# **Program Review**

PROGRAMS: AS.PS.GEN, AA.LA.GEN, and AS.NSM.GEN

**PROGRAM REVIEW TEAM:** Ilene Kleinman, Carol Miele, Laura Ochoa, P. J. Ricatto,

Michael Feder, Fred Golub, Kim Smokowski, Larry Hlavenka

**DATE OF THIS REPORT:** August 8, 2018

PERIOD OF YEARS BEING REVIEWED: 2012 -2017

#### **OVERVIEW**

The college offers Associate of Arts (AA) and Associate of Science (AS) transfer degrees. (The college also offers the Associate of Fine Arts (AFA) transfer program which will not be discussed in this report.)

A general curriculum is available in Liberal Arts (AA.LA.GEN), in Natural Science & Math (AS.NSM.GEN), and in Professional Studies (AS.PS.GEN).

These degrees support the College mission "to inspire our community to realize a better future" by preparing students to transfer to 4-year colleges in baccalaureate programs.

Program descriptions (program mission) and program learning outcomes (program goals) are found in the College catalogue as follows:

#### **AA.LA.GEN**

The Liberal Arts program is an interdisciplinary degree that provides an overview of the arts, humanities, social sciences, mathematics and natural sciences. Because the liberal arts major covers a broad spectrum of subjects, it prepares students to transfer to four-year colleges to pursue a Bachelor's degree in such fields as English, history, humanities, journalism, foreign languages, pre-law, literature, psychology, sociology, political science, philosophy, and education. Additionally, the program stresses the following LEAP goals: civic knowledge and engagement—local and global; intercultural knowledge and competence; ethical reasoning and action; and foundations and skills for lifelong learning. It provides a more individualized education and allows the student to develop a course of study by selecting from a variety of General Education Areas.

**Program Learning Outcomes** 

Demonstrate the ability to think critically and creatively.

Apply analytical reasoning across academic disciplines.

Demonstrate proficiency in oral and written communication.

Demonstrate information literacy and technological competency.

Recognize and appreciate diversity, historical viewpoints, and the global perspective.

Cultivate ethical values, personal wellness, and personal learning strategies.

#### AS.NSM.GEN

The A.S. Degree Program in Natural Science and Mathematics prepares students to transfer into baccalaureate programs in Biology, Chemistry, Physics or the Earth and Environmental Sciences. The program is designed to give STEM students the maximum flexibility to choose course sequences that will transfer as program requirements at the four-year school of their choice. Students are encouraged to research those programs with the STEM Counselor and /or their faculty advisor early on.

Traditional STEM occupations in Research, Quality Control, Laboratory Technology, Engineering and Environmental Science are all options available to students that complete this degree and then focus their studies at the baccalaureate level. This program is also well suited for students interested in Pre-Med or Science Education.

**Program Learning Outcomes** 

Demonstrate proper use of laboratory instrumentation to perform measurements and data acquisitions during laboratory sessions.

Create sketches, diagrams, and graphs to describe physical process and problem solving.

Construct a mathematical model of a real-world problem, translate the model into a mathematical problem, determine the solution(s) of the problem and interpret the solution(s) both mathematically and in real-world terms.

Acquire knowledge of the psychological and biochemical process in a variety of organisms and the interrelationship of living systems.

Acquire laboratory competence by developing and refining technical and analytical skills, demonstrate the ability to work with peers during experiments.

#### AS.PS.GEN

The General Curriculum degree provides students with a broad and multidisciplinary course of study rather than some of the more specific programs the College offers. The General Curriculum degree prepares students to think critically and analytically across a wide range of disciplines or fields of study. In addition to their General Education requirements, students take courses in a variety of disciplines in the humanities, arts and social sciences.

**Program Learning Outcomes** 

Demonstrate the ability to think critically and creatively.

Apply analytical reasoning across academic disciplines.

Demonstrate proficiency in oral and written communication.

Demonstrate information literacy and technological competency.

Recognize and appreciate diversity, historical viewpoints, and the global perspective.

Cultivate ethical values, personal wellness, and personal learning strategies.

#### **Learning Outcomes Assessments**

The descriptions and program outcomes were created recently when the College adopted an e catalog. These descriptions fulfilled the need at the time for this information to be included in the catalog. However, they are not very clearly stated and perhaps not accurate.

There is little or no distinction between AS.PS.GEN and AA.LA.GEN in program description. AA.LA.GEN and AS.PS.GEN have identical program learning outcomes. The outcomes are general education outcomes and as such have been assessed as part of the college's assessment of general education. For more information on the assessment of general education, please see <a href="https://backup.bergen.edu/Portals/0/Docs/GenEdu/Assessment2014-15.pdf">https://backup.bergen.edu/Portals/0/Docs/GenEdu/Assessment2014-15.pdf</a>

AS.NSM.GEN program learning outcomes are general math, science and technology outcomes and have been periodically addressed during the assessment of the mathematics option and the various science and technology program options. For more information on the assessment of math, science and technology outcomes, please see <a href="https://bergen.edu/about-us/institutional-effectiveness/assessment/assessment-of-student-learning/academic-assessment-plans-and-reports/">https://bergen.edu/about-us/institutional-effectiveness/assessment/assessment-of-student-learning/academic-assessment-plans-and-reports/</a>

AS.NSM.GEN has just finished a two-year assessment cycle. The assessment results are being reviewed and are not currently available for inclusion in this report.

#### SUMMARY OF SIGNIFICANT DEVELOPMENTS SINCE LAST PROGRAM REVIEW

The general version of each degree serves as a template upon which the many options were created. Options differ from the original program by 9-18 credits, which are referred to as Program Requirements.

Program reviews are routinely conducted at the option level, as indicated on the Program Review Cycle Chart, which can be accessed from <a href="https://bergen.edu/about-us/institutional-effectiveness/program-review/">https://bergen.edu/about-us/institutional-effectiveness/program-review/</a>.

A program review has not been conducted of any of the general programs. In part this is because AA.LA.GEN and AS.PS.GEN do not have divisional oversight nor faculty assigned to them specifically. AS.NSM.GEN has oversight in the Division of Math, Science and Technology, but faculty and administrative focus is at the option level.

It should be noted that AA.LA.GEN is counted in the Humanities Division and AS.PS.GEN is considered part of the Division of Business, Arts and Social Sciences for Institutional Research (IR) purposes.

Furthermore, Faculty Senate minutes (May 18, 2010) indicate that there was a request in 2010 (by the then president) that AS.PS.GEN undergo a program review. That program review never occurred. (See *Focus on Curriculum, Curricular Issues*).

#### **FOCUS ON STUDENTS**

Note: Data in this sections from the 2016-17 Fact Book and 2016 Program Dashboards, which were the most recent published sources during the major part of the research period.

https://bergen.edu/wp-content/uploads/IR-2016-2017-Fact-Book.pdf

https://bergen.edu/about-us/institutional-effectiveness/institutional-research/program-dashboards/

#### **General College Information**

College-wide, in fall 2016, 14,519 students registered for 159,948 credits.

The College awarded 2,410 degrees and certificates in AY16. Overall, the graduation rate was 21.9 while the transfer rate measuring 16.4%.

The enrollment in transfer programs was 11,406 in fall 2016. AS.PS.GEN continued to be the most popular transfer program: 3,490 or 30%. Together AA.LA.GEN and AS.PS.GEN made up 40% of all transfer students.

Over the course of 4 years, 2012 to 2016, the largest program AS.PS.GEN increased in enrollment by 13% while the second largest program AA.LA.GEN declined in enrollment by 53%.

Demographically, 32 percent were white; 24 percent were Hispanic; seven percent were Asian; six percent were black; one percent were Hawaiian/Pacific islander; and less than one percent were American Indian. Nearly 30 percent of students were of unknown race/ethnicity or non-resident aliens.

### **Demographics**

#### AA.LA.GEN

In AA.LA.GEN, headcount and credit enrollment have declined in recent years for both full- and part-time students.

Enrollment (FA 2016) - FT: 654; PT: 484; Total: 1,138.

Enrollment by registration type - First-Time: 297; Transfer: 25; Stop-Out: 199; Returning: 617. Retention rate: 64%

The program experienced proportional declines in attendance and credits over the last three years for both full- and part-time students.

Student demographics, retention rates (approximately 64 percent) and transfer rates (between 15-16.4 %) essentially mirrored the College's overall population.

Graduation by race/ethnicity: Hispanic 11%; White 17%; Black 4%

#### AS.NSM.GEN

In AS.NSM.GEN, part-time student enrollment remained stable while full-time enrollment declined. Of 438 enrollees, the majority are first-time college students (295).

Enrollment (FA 2016) - FT: 267; PT: 171; Total: 438.

Enrollment by registration type - First-Time: 86; Transfer: 9 Stop-Out: 48; Returning: 295.

Part-time enrollment remained consistent - it even grew in 2015 - while full-time has declined.

Hispanic females represented the largest demographic cohort by number (74) and percentage - significantly outpacing their overall College enrollment.

More than two-thirds of those enrolled were returning students.

#### AS.PS.GEN

In AS.PS.GEN, the largest degree program at the institution, almost 3,500 students enrolled in AY 2017-17 - 1,951 full-time and 1,539 part-time. More than half were returning students (1,989), while another 936 were first-time college students. Additionally, greater numbers of full-time students were enrolling in the program and taking credits; part-time numbers even outpaced these increases, growing at faster rates.

Currently enrolled - FT: 1,951; PT: 1,539; Total: 3,490.

Enrollment by registration type - First-Time: 936; Transfer: 95; Stop-Out: 470; Returning: 1,989.

By percentage, Hispanic females enrolled in the program in greater numbers (507) than their overall College enrollment.

Program retention (60 percent) and graduation rates (19.7 percent) were both lower than the College average (64.3/21.9 percent).

Graduation by race/ethnicity: Hispanic 30%; White 40%; Black 30%

#### Student Success

Data in this section are taken from Program Dashboards, the BCC Fact Book, and annual Graduate Follow-Up Survey and the Graduate Transfer Experience Report.

https://bergen.edu/wp-content/uploads/IR-2016-2017-Fact-Book.pdf

https://bergen.edu/about-us/institutional-effectiveness/institutional-research/program-dashboards/https://bergen.edu/wp-content/uploads/IR-Graduate-Follow-Up-Survey-2013-2015.pdf

2016-17 Fact Book and 2016 Program Dashboards and 2013-2015 were the most recently published at the time the research was done for this program review.

#### AA.LA.GEN

The program leads the humanities division in graduates from 2013-17, awarding 794 - 6.5 percent of all degrees awarded at the institution.

The graduation rate was higher than the overall College (25.2 to 21.9 percent).

While overall graduations declined, Hispanic graduates remained flat (30-35 each year), thus accounting for a higher percentage of grads.

Consistently over three years, students rated their preparation for transfer as 4 out of 5.

Top transfer institution: Montclair State University.

Less than 50 percent of graduates in each year of three-year study believed the program helped them obtain a job, perform better at their job or earn a raise at their job.

Most graduates surveyed (24/28 in a three-year study) who entered the workforce earn salaries of less than \$30,000.

#### AS.NSM.GEN

The program graduation rate (36 percent) was significantly higher than the College rate (21.9).

Completion rates among Hispanic students in the program were rising, while degree completion among all demographics remained static.

The program lead its division in degrees awarded.

Albeit a small sample, the number of students transferring lagged behind the College (14 percent to 16.4 percent).

Students surveyed only rated their preparation for a career in the high twos (out of five).

#### AS.PS.GEN

With 35 percent of all degrees awarded at the College, the program graduated 4,243 students in the last five years.

Degrees awarded peaked in 2014 with 939.

Eighty percent of program graduates began in a different program; the highest proportion of non-general program switchers were from AA.LA.PSY (38).

Students who first enrolled in the program and graduated from it doubled in 2007 to 14 and increased through 2014 to 186 before declining to ostensibly nil now (4).

A small number of students (45) re-enrolled after graduation.

Most students who entered and graduated from the program transferred to state schools - led by Montclair (109).

Less than half of students surveyed said the program helped them obtain a job, improve performance at their job or earn a raise.

#### Transfer

While all three general studies programs comply with the Lampitt Law for state-wide transfer to baccalaureate degree programs, how well the transfer of AS.PS.GEN meets students' needs at the four-year institution is not known. One study of transferability is discussed in detail on page 24.

#### Program Review Data Summary: Enrollment, Retention, Graduation

	AA. LA. GEN	AS. NSM. GEN	AS. PS. GEN
Enrollment	1,138	438	3,490
One-Year Retention Rate	64%	63.3%	60%
Graduation Rate	25.2%	36%	19.7%

College Retention Rate: 64.3%; College Graduation Rate: 21.9%

#### **Enrollment by Registration Type**

	AA. LA. GEN	AS. NSM. GEN	AS. PS. GEN
First Time	297	86	936
Transfer	25	9	95
Stop-Out	199	48	470
Returning	617	295	1,989

Source: 2016 Program Dashboards

#### FOCUS ON FACULTY AND STAFF

The general programs AA.LA.GEN and AS.PS.GEN do not have faculty or an academic department chair specifically assigned to them. The discipline faculty oversee the curriculum in the individual options under the direction of the Divisional Dean and the Academic Department Chair. The general program AS.NSM.GEN is overseen by the Dean of Mathematics, Science and Technology.

In the case of AS.PS.GEN, which is not directly linked to other AS.PS options, department faculty and administration do not have a definite role in program oversight, program development, and/or assessment of program learning outcomes.

Information on the college's faculty and staff may be obtained from the college fact book <a href="https://bergen.edu/wp-content/uploads/IR-2017-2018-Fact-Book.pdf">https://bergen.edu/wp-content/uploads/IR-2017-2018-Fact-Book.pdf</a>

#### **FOCUS ON CURRICULUM**

#### Summary of Program Curriculum

Curriculum requirements for AA and AS degrees are found in the Academic Catalog, accessible from the College homepage https://bergen.edu/home/.

These are the general curriculum for each degree type and serve as the template for each general program as well as the related program options. The templates show the General Education (GE) areas of study, required number of credits for each and selection rules.

The distribution among areas of study and total GE credits adheres to the General Education Foundation for AA and AS Programs in NJ Community Colleges. In addition to the GE Requirements, Program Requirements and Program Support Requirements are listed.

For each degree program Recommended Semester sequence charts are given, along with General Education Requirements and Specific Program Notes.

#### **Curricular Issues**

#### AA.LA.GEN

Second most popular program in Fall 2016 with 1,138 declared majors, out of a total of 1,541 declared AA.LA. majors (2016-7 Fact Book). The Liberal Arts General curriculum is more popular than all AA.LA. program options.

Complies with the Lampitt Law, the comprehensive state-wide transfer agreement adopted 9/22/08 to ensure "seamless transition from public associate to public baccalaureate degree programs and support successful acquisition of baccalaureate degrees by transfer students." http://www.state.nj.us/highereducation/PDFs/XferAgreementOct08.pdf

Focus is on General Education; included in the 45-credit General Education Foundation total is a one 3-credit course diversity course in gender studies, non-Western history or thought, and/or cultural diversity; beyond the 45-credit General Education Foundation total, BCC Program and Program Support Requirements consists of two or three (6-9 credits) humanities courses and two or three social science courses. These courses do not have to be courses approved for general education for transfer to NJ colleges and universities.

**Math Issues:** The state-wide transfer agreement requires a minimum of 12 credits in the Math, Science, and Technology category for an AA degree:

 $\begin{array}{lll} \text{Math} & 3-8 \text{ credits} \\ \text{Science} & 3-8 \text{ credits} \\ \text{Tech Comp} & 0-4 \text{ credits} \\ \text{Total} & 12 \text{ Credits} \end{array}$ 

At BCC the Math courses designated for Liberal Arts (MAT 130, Contemporary Math; MAT 155, Finite Mathematics; MAT 150, Statistics I) are all 3-credit courses. Any 4-credit MAT course has MAT 160 (Intermediate Algebra, a 4-credit non-GE course) as a pre-requisite, and all 4-credit math courses are designated for Math-Science majors or some Business or Math-Intensive majors.

INF-101 (Introduction to Information Technology) and INF-102 (Introduction to Computing) are 3-credit GE courses that can fulfill the Technological Competency requirement.

According to Math Department website, for most liberal arts majors, two MAT courses are required.

#### BCC AA Requirements and Choices (Two Science courses are required for Liberal Arts degrees)

Math 6 credits (MAT 130, MAT 150, MAT 155)

Science 8 credits (BIO CHEM PHY)

Tech Comp 0-4 credits

Total 14 Credits

OR

Math 3 credits (MAT 130, MAT 150, MAT 155)

Science 8 credits (BIO CHEM PHY)

Tech Comp 3 credits (INF 101, INF 102)

Total 14 Credits

#### AS.NSM.GEN

Fifth most popular program in Fall 2016 with 438 declared majors out of a total of 2,069 declared majors. Next most popular in AS.NSM category: AS.NSM.BIO = 410; AS.NSM.COMP.SCI = 425; AS.NSM.ENGR.SCI = 414. (2016-7 Fact Book).

The General Curriculum requires 24 credits in math, natural Sciences, and technology, which allows more flexibility than AS.NSM program options, e.g. BIO, CHEM. This also allows for more focus/flexibility for students using BCC as first step in transferring to programs such as pre-med, dental, physical or occupational therapy.

Because of the flexibility of its Program Requirements, AS.NSM.GEN is an important (and popular) option for students interested in a STEM career or BS/MS/MD level career in health professions, especially for students and advisors who are aware of the math and science degree requirements at a target four-year institution. For instance, many students interested in engineering programs at NJIT and Rutgers are better served with this option than they are with our Engineering Science degree because AS. NSM. GEN does not require upper level math and science courses (not required or accepted for transfer in an engineering major in a BS program); at the same time BCC does not offer many of the very specific 200-level engineering courses for their particular engineering sub-discipline. The same is true for many students interested in a BS in Biology. They are better off in AS. NSM. GEN because they can take a year of organic chemistry, which is required in the majority of BS/ BA in Biology degrees while many of Bergen's 200 level biology electives do not transfer as degree requirements.

The flexibility in AS degree programs is essential, and AS. NSM. GEN is an excellent way for each student to tailor course selections to best match a target transfer institution, which accounts for its popularity. It is a misconception that GEN degrees are for student\ts who don't know what they want.

#### Curricular Issues

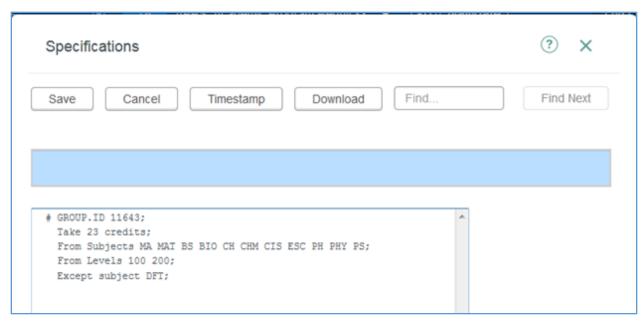
One of the notable things to examine in the **NSM** grouping is the difference in the math requirements between the options, as shown in the table below:

Option	Math requirement	College level pre-requisites based on proficiency testing	
AS.NSM.GEN	MAT 180*, MAT 280	MAT 160	
AS.NSM.BIO	MAT 180, MAT 280 or MAT 150	MAT 160	
AS.NSM.AVT.OPR	MAT 180, MAT 280, MAT 150	MAT 160	
AS.NSM.BIO.TECH	MAT 180, MAT280, MAT 150	MAT 160	
AS.NSM.CHM	MAT 180, MAT 280, MAT 281	MAT 160	
AS.NSM.COMP.SCI	MAT 280, MAT 281	MAT 160, MAT 180	
AS.NSM.MATH	MAT 280, MAT 281, MAT 282, MAT 283, MAT 286	MAT 160, MAT 180	
AS.NSM.PHY	MAT 280, MAT 281, MAT 282,	MAT 160, MAT 180	
*Students may test out the MAT 180 and take a CS, IT or upper level Math course in its place			

The base NSM degree **(AS.NSM.GEN)** and all of the discipline options except the Biology degree require Calculus I (MAT 280) while the Biology option allows the students to choose between Calculus and Statistics (MAT 150). While there may be nothing wrong with this in practice, it is unusual that options created from the base **NSM** share the same minimum math requirement. In that sense the NSM.GEN, degree has a more rigorous mathematics requirement than Biology option, so no one struggling with Math is migrating from NSM.BIO into NSM.GEN "just to graduate". The rest of the options above have the same or higher math requirements as base program.

Another interesting fact that may draw students into this degree over the more specific science or mathematics options is that if the pre-requisite MAT 160 is required, it can be used as one of the 22-24 credits listed as Program Requirements. In the other degree options, this course does not count as credit toward the degree. This is important for two reasons; 1] students can graduate 4 credits sooner and 2] since the course can be applied directly to the degree it is covered by Financial Aid.

The image below copied directly from colleague shows the exact specifications for the "Program Requirements" category in the AS.NSM.GEN degree:



There are no specific requirements, so students can choose as many credits as they want from any of the following disciplines (Biology, Chemistry, Computer Science, Mathematics and Physics) the courses do not necessarily have to be GE courses. Furthermore, there is no limit on the number 100 level credits or limit on the number that can come from any one discipline.

Also, there are no sequencing requirements, so students can take all the traditional first semester courses in science without taking any of the traditionally expected second semester courses (for example (students can take General Biology I without General Biology II). In general, this does not seem to be a problem because students who choose this degree tend to follow traditional patterns in order to fulfill the degree requirements of their target four-year institution. It should be noted that this flexibility will allow students to take 22 to 24 100 level (maybe even all introductory science course) to graduate with the same degree option as students who take a mix of sequenced 100 and 200 level course in disciplines required by their bachelor's degree program.

The flexibility of AS.NSM.GEN, which is a strength, should be kept while in it is worth considering imposing a level of sequencing that would require students to take enough 200 level courses to reflect sophomore status when they transfer.

#### AS.PS.GEN

The largest degree program, AS.PS.GEN is the program where undecided first-time students are placed, as well as students transferring into the College and those changing their curriculum. The Professional Studies General Curriculum has been the subject of study and discussion from its inception, with academic counselors, teaching faculty, and administrators taking different positions at various times. The information that follows provides a timeline related to the program and its growth and change over the past ten years.

#### Faculty Senate Curricular Restructuring October 2008 – May 2012

In 2008 there was a change in general education requirements in NJ. This precipitated a restructuring of all curriculum and a renewed interest in the merits of AS.PS.GEN. Noteworthy events regarding AS PS GEN are highlighted, as per Faculty Senate documentation, in the timeline below:

Oct. 2008 – NJ Presidents' Council finalizes General Education Foundations

Feb.25, 2009 – BCC Faculty Senate Ad Hoc Committee on Curricular Restructuring formed; Dr. George Cronk, Chair

March 10, 2009 – BCC Faculty Senate approves implementation of Foundations

April 21, 2009 – Committee report and proposal presented to the Senate

May 19, 2009 – Restructuring the Curriculum at Bergen Community College approved as amended by Senate motion and submitted to the President, G. Jeremiah Ryan. Amendments: (1) The sections on "transfer Credits and Free Electives" in the General Curriculum for the AS degree in Professional Studies" were sent back to the Committee; (2) the words "general education" were deleted from the AA/LA Program Requirements.

Note regarding AS PS GEN (p. 15, Report on Curricular Restructuring, as Amended and Approved by Faculty Senate, May 19, 2009):

With regard to the General Curriculum in Professional Studies (not with regard to the various Professional Studies Options), certain issues concerning student entry into said General Curriculum were referred by the Senate back to the Senate Ad Hoc Committee on Curricular Restructuring. Those issues will be resolved in the early fall. In the meantime\_AS degree Options in Professional Studies can be restructured on the basis of the above curriculum pattern, which has been approved by the Senate.

June 2, 2009 - SR-B-2009-2010 (reflecting May 19 Senate actions) Approved by President Ryan.

February 9, 2010 – Dr. Cronk gave an update on the BCC Curricular Reconstruction (sic) (particularly AS PS GEN track). Senate voted to accept the report. (50-1-1) Senate Committee proposed certain limitations on the kinds of credits that could be transferred into AS. PS. GEN. These limitations appear on pg. 15 of the updated report.

The report also includes the following statement:

This degree option is intended for students who have accumulated BCC college credits that do not satisfy the academic requirements of other BCC degree programs AND/OR who seek to transfer into a specific baccalaureate program for which these credits are appropriate. Students at the beginning of their collegiate careers should select a specific program of study or choose the AA.LA.GEN curriculum

May 18, 2010 - Dr. Kaufman reported on Restructuring of the AS.PS.GEN curriculum: President's Action: *The president withholds action and requests further study of AS.PS GEN curriculum*.

President's Rationale for withholding action: The current AS Professional Studies General Curriculum (AS.PS. GEN) is the leading program for which students seek graduation at Bergen Community College. Furthermore, the existing program appears to be amorphous and is in need of identifying clear learning goals and objectives. Therefore, the existing AS.PS.GEN shall remain in effect until a formal program review can occur. The results of said review shall drive future curricular change. By Oct 1, 2010, the college president in consultation with Vice President Peter Dlugos and the Academic Vice President shall empower a faculty committee to execute the aforementioned program review.

Program review did not occur as a result of this action.

September 2017 - AS.PS.GEN (along with AA.LA.GEN and AS.NSM.GEN) undergo program review.

#### AS. PS. GEN Curricular Changes 2011 - 2012

WEX courses removed as per Senate proposal approved by Senate.

Math requirement changed from two general education courses (6-8 credits) in Mathematics/Computer Science to one 3-credit or one 4-credit general education course in Mathematics/Computer Science.

Mathematics and Natural Sciences became one category requiring 11 – 12 credits, including two general education courses in Natural Sciences (8 credits)

General Education elective added, if needed to reach the Foundation minimum of 30 - 32 credits. (This would be necessary if a 3-credit rather than a 4-credit Math course). If not needed for that purpose, then 3-credit Free Elective

Diversity Requirement Eliminated; replaced by 3-6 credit Free Electives with the notation "Program can make recommendations". (Subsequently, recommendation was IST-123 Success 101 in all programs, not just AS.PS.GEN.)

#### AS. PS. GEN - Purpose and Practice

#### **Original Purpose**

The faculty Senate approved this curriculum in the 1980s as a general curriculum for the AS professional studies track. At that time, there were several professional studies program options, but if a student decided to move from one area of professional studies to another, credits were almost invariably lost. In other areas there was a general curriculum whereby these credits could be used. The AS.PS.GEN (or curriculum 226 as it was called) was created for this purpose. In its original incarnation, the only courses that could count towards its 15-18 credits of program requirement courses were specialty professional studies courses. The curriculum was not originally intended for students at the beginning of their college careers.

# Evidence of Original Purpose and attempts to retain the Professional Studies Character

2006-2010 - College Catalogs indicate 17 – 19 credits in "restricted courses", which were designated as "Electives in Professional Concentration".

2011-2012 - Degree no longer restricted to transfer from Professional Studies options; still not for students beginning their college careers

AS.PS.GEN Curriculum Requirements page includes the following:

This curriculum is intended for students who have accumulated college credits that are not applicable in other BCC degree programs. The curriculum is not intended for students who are at the beginning of their college careers. Admission to this curriculum is limited to students who have earned a minimum of 45 college credits.

Program Requirements no longer designated "Electives in Professional Concentration". There is no information of what the 15 - 18 AS/PS Program Requirements could be.

2013-14 – AS.PS.GEN degree without a description. No indication of what 15-18 credits of AS/PS Program Requirements could be.

2015-16 – AS.PS.GEN is designated in Smart Catalog (debuted that year) as the "General Curriculum Degree"

July 2017, "Undecided" added to admissions application in drop-down menu for degree choice, automatically placing students into AS.PS.GEN

#### The AS.PS.GEN Transcript Review

One of the concerns, along with entry into the program, has been that 24 credits of free electives are considered "deficient in academic structure and integrity." (Senate Report May 19, 2009). In order to explore this issue a transcript review was done to look at which courses students take beyond the required 30-32 credits of GE courses. An often voiced opinion was that students choose courses randomly and maybe capriciously, so that a completed degree would not have the same value as a degree earned with more clearly defined requirements.

#### **Questions:**

Which courses do students select to complete 24 Professional Concentration Electives (aka AS/PS Program Requirements (18) + Free Electives (6))?

Based on transcripts, what can be inferred about why students are in AS PS GEN?

Note: A discrepancy exists between Program Evaluations (in Colleague and used by Counselors) and the Academic Catalogue in how courses are categorized. Program Evaluations show 24 Professional Concentration electives. This designation was changed by Faculty Senate Curriculum Process to AS/PS Program Requirements (18) + Free Electives (6) in 2010-2011, but apparently not completely implemented throughout the system.

#### Research:

75 transcripts were reviewed from a total of 297 AS PS GEN graduates in spring 2017

Of the 75 transcripts reviewed, the majority of the students had Developmental English and/or Math placements (52 students). Three had ALP placements. Only 23 students had no developmental or ESL requirements.

Transcripts were grouped according to how there 24 credits were distributed as follows: whether there were transfer (TR) credits; if TR credits were CLEP LAN or not; whether were many courses in one field

("hidden major"?); whether student was accepted into HP or other degree program; whether there was no Dev Ed or TR

Dev English and/or Math

Dev English and/or Math ("hidden major" – many courses in one area)

Dev English and/or Math with CLEP LAN (12 credits)

Dev English and/or Math with transfer credits (not CLEP LAN)

2nd degree at BCC (NUR, DENTL, AAS BUS ACCT; AS NSM GEN)

TR credits – No Dev Ed

Not TR-Not Dev Ed

Dev English / Math	20
Dev English/Math ("hidden major")	8
Dev English /Math w/CLEP LAN	11
Dev English / Math w/ TR not LAN	6
2 <sup>nd</sup> degree HP*	13
2 <sup>nd</sup> degree Not-HP	2
TR credits – No Dev Ed**	9
Not TR-Not Dev Ed	6

<sup>\*</sup>Includes 4 Dev Ed \*\* Includes 2 CBE LAN

For the most part, CLEP LAN is made up of students transferring up to 12 credits in Spanish.

Twenty transcripts were further analyzed to see the distribution of courses taken to fulfill the 24-credit requirement. The transcripts selected were those of students who began with Developmental English and/or Math, had no TR credits.

# Social Science and Humanities Requirements in AS.PS.GEN:

	Program Requirements	# Credits
Social Science	Gen Ed = 1 AS PS Program Support = 1	6
Humanities	Gen Ed = 2 AS PS Program Support = 3	15

# Courses selected to complete 24-credit requirement by students with Developmental English and/or Math Placements:

	Social Science		Humanities		Gen Ed/Non-Gen Ed
	# Courses	# Over Required	# Courses	# Over Required	Courses to Complete 24 Credits
D1	7	+5 (15)	6	+1 (3)	WEX101; IST123; BUS101(5)
D2	7	+5 (15)	6	+1 (3)	WEX 163;PSY127 (6)
D3	4	+2 (6)	5	+0	WRT205,208;COM102; CIN140,170;MUA104;IST123 (21)
D4	3	+1 (3)	9	+4 (12)	EDU101,102; <b>MAT150</b> (9)
D5	6	+4 (12)	5	+0	CRJ101,103,107;CIN140;IST123 (15)
D6	7	+5 (15)	5	+0	CRJ101;WEX101;IST123 (8)
D7	6	+4(12)	5	+0	MAT160,223;INF101;IST123 (32)
D8	7	+5 (15)	5	+0	BIO203;IST123;WEX101(9)
D9	4	+2 (6)	9	+4 (12)	WEX101,WEX204;IST123 (6)
D10	5	+3 (9)	9	+4 (12)	<b>BIO109; MAT130</b> ;WEX101 (9)** (over 24)
D11	3	+1 (3)	8	+3 (9)	MAT160;COM101;WEX169;EDI101;HRM10 6(12)
D12	9	+7(21)	7	+3 (9)	IST123; <b>MAT150</b> (over 24)
D13	5	+3(9)	7	+2(6)	INF101; BUS101,203;ART110;ART189;FAB110 (18)
D14	5	+3(9)	5	+0	EDU120:BUS101,203,233,234(15)
D15	5	+3(9)	8	+3(9)	IST123;MOA140(6)
D16	5	+3 (9)	5	+0	BUS101, 233;ACCT110; MAT150;IST123(15)
D17	7	+5(15)	5	+0	BUS101;FAB100;IST123(9)
D18	8	+6(18)	5	+0	CIS158; IST123 (6)
D19	2	+0	7	+2(6)	HRM101,102,103,202,110;BUS101VET102, 103;IST123,223 (28)
D20	2	+0	5	+0	C158;BIO103,109,209;CHEM100;WEX101; MAT160(24)

# **Summary:**

Most of these students took 50% or more GE courses in Social Science or Humanities to complete the 24 credits. It is not known whether these students began in AS.PS.GEN or transferred into it. The courses other than general education in humanities or social science, for the most part, indicate that they may have been in a different program (PS) or have explored other possibilities.

#### **Articulation and Transfer**

The college has a large number of articulation agreements, please see <a href="https://bergen.edu/current-students/student-services-departments/center-for-student-success-counseling-transfer-and-careers/transfer-and-articulation-services/colleges-with-agreements-transfer-partnerships/">https://bergen.edu/current-student-services-departments/center-for-student-success-counseling-transfer-and-careers/transfer-and-articulation-services/colleges-with-agreements-transfer-partnerships/</a>

Ease of transfer to a 4-year institution is one of the strengths of the General programs in A.A. and A.S. degrees. AS.PS.GEN is considered beneficial because of its flexible requirements. Students can customize their program to meet requirements of a transfer institution in the program of their choice. Furthermore, the state of NJ Lampitt law, the state-wide transfer agreement, guarantees that graduates with an A.A. or A.S. degree" will have accepted exactly half of the credits to complete at the four-year institution.".

However, the Graduate Experience Survey Report for FY2015 indicates that more than half the AS.PS.GEN graduates responding to the survey needed over 61 credits to complete their program at a 4-year institution (61 to 70 = 20.7%; More than 70 = 27.6%). It should be noted that nly a small number of graduates typically reply to the survey (total = 33) and data depends on student reporting. There is no other way at this time for the College to collect more complete data on transfer of credits from BCC to other institutions.

One of the members of this Program Review Team, a Bergen Psychology professor, explored transfer issues and found the following:

As noted, the highest proportion of students who switched into AS.PS.GEN from a non-general program did so from the AA.LA.PSY program. Many of these "switchers" later went on to take even more psychology and related courses (e.g., sociology) after going into AS.PS.GEN. <u>Our research indicates that taking even more psychology-related courses at BCC once these students switch into AS.PS.GEN may not be a wise idea, especially if they plan to major in psychology at a 4-year transfer institution.</u>

The data below indicate that some BCC psychology courses <u>would</u> fulfill Psychology Major program requirements at one 4-year institution (Montclair State University), but many BCC psychology courses would not. It is possible that the same sort of conclusion could apply to other 4-year colleges. In addition, it seems likely that BCC students transferring into AS.PS.GEN from other non-general programs (unrelated to psychology) may be taking too many courses in their preferred field, i.e., courses which ultimately may not satisfy "major" program requirements at the transfer institution.

Our Committee sought out the expertise of Assistant Professor Sally Grapin, Ph.D. of Montclair State University (MSU) to learn how BCC's psychology courses might overlap with program requirements for a Psychology Major at MSU. Here is what we learned:

- PSY-101 (General Psychology) at BCC <u>does</u> fulfill one of MSU's Psychology Major program requirements.
- MSU's Psychology Major program requirements include two "200" level courses in various content
  areas. BCC's PSY-201 (Child Psychology) and PSY-207 (Psychology of Adolescence) would fulfill those
  requirements. Other BCC 200 level courses might fulfill MSU's program requirements but would have
  be assessed for transfer by MSU's Psychology staff.
- Some courses offered at the "100" level at BCC, such as PSY-106 (Developmental Psychology) and PSY-110 (Psychology of Sexuality), would fulfill MSU's Psychology Major requirements if they were to be offered at the "200" level. Other "100 "level courses at BCC (e.g., Educational Psychology) would not be accepted as a program requirement even if offered at the "200" level.
- One of MSU's Psychology Major requirements is a "200" level "Research Methods" methods course. If
  the course were to be developed and offered at BCC, it would be accepted by MSU, and the course
  would enable students to start taking required upper level (300 and 400 level) psychology courses

immediately upon transfer to MSU. A committee at MSU currently is working with community colleges to coordinate this "Research Methods" course.

Some, but not all, of BCC's psychology courses might transfer in as Psychology Major "electives", although at this time the criteria for this type of transfer are not clear.

#### FOCUS ON SUPPORT

#### **Recruitment/Admissions**

Prior to 2017, the College did not offer "Undecided" as an options on the admissions application. Students who were uncertain as to which academic program to choose would choose "Non-Degree". The lack of an undecided option was especially problematic for the Admissions recruiters when interfacing with high school students and guidance counselors. If students choose "Non-degree" they will not have a program of study. Furthermore, for Financial Aid they must choose a degree program.

As of July 2017, the College added Undecided on the drop-down menu of the admissions application. This is the first option that appears on the list where students choose a degree program. When student selects "Undecided" they are automatically placed into the AS.PS.GEN program and receive the email below. Their admission letter indicates AS.PS.GEN as well.

The committee does not know what percentage of students who receive this letter follow up, i.e. how many students, upon nearing the completion of their first semester, drop into the Academic Counseling office to discuss changing their major.



# Undecided? No problem!

You indicated on your application that you are undecided on a major. You're not alone! Many students enter Bergen unsure of what they want to study. To make things a little easier for you we have placed you into our most general degree program which is called the Associate in Science in Professional Studies, or as many refer to it "AS.PS.GEN".

The <u>AS.PS.GEN program</u> provides students the flexibility to explore different academic areas but also the structure to avoid taking unnecessary coursework which could delay degree completion.

Once you're nearing the completion of your first semester, feel free to dtop into the Academic Counseling office if you want to discuss changing your major.

We wish you all the best at BCC!



#### **Support Services**

Onboarding: New Student Advising & Registration

New student advising takes place in the Center for Students Success where faculty advisors help students select courses and register. Advising is not required. Students can register online through Web Advisor or the new Student Planning system.

Retention and Completion: Continuing Student Advising

Transfer counselors provide students with information about requirements for transfer to 4-year institutions. Academic Counselors as well as faculty advisors are available to assist students with academic planning. Counselors believe that changing a student's degree program to AS.PS.GEN is helpful to many students, is not harmful to students from a transfer perspective, enhances retention, and enables many students to graduate and/or graduate faster. Only counselors can change a student's degree program and, at that time, counselors suggest what AS.PS.GEN's 24 credits should be.

There is no mandatory advising for new undecided students who are placed in AS.PS.GEN at the time of admission. Therefore, student progress is not monitored. Progress toward completion may be slowed down, students may take unnecessary courses (e.g. make choices that are not in their best interests) or they may end up with more credits than need to graduate.

#### **SUMMARY**

# **Strengths - AS.PS.GEN**

Students who complete AS.PS.GEN comply with the NJ Transfer Legislation (Lampitt law) for state-wide transfer to baccalaureate degree programs.

Appropriate option for students who need pre-requisites for all HP restricted admissions programs. Students taking prerequisite courses towards health professions ie. Nursing, Radiography, etc and A.A.S. Career program courses find AS.PS.GEN allows them to receive 100% Financial Aid.

Students transferring in from other community colleges, 4 year schools (both in State and out of State) or from other countries with courses from equivalent academic disciplines found at BCC, find flexibility in the AS.PS.GEN towards degree completion at BCC.

The degree is also an option for students who change their mind about their first degree choice, want to change, but not lose too many credits. This is a strong retention tool.

All college level courses in all academic divisions at BCC are weighted equally within the 24 credit Professional Studies concentration area of AS.PS.GEN.

Flexible structure for students who wish to prepare for study at four-year school in an area for which BCC does not have a matching curriculum.

Accepts CLEP, A/P credits from international transfer tend to fit better.

Allows Dual Enrollment high school students taking courses in both traditional and underrepresented academic subjects, such as Drafting, WEX, Aviation...) to benefit from their completion.

Requires only one college-level Math.

Only program that accepts three science courses, except AS.NSM.GEN, which requires MAT-280 or BIO, which requires MAT-180.

Allows students to try a few intro courses across all majors and still count toward a degree.

Allows options for financial aid students who are undecided about choosing a program of study. Without this option, they would lose their aid.

# **Challenges - AS.PS.GEN**

The extent of the challenges regarding AS.PS.GEN can be captured by the information in this report. However, the numbers themselves begin to tell the rest of the story as describe below.

"The Associate of Science degree in General Professional Studies (AS.PS.GEN) continued a longstanding trend of being the most popular program offered at BCC. Its 3,490 declared majors accounted for almost a quarter of the student population in Fall 2016. This one transfer program held more declared majors than all career programs combined (2,077) in Fall 2016. "(2106-17 Fact Book).

AS.PS.GEN program entry points and academic structure have been a contentious college issue for quite a while, characterized by debate between opponents with strongly held beliefs. Student Services and Academic Affairs/Faculty Senate and the College administration have not found a way to overcome the differences and recognize common values and goals.

Intended as general curriculum for AS professional studies in cases where students decided to move from one PS area to another. It was meant to serve to catch and consolidate credits that would be lost. The original Program Requirements in AS.PS.GEN were supposed to be specialty professional courses transferred for previous PS program. No new student or transfer students were to be admitted. Currently this is not the situation. In fact, this program is the default for undecided students.

There are no curricular program requirements. The total number of free electives (aka Program Options + free electives) is 18 - 24 credits. This allows maximum flexibility since any college-level courses can be accepted—from any other degree and outside transfer credit. Flexibility is thought to result in higher degree completion. (However, AS.PS.GEN graduation rate = 19.7% whereas BCC graduation rate = 21.9%). Academic Counselors value the flexibility of AS.PS.GEN since it allows students who have been taking course without a definite plan to graduate once they have the required Gen Ed courses and any 24 college credits.

The Faculty Senate favors minimal restrictions on students' freedom to choose general education electives. In fact, freedom of choice is highly valued. Nevertheless, the faculty also has favored limitations on kind of credits that can be transferred into the AS.PS.GEN and sees a degree with 24 free elective lacking in academic structure

The state-wide transfer agreement guarantees that "an A.A. or A.S. degree from a New Jersey community college will be fully transferable", so the A.S. P.S. GEN. degree serves an exploratory program where more specific choice of area of study is not required. Any and all courses that a student takes are likely to fit into the flexible structure. Counselors are supportive of this option since many students do not choose a "major" and end up with a random group of courses that would not satisfy the requirements of A.S. or A.A. GEN programs. This is not to say that there are no other reasons why A.S. P.S. GEN is an appropriate degree for some students, i.e.

College needs to agree on status of AS. PS. GEN as a general studies degree program or whether to look at other possibilities, especially for new students.

#### **Other Challenges**

Semester-by -Semester sequences that accompany Curriculum Requirements are recommended, not mandated. In practice students do not typically follow these sequences. Students are likely to use their individual Program Evaluation (generated by Web Advisor or Colleague, but transitioning to new Student

Planning system), which show the requirements by area of study. They are able to choose freely regardless of the recommended sequences.

The information for each degree program displayed in the Academic Catalogue is detailed with requirements and recommendations, cross-references and footnotes. These pages require careful reading to comprehend the complexities of the academic programs.

The Recommended Semester Sequences do not include Developmental English (or ESL) or Math requirements. It is not clear how well students, especially those with developmental education requirements, understand their entire program—how long it will take and how to select their courses.

Total number of credits required to earn a transfer degree exceeds 60 credits. Reducing from current 64-66 will require an institutional effort at curricular restructuring.

#### **Recommendations for Change**

While there is little controversy regarding the value of AS.NSM.GEN, and only minor discussion concerning AA.LA.GEN (related to the two math requirements which can be amended), there is significant controversy, or multiple perspectives, on the current use and overall usefulness of AS.PS.GEN particularly as it applies to new students.

The recommendations that follow reflect these multiple perspectives and, to some extent, the nature of the differences, which we have tried to make clear throughout this document.

Keep AS.PS.GEN "as is" including keeping the current AS.PS.GEN requirements.

Keep AS.PS.GEN but return it to is original purpose i.e. enforce the already existing policy that does not allow students to apply directly into this program. Revisit the role of AA.LA.GEN as the default curriculum for undecided students entering the college.

Resolve discrepancies in state vs. BCC Math requirements.

Assign administrative oversight of AA.LA. GEN and AS.PS. GEN to the appropriate deans.

Revisit program descriptions and learning outcomes for AS. PS. GEN and AA. LA. GEN to ensure that they accurately capture the intentions of the programs as well as how they are carried out at the College.

Revisit current AA and AS curriculum patterns and requirements for ease of reading and understanding; clarify recommendations, include specific courses as suggestions for GEN ED electives without restricting choice.

Create Recommended Semester Sequences that include Developmental Ed courses.

Reduce the transfer degree requirements from 64-66 credits to 60 credits.

Develop a new General Studies curriculum for entering students that allows for exploration across disciplines and provides a flexible framework. Students would select one of four core areas to focus their academic study: STEM, Business and the Professions, Social Sciences and Health/Wellness, and Integrated Studies which allows students to pursue courses in any two disciplines. Upon completion of their 30 general education credits, students would be advised to select at least 15 credits from any discipline courses or individual courses within a core, including at least 6 credits at the 200 level. This framework would allow students flexibility to explore while at the same time structuring their academic experience so that they begin/experience a sequential academic path.

In developing new programs, the goals should be to enable exploration and free choice with guidance and clarity. Efforts in curriculum development should be guided by Liberal Education and America's Promise (LEAP), which "champions the importance of a liberal education—for individual students and for a nation dependent on economic creativity and democratic vitality." Although the College website states that "the general education program at Bergen Community College have been aligned with the LEAP Essential Learning Outcomes (Approved by the Faculty Senate in April 2013)", these outcomes should also inform discussion of curriculum changes. These learning outcomes will make it possible to ensure that the College prepares students for 21<sup>st</sup> century challenges while preserving academic values traditionally embraced by BCC faculty, i.e. study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts. (See <a href="https://aacu.org/leap/essential-learning-outcomes">https://aacu.org/leap/essential-learning-outcomes</a>)

#### **ACTION PLAN**

Goal One: Create a General Studies Program for New/Undecided Students

Objective: Collect data to characterize the undecided student (e.g. information regarding

developmental student success, students' concerns regarding choice).

Timeframe: 2018-2019

Responsible Party(ies): Small college-wide working group appointed by the VPAA and President

of the Faculty Senate

Resource Implications: IR support

Objective: Develop a new curriculum that allows for exploration across disciplines while at the

same time structuring the academic experience

Timeframe: 2018-2020

Responsible Party(ies): College-wide working group appointed by the VPAA and President of the

Faculty Senate

Resource Implications: tbd

Goal Two: Clarify current AS PS GEN program description, learning outcomes, policies and practices and ensure that it provides students with a program of study that has academic structure and integrity

Objective: Describe and evaluate current policies and practices

Timeframe: 2018-2019

Responsible Party(ies): College-wide working group appointed by the VPAA and President of the

Faculty Senate and including the Dean who will be providing oversight to this program.

Resource Implications: tbd

Objective: Revisit program description and learning outcomes in light of current practice

Timeframe: 2018-2020

Responsible Party(ies): College-wide working group appointed by the VPAA and President of the

Faculty Senate and including the Dean who will be providing oversight to this program.

Resource Implications: tbd

Some Committee members strongly suggested additional goals:

Goal 3: - Change default program for new undecided students to AA LA GEN

Objective: Provide more structure for academic planning than the current AS.PS.GEN, the current

default

Timeframe: Implement change by the next registration cycle

Responsible Party(ies): Academic Vice President, Vice President for Students Affairs and College President

# Goal 4: Resolve discrepancies in MAT requirements for AS.PS. GEN and AA.LA.GEN programs

Objective: Ensure that Mathematics requirements comply with minimum state-wide Gen Ed requirements

Timeframe: 2018-2019

Responsible Party(ies): Academic Vice President, appropriate Deans and Department Chairs

# Summary of External Review: AA.LA.GEN, AS.PS.GEN, AS.NSM.GEN

Reviewed by: Sabrina Mathues (smathues@brookdalecc.edu), Faculty at Brookdale Community College

#### **Visit Recap**

On July 25, 2018, I visited Bergen Community College in Paramus. Plans for the day were discussed with the program review's coordinators, Ilene Kleinman and Carol Miele. An hour long conversation with students followed, and was attended by 6 students at various levels of degree completion. A meeting with the program review committee focused on some of my questions and comments stemming directly from the program review document. Faculty members from across various disciplines then joined the meeting and shared their perspectives and concerns. A final meeting with the Vice President of Academic Affairs recapped the day's discussions and provided opportunity to share initial thoughts. The visit was well-planned and well-coordinated.

#### **Program Review Document**

The drafted program review document provided by the review team follows a template structure focused on the nature and outcomes of the three programs covered in the review. Because the general AA.LA.GEN, AS.PS.GEN, and AS.NSM.GEN programs are not connected with a particular group of faculty or staff that area of the templated review is not thoroughly addressed. Similarly, because it is challenging to capture the student feedback in programs that lack discipline-specific capstone courses (to serve as captive audiences), the section on students is limited to what can be ascertained through success metrics and inferred through a review of student transcripts. These are not criticisms of the report, but rather, an acknowledgement of the specific challenges of reviewing general programs.

Because there are three separate programs (with different strengths and weaknesses) discussed in the review document, it may be useful to add a summary page to highlight these different characterizations, perhaps using a chart for ease of comparison.

#### **Student Feedback**

Noting that student satisfaction is not addressed in the program review document, this area is covered here in greater detail, with the acknowledgement that the sample size is inadequately rigorous. The students who attended the program review meeting were equally distributed among the three programs under review, with 2 students in each of the AA.LA.GEN, AS.PS.GEN, and AS.NSM.GEN programs. Students' motivations for pursuing these degree programs varied: 1 NSM student indicated that the program was very appropriate for her pre-med study goals and was also very satisfied with the general program. Another NSM student indicated that she would have preferred to have followed a math degree path, but misunderstood or was insufficiently advised regarding the time frame for completing pre-requisites. The general program met her needs in terms of timely graduation, but she was already aware that she was not well prepared for her transfer goals. An LA student and a PS student both indicated their intention to change their degree programs into a more specific major path. They entered as undecided students and felt that their general programs allowed them to "safely" explore. ("Safely," in that they were meeting obligations for their international/financial aid programs while exploring.) 1 LA student

switched into LA after determining that a more specific major path would lengthen time to graduation and another PS student started in and remained in the general program because it allowed the speediest path to graduation after having to complete developmental coursework.

**Student summary.** In summary, the students in the general programs shared an appreciation for the flexibility and transferability of their programs in meeting their academic goals within a reasonable timeframe; and this was particularly the case for those students who took developmental/remedial coursework. These students' greatest concern regarding the general programs was the lack of assistance they had received (or sought) in planning their coursework. One student shared that "Everyone knows the cans, but no one knows the don'ts." In other words, she enjoyed the many choices afforded to her, but she had trouble understanding how to make the right choices for her transfer goals. The other students echoed this concern, and also shared that they had trouble explaining what they were studying to others.

Student recommendations. These students asked that the tv screens advising that Self-Service is now live explain what Self-Service is, as they felt students were not generally familiar with the lingo. They also felt as those it would be helpful if there was more attention paid to advising new students and to the creation of a multi-semester course plan earlier in their study. They also felt it would be helpful if either advisors or mentors (if a mentorship program would be developed) could specialize in an academic area, such as humanities or STEM, and be aware of the specific transfer concerns related to those disciplines when advising. Note, that students did not differentiate between faculty, counseling, and professional advisement when sharing this feedback, but they were clear that they were referencing employees of the college and not informal advice-seeking.

#### **AS.NSM.GEN Considerations and Recommendations**

As is noted in the program review document, the NSM general program serves a specific function for students pursuing a pre-professional path in medicine/allied health and some engineering fields. The program prepares students well for transfer into these fields by allowing for the flexibility of course selection across a breadth of disciplines (as opposed to depth within a single discipline) and by requiring the first level of calculus. Students in this program take can advantage of these strengths by mirroring the requirements of transfer institutions, without the "risk" of taking 200-level sciences that may not be accepted as direct equivalencies at the transfer institution. That said, the assumption that underlies these advantages is that students in this program have a longer term plan and are familiar with the requirements of transfer programs, as opposed to simply having an exploratory interest in the sciences.

**NSM Recommendation 1.** For the reason articulated above, I would recommend that NSM.GEN students receive some targeted information regarding Transfer Central and other transfer resources at the college.

**NSM Recommendation 2.** While acknowledging the small sample size of students providing feedback for this report, one NSM student discussed how the NSM program was not ideal for her goals in becoming a STEM educator. The program description for NSM.GEN touts the program as being well suited for students with an interest in Science Education. I recommend that Science Education pathways at top transfer institutions be reviewed for their ideal alignment with the NSM.GEN program (versus other programs at the college). If it is not found to have the best alignment, I would not recommend a change to the curriculum, but rather to the program description and advisement approach for students interested in pursuing education degrees.

#### **AA.LA.GEN Considerations and Recommendations**

While the AA.LA.GEN program is not the most highly enrolled of the general programs (it is second to PS.GEN), given the prescriptive nature of the AA degrees statewide, it is the program that is the most closely aligned with the anecdotal intention of students to complete their "gen ed" requirements at the community college prior to transfer. Though categories of coursework is prescribed, students are free to select from a wide range of courses in order to meet these category requirements. Perhaps this wide range of choices is what led to the program being described in its program description as "an interdisciplinary degree that provides an overview of the arts, humanities, social sciences, mathematics and natural sciences;" however given the pre-requisite structure of many STEM courses, the disciplinary leaning of the AA.LA.GEN program is more towards the arts, humanities and social sciences in terms of elective choices. The program review committee shared that the program description is a vision for the program, but were not certain how the provision of "a more individualized education" was operationalized. The program is declining in enrollment, but it was shared that that decline is proportional with the institution's enrollment decline. Notably, the graduation rates in AA.LA.GEN are higher than the institution's overall graduation rates; however, 50% of graduate survey respondents were unable to link their AA.LA.GEN degree to specific transfer or career outcomes. Student who participated in the focus group on the day of the consultant visit shared that they were unable to explain their program when asked by others "what their major is."

**LA Recommendation 1.** Revisit the program description to ensure that it accurately captures the intentions of the program, as well as how it is carried out at the college. For example, the program description touts "a more individualized education": individualized implies that the program meets individuals' goals, goals which would presumably guide the students' course selections in the defined categories they must fulfill. However, it is unclear how students are assisted in articulating their goals and in planning the courses to fulfill those goals.

**LA Recommendation 2.** Related to the above, LA.GEN students should be assisted in articulating their goals, understanding academic decision-making, and in planning in some consistent programmatic way. In making such a plan, they should also be better able to explain their program. One way to achieve this may be to require a first year experience course that is focused on academic and career planning (as opposed to study skills). Student support may also be provided through more intrusive advisement.

**LA Recommendation 3.** Students may be better tracked and supported if the LA.GEN program is "owned" by a department/individual. I recommend making an assignment for the oversight of this program.

LA Recommendation 4. Program learning outcomes (PLOs) for LA.GEN and PS.GEN are identical, and are reflective of the general education requirements. Because general education assessment is conducted in 200-level courses and these general program students are not required to take 200-level courses, they may not be assessed through the general education assessment that is noted as the assessment method for these programs. PLOs should ideally be differentiated between these two general programs; otherwise, their only distinction is in the general education structure of the AA versus AS degree paths. It would also be helpful if PLOs are defined with assessment method in mind. If a planning-focused first year experience course is required of LA.GEN students, then perhaps the PLOs could be derived from the goals of the individualized planning aspects of that course (consistent with the extant program description).

#### **AS.PS.GEN Considerations and Recommendations**

The AS.PS.GEN is described in considerable length within the program review document and hints at the shared or contentious concerns regarding the intention and use of the program. The program is the most highly enrolled at the college and is noted to be the most popular transfer program. This popularity may be due to the fact that (as of the date of the program review visit), the college's admissions application defaults self-identified undecided students to the AS.PS.GEN degree program. During the external review visit, one faculty member explained that students may be staying in this program (after they are defaulted to it) out of fear of making a choice. Thus, the AS.PS.GEN degree program may be the "unchoice." If this is the case, shared concerns about the ethical nature of allowing students to graduate without making a choice, or having a plan, are warranted. An additional concern that was shared is that students would select the AS.PS.GEN program over the AA.LA.GEN program simply because the AA.LA.GEN program requires additional math, making it less ideal for the mathadverse and developmental/remedial math students. Though not using this word during our discussions, the question of rigor in such a flexible program was also discussed.

While these are warranted concerns, in making further consideration of possible changes to the degree program, it MUST be noted that AS.PS.GEN students are generally successful in terms of graduation and transfer rates, as indicated within the program review document. Lower retention rates in this program may be correlated both with a higher concentration of undecided students and with higher numbers of developmental/remedial students in this program versus others (and this may be data that the committee would want to explore).

**PS Recommendation 1.** Collect additional data to further characterize AS.PS.GEN students, including: information regarding developmental student success in this program versus others (as it may be the best route to an expedient graduation for developmental students); information regarding the "program switchers" into and out of this program (as the default major for undecided students, switching out may indicate a successful decision and yet data indicates that 80% of program graduates began in a different program); and information regarding fields of study that these students pursue after transfer. Such data may help to better

understand both the students in this program, as well as the utility of the program at the college.

**PS Recommendation 2-4.** Recommendations 2-4 for the PS.GEN program mirror my above recommendations 2-4 for the LA.GEN program and include: the inclusion of a planning focused first year experience course, assignment of the oversight of the program, and a review and revision of PLOs.

#### **Final Thoughts and Other Considerations**

With specific regard for the ethical and rigor considerations noted above, both the PS and the LA general programs function to provide undecided students with flexible entry into the institution, and to provide students who have spent some time exploring and who are nearing graduation with flexible exit. In making any changes to these programs, impact on these two populations of students should be considered.

A 2010 report referenced in the program review document indicates a preference for AA.LA.GEN for undecided students. Perhaps the default program for the admissions application should then be discussed and with a possible shift from AS.PS.GEN to AA.LA.GEN; however, even if this shift is made, students will still have considerable choices to make. Assigning programmatic accountability for undecided students (as well as for the programs under review) and developing an advisement plan (particularly for new students) may be a first step in addressing the issue of students making the "unchoice" and graduating without a plan. If program rigor may be defined by the meticulousness in which the program learning outcomes are achieved, then programs with significant choice may be best made more rigorous by further defining the program learning outcomes AND/OR by allowing student goals to serve in place of PLOs in measuring success. Students will need guidance in their first semester in order to define these goals and create a plan for their coursework (and ideally be taught how to utilize related planning technology and tools available at the college). A good venue for this effort may be the captive audience of a required first year course focused on planning. If students are following individualized plans that have been created to be attuned to their individual goals with faculty/counselor guidance, then program flexibility and ease of transferability may be retained while addressing the issues of concern.

The general programs in their existing form may be useful for a metamajor model wherein students select a general program upon entry (and cannot select undecided) and take a common first semester coursework (wherein the general program's first semester matches the first semester coursework in every option under that general program). Oftentimes, students are required to select an option after a certain number of credits are completed. If the college ever considers a metamajor model for serving undecided students and reducing program switching, these programs would be an ideal starting point.