitative student data

To better understand the qualitative side of the research, an electronic survey or focus groups of past participants should be conducted. From the limited qualitative data that have been collected, it is clear that students valued the MINDSET components of the program. Feedback from past participants could help instructors and coordinators to understand student perception about content and consultations and to incorporate student suggestions for program improvement. It could also help to better understand the decision-making process for those students who were eligible to return to studies but elected otherwise. Part of the program's success could be that students have found postsecondary options more suited to their goals outside this avenue. Understanding student motivation regarding the decision to participate in

the AASP may help the Registrar's Office with the communication about the program to students facing suspension.

Enhance student tracking

There are two key aspects of student tracking that should be discussed. The first aspect is the ongoing tracking of students facing suspension. This aspect includes both students who elect to participate in the AASP and those who do not. Enhanced demographic information about these students will allow for analysis of the role of factors like gender in participation rates for the program. Early results of the AASP are positive; however, the true assessment of the program in assisting students in persisting with their programs occurs once all participants have completed their studies at Brock University, whether by graduation or withdrawal from studies. The continued tracking of students both from the pilot and over subsequent years will be important to effectively assess persistence with programs and how it compares to the path chosen by non-participants.

Another aspect of tracking to be addressed is the linking of the qualitative MINDSET Inventory to the academic data. At this point, analysis indicates an aggregate improvement in each component of the MINDSET Inventory. With anonymity of submissions in 2009, no correlation can be made with the degree of improvement in scores to degree of improvement in academic performance. Attitudinal scores should be linked to students in upcoming programs to understand whether a relationship exists between MINDSET components and changes in academic performance and to what degree. Understanding the impact of the attitudinal changes and whether it is correlated to academic performance will help instructors empower students to be aware of factors impacting their success.

A variable that had not been considered for this report that should be incorporated into future tracking data is the full- or part-time status of participants, to allow for a better understanding of the relationship with entry year for students facing suspension. There may be differences in the degree of persistence for students who are either full- or part-time that may be masked by entry year of students. Additional demographic data that could be incorporated into tracking efforts could include age, route of entry (i.e., high school, college transfer or mature students) and number of credits attained.

Investigate additional diagnostic tools

Currently, we know that students entering the AASP with an overall average less than or equal to 50 per cent are less likely to return, as are students missing even one AASP class. We do not know whether there are any behavioural or personality traits common to those students who persist with studies. Understanding personality traits with tools such as the Myers-Briggs Type Indicator, coupled with focus groups and surveys, would not only help with possible predictors of success, but also allow instructors to refine program materials based on research results. Once variables impacting student persistence are defined, strategies can be put in place to improve program results and student success.

Pursue long-term program assessment

While report findings suggest that the AASP is having a positive short-term impact on present academic performance and student retention, true assessment of impact on long-term retention should follow the students until they complete their studies in some form at Brock University. Further analysis is required on academic records data that will become available in late spring of 2011 to assess the true impact on student retention and graduation rates. That data will also allow for the comparison of 2009 and 2010 AASP participants to assess for differences and trends. Assessing the 2009 AASP cohort should continue until all students have moved through to some form of completion of studies at Brock University to have a true understanding of the program's impact. The results from this pilot group will provide important benchmark data for future years. In addition to enhancing Brock's AASP, the findings from this type of long-term program assessment could also help develop strategies to support at-risk students at other universities.

Appendix A: The MINDSET Inventory

Reflect on your last term and rate yourself on the following areas using the point system below:
5 points – usually or always true
4 points – often true
3 points – sometimes true
2 points – seldom true
1 point – never true

MINDSET

	My professors were not very good teachers.
	When a class was boring, I lost interest in the course.
	In my classes, I underestimated the amount of time and effort needed to achieve a desirable grade.
	When I didn't perform well on a test, it was mostly because either the test was unfair or the instructor didn't cover the material very well.
	I had difficulty motivating myself to study.
	Most subjects that gave me difficulty were those in which I've never done well. I just don't have the knack for certain subjects.
	My attention tended to wander while in class.
	Total Motivation score (add numbers from above)

MINDSET

	I rarely met with my academic advisor.
	I did not speak with my professors outside of class.
	I found it difficult to follow through with my class-related commitments outside of class (i.e., attending scheduled appointments).
	I did not participate in study groups.
	Few people who work at the college or university knew me by name.
	I did not receive tutoring or visit the learning centre.
	I skipped classes last term.
	Total Initiative score (add numbers from above)

MINDSET

	I was unsure of my options for repeating courses and the possibility of replacing my bad grade(s).
	I was unclear about how my low GPA affects my loans, grants, scholarships and other financial services.
	I did not receive encouragement and support for attending college from family or friends.
	I was not clear about general education and other degree requirements.
	There seemed to be a lot of red tape at this university which made it difficult to know where to go and what to do.
	I was unsure who to see when I experienced personal problems or stress.
	When I wanted to know about a specific university policy that applied to me, I was unsure where to find information about the policy.
	Total Navigation score (add numbers from above)

MINDSET

	I was not sure how my abilities related to various majors.
	It was difficult for me to imagine what my life will be like five years from now.
	I had a hazy understanding of which careers are appealing to me.
	I did not estimate what grades I thought I would receive last term.
	I was unsure if I could meet the academic demands of specific majors.
	Once I established a plan, I found it difficult to follow through with implementing it.
	It was difficult to pinpoint subjects that I really enjoy and ones in which I can excel.
	Total Direction score (add numbers from above)

MINDSET

	I rarely read my assigned reading prior to the lecture.
	I only reviewed my lecture notes the night before the exam.
	I seldom took notes while reading my textbook.
	I rarely made and answered questions from practice tests that I prepared.
	Flashcards weren't very effective for memorizing; therefore, I didn't use them much.
	At the end of class or lecture period, I found it difficult to summarize in much detail the information presented.
	I was easily distracted when studying.
	Total Study Skills score (add numbers from above)

MINDSET

	It was unclear to me how my professors assign grades in my classes.
	I was uncertain about how much work I needed to do to earn an A in my classes.
	I was confident that I could achieve good grades in my classes in spite of difficulties that arose.
	When I was earning a D or F at midterm, I remained in the class with the expectation that I would be able to raise my grade by the end of the term.
	In classes that I knew were going to be challenging, I was happy to settle for a passing grade so that I could get the requirement out of the way.
	I had many interests which made if difficult to identify which of the following areas were more important to me: classes, work, social, family.
	Even when I received a failing grade on a test, I didn't change the way I prepared for the next test.
	Total Expectations score (add numbers from above)

MINDSET

	I worked in a job an average of 15 hours or more per week last term.
	I preferred to study when the mood hit me instead of following a study schedule.
	I found it difficult to study at least four hours per day (including weekends).
	I never seemed to have enough time to get everything done.
	I spent less time on my studies in college (classes plus studying) than I should have.
	I believe that I wasted time.
	I tended to cram for exams rather than begin studying at least 5 days in advance.
	Total Time Management score (add numbers from above)

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Appendix B: AASP Pre- and Post-Assessments

For each of the MINDSET components, use the drop down menus to input your ***total score*** for each area. Your scores will remain anonymous, but will help instructors understand the areas where AASP is strongest in helping students and which areas need further development.

Pre-AASP Scores		Post-AASP Scores	
Motivation		**M**otivation	
Initiative		**I**nitiative	
Navigation		**N**avigation	
Direction		**D**irection	
Study Skill		**S**tudy Skill	
Expectations		**E**xpectations	
Time Management		**T**ime Management	

Please include any additonal comments regarding the AASP.
Areas I feel were particularly helpful:

Areas I need additonal support with: