Union County College

**Transforming Our Community…
One Student at a Time**

Academic Master Plan
2019-2024

January 2018

Academic Master Plan (AMP)
2019-2024

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In line with Union County College's mission, *Transforming Our Community, One Student at a Time,* we will:

1. Support the community college mission of excellence, access, and affordability.
2. Support Union's vision of student success by increasing the College graduation rates.
3. Actualize our mission of facilitating students' educational goals.
4. Operationalize the *Students are # 1* concept through an approach that eliminates needless:
    a. Barriers,
    b. Delays,
    c. Attrition,
    d. Inflexibility,
    e. Helplessness,
    f. Hopelessness,
    g. Failure, and
    h. Waste
5. Address the increasing need to conserve resources and operate in a cost-effective manner.
6. Support all efforts that promote active and collaborative learning and the use of technology.
7. Demand accountability through the use of best practices and high-impact practices, as well as the use of information and data.

Introduction & Executive Summary

The new five-year Academic Master Plan (AMP) focuses on Union County College's commitment to empower students in achieving their goals by providing access to high quality and affordable higher education to the residents of Union County. The values that guide the operation of the College are student success, excellence, student engagement, collaboration, integrity, stewardship, community engagement, diversity, and globalization. This AMP offers strategic and operational priorities for the Division of Academic Affairs through 2023, while building on current strengths and embracing new opportunities.

This Plan will include the following academic years:

2019-2020
2020-2021
2021-2222
2022-2023
2023-2024

In 2021-2022, if deemed relevant, the Plan will be reviewed for currency and for the inclusion of emerging trends and opportunities. In order to ensure the next Plan is prepared on a timely basis, in 2022-2023, a new Plan will be written so that a current AMP is available for the development of the next Matrix.

Through the leadership of the Vice President for Academic Affairs, the Division Deans, faculty, and staff, the AMP outlines a bold vision to engage the entire College community and progressively bolster imperative success metrics, including enrollment, learning, retention, and graduation rates through four overarching Core Concepts:

1. Aligning academic efforts with workforce needs –to increase enrollment and preparedness of adult learners.
2. Applying creative and engaging strategies for teaching – to bolster effective teaching and learning outcomes.
3. Using targeted data and predictive analytics – to strengthen institutional and student success outcomes.
4. Developing collaborative partnerships – to advance institutional and student success with high schools, senior colleges, and businesses and industry partners.

The central focus of this AMP is to foster student success through a pursuit of excellence while providing access to the transformative power of education to the Union County community. These four Core Concepts will be in large part accomplished by a number of "Next BIG Things:"

- Acquiring and developing the back of the Thul building at the Plainfield campus so that our automotive program can be moved to Plainfield and also develop a small-engine/ diesel program, further aligning our programs to workforce needs in the community.
- Pursuing mission-differentiation and offering the community college baccalaureate in health science and other high demand programs to provide baccalaureate graduates in needed occupations.

- Exploring a partnership with Linden Airport so that we can develop aviation programs in hi-need areas such as aviation technology maintenance.
- Employing undergraduate research to expand and enhance experiential learning opportunities (ELOs) for students.
- Establishing an Innovation Center that includes information and approaches to teaching that encourage faculty to engage in pedagogical practices that engage students.
- Realizing a "Virtual Campus" whereby at least 20 programs are fully online by 2020 so that online enrollment is substantially increased.
- Executing an OER approach for our programs building on the current efforts to bring American Honors to an OER platform, decreasing costs to the students program and expanding the use of technology in learning.
- Enhancing the relevance of UCC 101 to students and improving completion rates by connecting the course to New Student Orientation, offering it in a 7 week block and strengthening its connection to the each academic division through discipline-based approaches.
- Harnessing the potential of Predictive Analytics to more fully support student success.
- Developing a University Center that would include 4 year partners and a Supply Chain Academy in collaboration with Union County Vocational School at our Scotch Plains Campus, increasing student access to a baccalaureate degree and to industry valued credentials from certificates to degrees.
- Creating a Prior Learning Assessment (PLA) framework to improve our enrollment and revenue, particularly with the adult population.
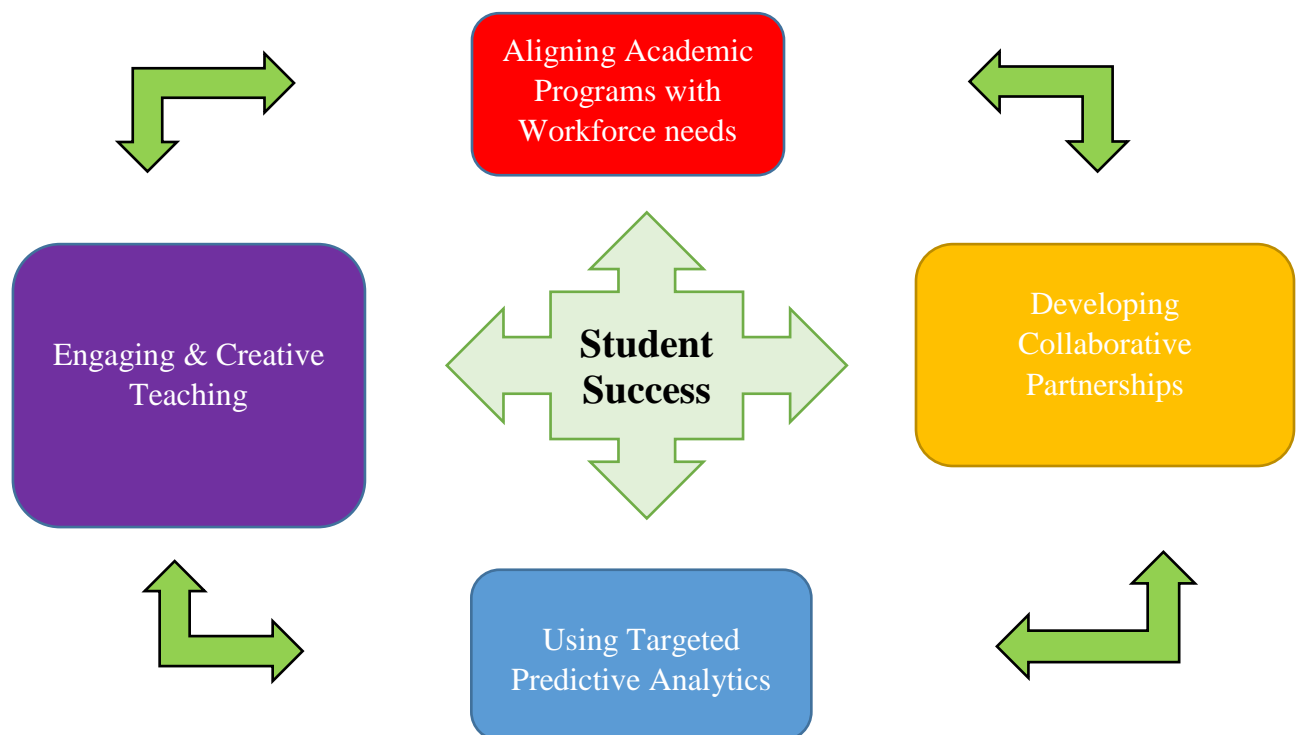
All of these Core Concepts are intimately intertwined with one another to reinforce the goals of the College as it moves forward into the next decade. If faculty and students are engaged in the classroom, students will continue to engage as alumni. If data is obtained and maintained about current and potential procedures and opportunities, students will be better prepared to succeed at Union County College, a senior college, and in the workforce. Collaborating with the community will enhance student engagement, workforce opportunities, and a wider population with which to obtain, share, and analyze meaningful data. In other words, everything that the College does can and should function as an ongoing effort among all parties to support its vision, goals, and success.

Borrowing a powerful idea from entrepreneur Marcus Lemonis, star of the television show, *The Profit*, who breaks down any success into three key components: *product*, *process*, and *people* (Ciccarelli, 2015), we commit to continually refining our products (the curricula) and our services for the people that we serve – which include all of our stakeholders, including students, alumni, staff, faculty, and our Union County community. In addition we commit to processes that maintain our fiscal well-being and the development of new initiatives that will keep the College in the forefront of innovative practices and offerings. Finally we will continue to strive to attract and employ people who support our success priority.

I – What does success look like?

Success for this core concept is ensuring that Union has an array of well-designed industry needed academic programs to support student jobs and careers of the future – our *product*! To support this goal, we must certify that our product, Union's curricula, is relevant for tomorrow's global economy, provides students the opportunity for experiential learning in specific programs, and arguably more importantly, provides rigorous academic experiences – ensuring that the College's identified competencies: oral and written communication, scientific/critical-thinking and quantitative reasoning, and information literacy/technological competencies are adequately achieved by all of graduates. Ensuring sound academic offerings that are well-connected to workforce needs will bolster Union's enrollment and completion rates. Union must distinguish itself as a steward in community college offerings within New Jersey *vis-à-vis* strong academic programming and connections to employers.

To actualize this framework of success, our faculty, academic specialists, staff, and academic deans must continue to carefully evaluate all of our programs of study on a five-year cycle, while incessantly reviewing and revising curricula to ensure all programs are grounded in promising practices and evidence inspired decisions. In addition, we should conduct environmental scans for potential new academic directions that would enhance our students' competencies and skills necessary for a 21st Century workforce. Conducting frequent market analyses to obtain information regarding what employers are looking for is essential for the College and its stakeholders. We must ensure that all of our programs, especially our Associate in Applied Science (A.A.S.) programs and Certificates, which are inherently workforce-preparedness driven, meet employer and industry needs. If they are not deemed to be meeting identified standards, then they should be revised or eliminated to free-up resources for other efforts.

II – Where are we?

The labor market should periodically be studied so that workforce needs that may not be met locally can be evaluated to determine how the College can close that gap. In reviewing the projected needs of the New Jersey employment landscape (*New Jersey Industry and Occupational Employment Projections: 2014-2024*, 2014, p. 11), the New Jersey Department of Labor (NJ DOL) has identified projected job growth along with six broad industries as having the highest rate of growth over the next several years, as reflected in Table 1.1 below.

Table 1.1 – Various Industry Job Growth (2014-2024)

Industry	Projected Job Growth (2014-2024)
Educational and Health Services	109,250
Professional and Business Services	81,750
Trade, Transportation, and Utilities	55,850
Leisure and Hospitality	38,300
Construction	21,300

Table 1.2 provides a deeper view of the projected job growth for in-demand jobs (*New Jersey Industry and Occupational Employment Projections: 2014-2024*, 2014, p. 15).

Table 1.2 – Professional and Service Occupation Growth (2014-2024)

Occupation	Projected Job Growth (2014-2024)
Service	92,400
Professional	74,500
Transportation	31,900
Management, Business, & Finance	31,100
Sales	19,950
Construction	14,800
Installation, Maintenance, & Repair	9,400
Office & Administration	6,300
Production	5,050

The projected changes identified in Table1.2 point to several professional and service-related occupations, which are reflective of the aging American population and the drastic increase in retirees expected over the next twenty-years. As the Baby Boomer population continues to retire (Heimlich, 2010), it is projected that over ten thousand Baby Boomers will turn sixty-five years old every day between 2010 and 2030. This raises two primary concerns, including:

1. The number of educated citizens needing support from various entities will grow exponentially.
2. The large need for newly educated labor will grow just as quickly.

These data are supported in part by forecasts provided via the NJ DOL in Table 1.3 (*New Jersey Industry and Occupational Employment Projections: 2014-2024*, p. 16).

Table 1.3 – Replacement Demand in Major Occupational Groups (2014-2024)

Occupation	Projected Replacement Demand (2014-2024)	Percentage of Overall Job Growth (2014-2024)
Service	33,030	35.75%
Professional	27,870	37.41%
Office & Administration	16,650	264.29%
Sales	15,210	76.24%
Management, Business, & Finance	14,100	45.34%
Transportation	11,010	34.51%
Production	4,640	199.08%
Installation, Maintenance, & Repair	4,440	47.23%
Construction	3,600	24.32%

This replacement demand creates a gap in technical skills that employers will need to fill as those individuals leave the workforce, placing Union in the position to work with these employers to train potential candidates in the skills those employers will require. We can support this demand and gap by evaluating each of our A.A.S. programs to determine if each continues to meet the demands of the employers, as well as investigating which academic programs the College should add to its portfolio of program offerings. The NJ DOL projects that jobs with 'moderate requirements' will lead the way in employment opportunities within the State over the next several years (*New Jersey Industry and Occupational Employment Projections: 2014-2024*, p. 21). It defines each area and its projected growth as illustrated in Table 1.4 below.

Table 1.4 – Educational Requirements and Projected Growth (2014-2024)

Level of Educational Requirement	Degree-Level	Projected Growth
High	Associates Degree	7.9%
	Bachelor's Degree	6.9%
	Master's Degree	8.8%
	Doctoral/Professional Degree	8.3%
	TOTAL	**7.2%**
Moderate	Some College, No Degree	0.6%
	Post-Secondary, Non-Degree Award	11.7%
	TOTAL	**8.2%**
Low	Less Than High school	9.8%
	High school Diploma or Equivalent	3.3%
	TOTAL	**6.1%**

What do these data mean for Union County College?

1. The current and potential offerings of Union should expect to see substantial changes over the next several years;
2. The evidence above supports that demand for postsecondary non-degree job growth will rise at 11.7%, suggesting that increasing certificate offerings as aligned to our Associate degrees must continue.

As an institution, many academic changes have occurred over the past several years at Union to align with evolving needs and demands in varying areas. Table 1.5 offers information in career areas from 2011 through 2018, supporting the notion that the College has streamlined and decreased the number of A.A.S degrees. In order to meet the educational demands of living in an ever-changing and increasingly demanding knowledge economy, our programs must continue to be updated and aligned to tomorrow's workforce requirements.

Table 1.5 – Shift in Workforce Degree/Certificate Offerings at Union

Academic Catalog (by year)	Associate's in Applied Science (AAS) offerings	Certificate (CT/CTA) offerings	Total AAS/CT/CTA offerings	Change in Workforce offerings (YY-YY)
2017-2018	13	14	27	0
2016-2017	13	14	27	-8
2015-2016	20	15	35	+1
2014-2015	20	14	34	-1
2013-2014	21	14	35	+2
2012-2013	21	12	33	+1
2011-2012	20	12	32	-

The College is well-positioned to meet current and emerging workforce demands with its strong leadership, current academic offerings, and committed body of faculty and staff focused on accomplishing Union's mission of *Transforming Our Community…One Student at a Time*. Our non-credit areas including Continuing Education (CE), Center for Economic and Workforce Development (CEWD), and Industry-Business Institute (IBI) departments have established partnerships with local businesses, hospitals and professional and governmental groups to meet the evolving workforce conditions.

To provide a better outlook for our students, we must work more collaboratively with the non-credit areas and their programs. Specifically, we should identify certificate programs/courses from CE, CEWD, and IBI that may align to specific academic courses. Where appropriate and justified, Academic Affairs should recognize such coursework through credible non-credit to credit conversion approaches. Such collaboration would encourage students who complete a non-credit course and/or program to continue their studies in one of our 60+ programs of study, with earned credits towards their Certificates or Associates Degrees.

In order for our graduates to thrive in tomorrow's workforce, there needs to be stronger assessment of all curricula, with greater input from students, alumni, faculty, industry professionals, and possibly State Department of Labor representatives. This approach would allow for more effective communication among all stakeholders, and in effect would help ensure that all Union graduates are as well-prepared as possible to enter the evolving workforce.

Furthermore, the level of education demanded must be in-line with employers and industry demands and standards. The greatest demand in the workforce falls under the 'moderate' and 'high' requirements, which includes Certificate and Associate degree offerings. This again reinforces the notion that Union is well-positioned to meet the educational and workforce needs of various future industries. Moreover, we must work assiduously to distinguish ourselves from other local community colleges. The community college baccalaureate is one example of how Union could provide our students with a higher post-secondary degree, at a significantly lower cost to students, potentially enhancing enrollment, revenue, and student success.

III – Current Research & Promising Practices

Union County College seeks to be a leader in affordability and academic rigor. By offering our students and community quality programs that align with workforce needs and growth, the College seeks to continually be more innovative and relevant with our program offerings. Union should strive to be competitive in Union County, and in New Jersey at-large with program offerings. Union must continue to carefully examine our County needs, businesses, and trends based on the data to better appreciate possible directions for workforce ready programming. As an example, Linden Airport is approximately five miles from the Elizabeth Campus. Given the proximity of this airport and that the transportation industry at-large is expected to grow 34% over the next several years, it makes sense to explore the possibility of developing aviation-based programs.

Given the recent hire of an academic specialist for the program, the increased interest, and the resources available, Union also has a tremendous opportunity to develop a full degree offering(s) as well as a robust Theater program at our Rahway location.

As a national community college trend (Chan, 2017), many institutions are offering select Bachelor's degree programs to provide students with both access, affordability, and superior preparation. For example, Hood College in Maryland offers a BSN degree. Valencia College in Florida has offered the following Bachelor's degree programs for several years:

- *Business and Organizational Leadership*, Bachelor of Applied Science (Summer 2018)
- *Cardiopulmonary Sciences*, Bachelor of Science
- *Electrical and Computer Engineering Technology,* Bachelor of Science
- *Nursing*, Bachelor of Science (Fall 2018)
- *Radiologic and Imaging Sciences*, Bachelor of Science

Based on data from the New Jersey Industry and Occupational Employment Projections (2014-2024), and recently established academic programs by other NJ institutions, several promising areas worth consideration include:

1. *Business analytics/ Data science* (Montclair, NJCU, Rider, Rowan, Rutgers, & St. Peters Universities)
2. *Coding/ Cyber-Tech related* (Atlantic CCC, NJIT, Stevens Institute of Technology)
3. *Manufacturing Technology* (Bergen, Mercer CCC)
4. *Healthcare/ Healthcare Informatics/ Health Information Technology* (Borough of Manhattan Community College - CUNY, Brookdale CC, NJCU, Passaic CCC, Raritan Valley CC, Rowan, & Rutgers)
5. *Transportation* and *Automotive Care* (Miami Dade College, CC of Baltimore County)
6. *Construction Management* (Hudson CCC & Stevens Institute of Technology)

The advancement of specific programs based on the areas above must be relevant to the labor-market needs to attract students and increase enrollment (The Aspen Institute, 2014). College administrators must work closely with faculty, career advisors, industry partners, alumni and students to enhance program offerings and ensure that the offerings align with current and future community needs. Many adult learners want to take courses online (Hanover Research, 2014). A 2016 survey by *Learning House* revealed that adult learners are seeking to improve current skills and also learn new skills (Stoltz-Loike, 2017).

Adult learners require flexibility with course-time offerings. As such, online coursework appears to be ideal for this population. In addition, many industries demonstrate knowledge attainment via a marker. Micro-credentials, also known as "digital badges" are electronic representations of educational achievements. Just like pins and medals earned for skills-training, micro-credentials represent the completion of requirements set by an organization issuing the credentials. For example, the credentials that teachers earn at the beginning of their careers are often referred to as certifications, which are awarded in a particular area of instruction. Micro-credentials are awarded for smaller, bite-sized learning or mastery of skills awarded for the demonstration of very specific competencies (Perkins, 2017). For badging to benefit our students, they must be recognized as valuable earned commodities by businesses in our community and beyond.

IV – Where do we want to be?

While Union revised hundreds of courses and consolidated or eliminated a number of programs, our A.A.S. and Certificate programs have decreased over past several years. This shift to a greater focus on transfer programs, in part, reflects a greater focus on workforce needs. For Union to be more attractive than other colleges competing for both adult learners and to those students who want a terminal degree, we must continue to market and strengthen our A.A.S & Certificate degree programs through experiential learning opportunities (ELOs) via a number of approaches. Furthermore, as a consumer-based institution, we must identify and collect relevant data to employ strategies that allow us to provide the "right" programs and coursework at the times when these populations desire them.

As degrees are modified from an A.A.S degree to an Associates in Arts (A.A.) or an Associates in Science (A.S.) to meet standards, technical and career-focused skills have taken a back-seat to transfer preparedness. Students who want to immediately enter the workforce after graduating may be at a disadvantage given the decreased A.A.S. offerings. Accordingly, Certificate and A.A.S. offerings should continue to be expanded where there is demonstrable value to students, while at the same time considering the development of needed transfer programs.

Further expansion of the Thul building would enable us to develop Diesel Technology training programs as well as move our Automotive Training program from its current location in Scotch Plains to a location that would allow for full day and evening programming. Graduates from these programs are highly sought after technicians with employable skills.

Union must continuously review ELOs for all our students, across all programs of study so that they become more competent and employable. We must also work more closely with industry partners to better align our programs of study, coursework, competencies, and ELOs. Such

collaboration would not only better prepare our students, it will also enhance our relationships, credibility, and enrollment, especially with adult learners. In addition, working more closely with such partners would allow Union to enhance our Advisory Boards to better appreciate, and consequently develop appropriate badging opportunities.

Our A.A.S. degree programs have strong Advisory Boards which have been supported by Perkins grant-funding. They are comprised of faculty, staff, and employers. We should more effectively leverage these Boards to help us refine current and design new A.A.S and Certificate programs. Moreover, these Boards should also focus their efforts on expanding ELOs and possibly supporting jobs for our graduates. Furthermore, Union has a strong College Foundation Board. With a tremendous alumni pool from which to draw upon, academic divisions should work more closely with folks from our College Foundation to bring together key constituencies to its various functions in an effort to not only help with fundraising goals, but also to expand possible partnerships with community businesses which may support ELOs for our students.

V – The Next BIG Thing

1. Develop the back of the Thul building in Plainfield and offer automotive technology programs.
2. Given the proximity of Linden Airport to Union coupled with the growth of the transportation industry, explore the feasibility of developing aviation technology programs.
3. Employ undergraduate research as part of Union's efforts to expand and enhance experiential learning opportunities for students.
4. Continue to pursue mission-differentiation beyond nursing.
5. Establish a University center and Supply Chain academy at the Scotch Plains Academy.

VI – Action Plan

Recommendations	Responsible party (& partners)	Timelines
Increase enrollment and preparedness of adult learners by:		
a) exploring, enhancing, and forging relevant partnerships with key community businesses and community-based organizations	Academic Division Deans, (Director of Career Services, Executive Director of CE & Workforce Development)	2019-2024
b) developing non-credit to credit opportunities with specific program and course equivalencies mapped	Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors, (Executive Director of CE & Workforce Development)	2020-2022
c) expanding in-demand online programming	Academic Division Deans, Director of Instructional Design	2019-2024

Recommendations	Responsible party (& partners)	Timelines
d) revising current, and developing new A.A.S. and Certificate programs based on relevant data	Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors, (Exec. Director of Institutional Assessment, Planning, & Research)	2019-2024
e) exploring the viability of developing aviation technology programs in concert with Linden Airport	VPAA, Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors, (Advisory Boards)	2020-2024
f) continuing to pursue mission differentiation as the process evolves through the state	VPAA, Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors	2019-2024
g) reviewing programs for possible Certificates	Academic Division Deans	2021-2024
h) increasing experiential learning opportunities (ELOs), including undergraduate research	Academic Division Deans, (Advisory Boards)	2019-2024
i) evaluating and improving our Advisory Boards where appropriate, – ensuring that they are providing the suitable support and opportunities for our students, including ensuring the alignment of curriculum and industry-based employer needs	Academic Division Deans (Executive Director of CE & Workforce Development)	2019-2022
j) creating a "digital badging" (or micro-credentialing) program tied to individual achievement in workplace ready skills and showcase badges on free portable portfolios made available through *Canvas*	Academic Division Deans, Director of Instructional Design,	2019-2021
k) piloting a badging program with the American Honors program	Dean of Curriculum, Accreditation & AH, Academic Division Deans, Director of Instructional Design	2019-2021
l) acquire the back of the Thul building and develop automotive programs	Plainfield Dean, (VPAA, & Finance Affairs Division VP Director of Facilities)	2023-2024
m) Offer a full degree program as well as a robust theater program at our Rahway location	Academic Division Deans	2022-2024

Core Concept 2: *Engaging & Creative Teaching for Student Success*

I – What does Success look like?

Success in the area of advancing more engaging and creative teaching means a number of things particularly increasing faculty participation in pedagogy trainings and workshops. Moreover, it means that faculty and academic specialists are implementing innovative strategies and reevaluating their teaching methodology regularly to further improve student learning outcomes. Success with this core concept would also translate to increased student satisfaction with the classroom environment, along with higher retention and graduation rates. Finally, a significant learning outcome of more engaging and creative teaching would help bolster mean scores on the ETS Proficiency Profile – namely critical thinking, mathematics, reading, and writing skills.

II – Where are we?

Union currently offers professional development for faculty and staff through the Professional Development Committee. The Distance Education Department also offers weekly "Tech Tuesday" sessions to introduce instructors to technological pedagogy and a summer "Tech Camp" for early adopters. In addition, the College also offers annually held Professional Development and Assessment Days to help support this core concept. While these support services are important and evaluation is conducted, we do not have any strong data that connects whether these efforts improve teaching and learning.

Union must identify and implement more innovative ways of engaging in creative teaching that lead to improved student success outcomes – specifically course completion and retention and graduation rates. Based on the results from the 2015 Report on *ETS Proficiency Profile*, only one-percent of the sampled Union students demonstrated critical thinking "proficiency" (Appendix B).

In addition, our College Success course, UCC 101, plays a pivotal role in potentially preparing, engaging, and retaining students. The UCC 101 outcomes are however not ideal. For example, the course completion rate in Fall 2016 was 76.3%, falling below the college total completion rate of 79.4%. Additional related concerns include reenrollment the following semester after completing UCC 101, the percent of full time students who actually register and complete UCC 101, the lack of connection of UCC 101 to New Student Orientation, and the length of the course.

III – Current Research & Promising Practices

Currently, there is a national emphasis on innovative and evidence-based teaching (Mellow, Woolis, Klages-Bombich, & Restler, 2015). In New Jersey, the New Jersey Council of County Colleges (NJCCC) Center for Student Success has made strides in working collaboratively with all the other nineteen NJ community colleges to promote innovative pedagogy. NJCCC stresses engaging teaching based on student learning outcomes and offers workshops and conferences on the Guided Pathways model, Student Success courses, as well as a robust faculty development series. New York has also established a Center for Professional Development. Four-year

universities like Quinnipiac and the University of Virginia have recently established teaching and learning centers that present innovations at national teaching conferences.

Additionally, Faculty Fellows programs have expanded greatly throughout the nation. Chattanooga State and the University of Texas at Austin provide two notable models of Faculty Fellows programs. While such programs are not as popular at two-year colleges yet, Union County College could pave the way for other community colleges in New Jersey and beyond to follow suit. With the development of as Faculty Fellows Program, participants would use current research to develop and implement new pedagogies (Baepler, Brooks, & Walker, 2014) with a focus on active learning and student-centered classrooms (Frego, 2006).

Finally, a College Success course has the potential to help students thrive in college, persist, and graduate (Skipper, 2017). Broadly connecting such a course to the disciplines within a division or department coupled with support by faculty and advisors has been demonstrated to support student success (Polnariev, Jaafar, Hendrix, Morgan, Khethavath, & Idrissi, 2017).

IV – Where do we want to be?

Establishing a Faculty Fellows Program in the Innovation Center will help us begin to actualize success by providing our students with progressively more engaging and creative teaching, while helping faculty in integrating and utilizing more technology for educational purposes. Additionally, the Innovation Center should emphasize support in helping faculty infuse ELOs in select courses for all programs, initially with the A.A.S. and Certificate programs, to support improved student retention and graduation rates, as well as offer better preparation for jobs and careers.

This direction will help Union expand the types and rigor of Professional Development offerings, with workshops geared towards enhancing faculty member's abilities to infuse critical thinking, communication and information literacy into their pedagogy. This would help us bolster students' outcomes of such competencies as measured by our outcomes assessment tools. A focus on integrating specific skills and competencies across the curriculum would also lend itself to higher ETS proficiency scores.

These new initiatives would help further advance the credibility of another Union product – our superior teaching. Instituting a revised discipline-based UCC 101, connected to every academic division and the New Students Orientation will prove to help retain students. Such an approach will better connect students to their major earlier in their academic journey so that they are better informed and prepared to be successful in their chosen major. Linking New Student Orientation to UCC 101 will further strengthen the connections for both students as well as faculty to advising staff.

Online offerings and online student credit hours have remained relatively static over the past years. While the number of online programs increased in fall 2017, much work remains to be done in this area in order to remain competitive in this market. All academic deans must collaborate to ensure the right courses are offered in a distance format so that more programs can

be offered online. Moreover, additional assistance should be provided to help students evaluate their ability to successfully navigate an online program.

V – The Next BIG Thing

1. Union should continue to develop the Innovation Center as a Center of Excellence, so that it supports faculty and staff in enhancing teaching and learning practices. This Center should take approved recommendations from relevant governance committees, such as the Experiential Learning Advisory Committee and General Education Committee that have the potential to improve teaching and learning.
2. We should finally realize a "Virtual Campus" whereby at least 20 programs are fully online by 2020. As of fall2017, there are ten programs fully online; most of which are from the Social Science/Business/History Division. Other divisions must continue to expand online courses and programs in order for the College to remain competitive.
3. Union should develop and implement online program curation, which would be led by faculty. Curating program-specific resources would open the door for expansion of OER at the College and could lead to greater innovative teaching methods and learning for both faculty and students. Possible curation sources could include *Pearltrees*, a visual, collaborative library for discipline-specific courses; *eLearning tags*, which would allow sharing and voting on sources to be used within a division; or *Scoop.it*, which would arrange niche online information for particular courses.
4. American Honors at Union should implement their revised approach of an OER program for their offered honors courses across the A.A. and A.S. programs.
5. Connecting UCC 101 to New Student Orientation, shortening its length, and strengthening its connection to the academic divisions by instituting a discipline-based approach will better support student retention and success.

VI – Action Plan

Recommendations	Responsible party (& Partners)	Timelines
Bolster engaging teaching and effective learning outcomes by:		
a) emphasizing teaching and Learning in the Innovation Center	Academic Division Deans, Director of Instructional Design	2019-2024
b) expanding and evaluating faculty participation in pedagogy trainings and workshops	Academic Division Deans, Profession Development Institute, Distance Education Department	2019-2024
c) developing a non-stipend based Union Faculty Fellows Program	Academic Division Deans, Professional Development Institute, Director of Instructional Design	2020-2021

Recommendations	Responsible party (& Partners)	Timelines
d) increasing scores on all four components of the ETS Proficiency Profile with the support from a series of workshops geared towards all faculty and other strategies based on the approved General Education Committee recommendations	Academic Division Deans, Governance, Professional Development Institute, Distance Education Department	d) 2020-2024
e) demonstrating improved teaching satisfaction scores on relevant surveys from faculty and academic specialists who participate in the Faculty Fellows Program and/ or the pedagogy workshops	Academic Division Deans	2022-2024
f) increasing course completion rates from faculty members and academic specialists who participate in the Faculty Fellows Program and/ or the pedagogy workshops	Academic Division Deans	2021-2023
g) supporting the curation and expansion of OER coursework across all academic divisions	Academic Division Deans, Director of Instructional Design	2019-2024
h) Using OER in all American Honors courses	Dean of Curriculum, Accreditation & American Honors, Director of Dist. Ed.	2019-2021
i) advancing a "Virtual Campus" with at least 20 fully online programs of study	Academic Division Deans, Director of Instructional Design	2020-2022
j) enhancing the importance and viability of UCC 101 in order to boost student retention by: • connecting it to the New Student Orientation (NSO); • shortening its length of time; and strengthening its connection to each academic division by instituting a discipline-based approach	Elizabeth Campus Dean, UCC 101 Faculty Coordinator, Academic Division Deans, (Student Development Division Deans, Exec. Director of Institutional of Assessment, Research, & Planning)	2020-2021

Core Concept 3: *Using Predictive Analytics for Student Success*

I – What does Success look like?

A significant amount of information and data is currently available to help support student success. For example developing the master schedule from both a retrospective and prospective approach and managing enrollment as each semester progresses so that the right courses at the right time are available are two examples of information that are readily available and that can contribute to student success.

Predictive analytics (PA) can enhance our current efforts to use data to support our work. Using PA would can provide relevant and timely data to all key stakeholders, allowing faculty and staff to make better data-informed decisions to support student enrollment, learning, retention, and graduation rates. Ideally, PA would help us to identify the key variables that strongly correlate with specific behaviors such as enrolling and re-enrolling at Union, attending tutoring, learning and demonstrating higher-order competencies, engaging with peers, advisors, and faculty, attaining high grades, and ultimately graduating and transferring; such information would help us to better support our students – allowing us to better fulfil our mission, "*Transforming Our Community…One Student at a Time*."

Use of PA at Union County College reflects a consistent and proactive response to academic challenges and changes occurring throughout the country, the community, in particular compliance with government regulatory criteria focused on student academic success and preparedness for the workforce. On a microscale, PA involves collecting data on students' class progress to forecast student outcomes: pass, fail, or withdrawal, the latter two of which can result in students dropping late, correlating to lower retention and graduation rates. Data points may include attendance records, test scores, and class participation. If data predicts withdrawal or failure, Union can use these indicators to re-direct students through various support strategies developed by the College. To expand beyond the microscale to the mesoscale of retention and graduation, greater intrusive advising patterns should be adopted to help students overcome identified obstacles such as poor study and time-management skills. College Orientation and UCC 101 classes can be used to teach students these and many other important skills, which may not have been previously learned and/ or refined.

However, PA is not restricted to student success. Institutions can also improve operational efficiency and effectiveness by fully realizing PA's potential. Real-time student progress information can be used by the College to more accurately forecast new and current student enrollment, better gauge course offerings, and more optimal use of College resources. Furthermore, PA can identify emergent factors that lead to student success at Union during the recruitment of new students. PA can also help identify students who recognize Union for their success and who may become future donors or otherwise involved in helping the College in its scholarship drives. PA supports community colleges by predicting the needs of an ever-changing society.

II – Where are we?

Union is currently using academic and operational data for supporting day-to-day activities, reporting, including dashboard data. Although the College's student data repository is used for tracking various activities in the College (i.e. *Ellucian Colleague* ERP), it needs integration with the learning management system (*Canvas*) and external data sets in order to present more robust information related to student academic performance.

The *ACCUPLACER* exam is used to predict student success in college level Math and English; students who underperform on these exams must take and pass developmental classes before they can proceed with college-level courses. However, Union recognizes other predictive data points that allow students to enroll in college-level courses with a waiver of the *ACCUPLACER* exam provided that at least one of the following criteria is met:

1. Graduation from college within the past five-years and a GPA of 3.0 or higher
2. SAT scores (Reading 540 or higher; Math 530 or higher)
3. Successful attendance at another accredited college
   a. B.A. (with transcript)
   b. Transfer credits for ENG 101 and/or MAT 119 (with transcript)
   c. Completion of developmental Math and/or English (with transcript)
   d. Visiting status from another college
4. Previous qualifying test scores (with transcripts or other evidence)

Once enrolled in college-level courses, staff from specific programs/areas, including American Honors, Athletics, EOF, Online, Operation Graduation (OG), and STEM*pact* diligently track their specific Cohorts using progress reports dispersed in intervals to instructors throughout the semester to help predict student success in classes, and the prospect of their respective retention and graduation status. Each of these cohort-based groups uses specific interventions that are designed to support students and contribute to successful outcomes; the intervention is triggered whenever a progress report indicates that they are struggling in some way, such as issues with attendance, classroom behavior, and/or poor academic performance. Peer-tutoring provided by the Academic Learning Center (ALC) is a highly advocated strategy in most cases – aiding students in homework review across several disciplines, test-taking strategies, and essay and report writing, at no additional cost to students.

In 2015, the College formed a *Guided Pathways to Success* (GPS) Committee. *Academic Maps* were developed for each of the college-level programs offered by the institution. The *Academic Maps*, developed as a result of the 2015-18 AMP, provide a clear sequence of required courses needed by programs, identify "milestone courses" by semester, and include career and transfer options. Whether in a classroom or navigating through College policies leading to graduation, community colleges focused on guiding first-time full-time students through the GPS system are more confident that every student will receive better guidance from pre-enrollment through graduation. The further use of PA is reflected in the number of new degree and certificate programs, reduction in degree program credits to sixty in many disciplines, deletion of courses and degree programs that are no longer viable in the current and future marketplace, and new

course offerings currently pending approval. Further enhancing student success is the application of curriculum principles so that curricula is designed backward and delivered forward with the linking of instructional approaches and evaluation strategies to learning outcomes.

The College recently adopted two promising software packages from *AspirEdu*, *Dropout Detective* and *Instructor Insight.* This software analyzes *Canvas* data to identify "at-risk students and has the capacity to see all classes and all grades for each student on one page, get personalized dashboards of students for sports coaches & other users, share notes on students, and provide…real-time data to perform periodic instructor evaluations" ([http://aspiredu.com/,](http://aspiredu.com/) n.d.).

This software gathers assessment information, such as grades and attendance data to predict whether or not students are on track to pass their course. As this information is current, advisors will have the ability to immediately reach out to their student cohort to ascertain the cause for any distraction or difficulty that they may be encountering and to chart a success intervention. Being able to track and analyze student progress in real-time via *Canvas* can assist us with predicting course completion and retention rates. Faculty must lodge grades in real time in Canvas in all courses in order to help students evaluate their progress as well as help advisors to counsel students.

To accelerate our abilities to support students, our technology tools should "push" key information, helping to nudge students to take appropriate action. While many factors affect student retention, course completion is a key factor in student satisfaction leading to student persistence. Further, any data emerging from *Canvas* can be utilized in collaborative teaching and advisory models contributing to course-planning.

Union is currently using the Colleague Reporting and Analytics tool (i.e., *Business Objects*) for storage and reporting of student information. Access to the student data repository is used in order to conduct various analyses such as comparing *ACCUPLACER* score and grades earned in math classes, credit-hours earned per semester and/or to review student cumulative grade point averages. Student survey data is also collected by the College's Institutional Assessment, Planning, and Research Department and shared with the College community during College-side meetings in which enrollment, retention, and graduation rates are reviewed. Although the Academic Division Deans and other staff receive enrollment and course schedule information daily, the current reports do not provide comprehensive information that would allow them to make fully-informed decisions. For example, the Academic Division Deans would ideally want to know if the courses identified to be considered for cancellation are needed for students to graduate, and which programs require the identified courses before we would cancel a course. Instead the Deans' decisions are delayed until they have conversations with relevant advisors from OG. Having real-time accurate data and effectively utilizing PA is essential to empowering faculty and staff in more efficiently supporting students. Furthermore, using PA would allow us to better use our time in other ways – such as making collaborative connections and improving our teaching methods.

PA uses data to attempt to foresee outcomes. Colleges can then reflect upon the predictions to determine the direction to proceed, if any. In recent years, OG has been credited with significantly increasing our cohort graduation rates by providing students with intrusive and proactive advisement, personalized follow-up, communication strategies, and widespread support from both faculty and staff. Currently, OG uses various reports, including Excel and the Colleague Student Information System in order to both manage and coordinate activities with cohorted students, staff, and faculty. Aside from confirming whether a cohorted student was contacted and responded, OG and other programs generally do not share student responses and feedback regarding the interventions with faculty and staff. To continue to increase the College's graduation and retention agenda, collaborative communication between instructors and advising personnel is encouraged. Such communication may help others who are involved in advising students to further ensure consistency of responses and, in turn, the achievement of our ultimate goal to support the students' degree completion.

Furthermore, Union County College fully endorses New Jersey's bold commitment to becoming one of the most educated States in the Country as part of *Lumina's* "65 by 25: Many Paths, One Future" national goal. In other words, we are committed to growing the number of adults with a post-secondary education to 65% from our current 50% for NJ by 2025, which is slightly above the mean in order to help meet the state's future economic needs (Augustyn, 2017).

The data also indicates a wide disparity among various NJ counties and ethnicities; approximately 30 percent of African-Americans and 24 percent of Hispanic NJ residents have a post-secondary educational degree. As a minority-serving institution, with a large Hispanic population, this finding is of great concern, but offers an opportunity to further close our achievement gap.

III – Current Research & Promising Practices

While we have access to greater amounts of data than ever before, we also have greater pressure to make better data-informed decisions (Baer & Norris, 2016). Union's 2015-2018 AMP acknowledged the broad scope of PA used by more than one-hundred fifty colleges: "Academic analytics has the potential to improve teaching, learning, and student success…These initiatives can predict which students are having academic difficulty which subsequently lead to interventions and guided learning paths from faculty and or advisors" (p. 51). Wagner and Longanecker (2016) suggest that "while data professionals will be needed to help construct new modeling and analysis techniques for the future, *everyone on campus* – advisors, faculty, administrative staff, and students – needs to increase their fluency with data-driven decision-making if we are to achieve institutional improvement and student success" (p. 58). Scientific analysis of student enrollment, academic success, course learning outcomes, student grades, student advisement outcomes, and data similarly collected from other college initiatives will need to be centralized. The centralization of information is important to predictive analytics and future success of the College in its decision-making projections. "An effective continuous improvement process will examine indicators against current goals but also against changing environments to identify ways to strengthen programs and processes to ensure ongoing student success" (Chaplot et al., 2013, as cited by Maxwell & Person, 2016, p. 91).

PA reporting reflects a broader scope beyond traditional data collection and the focus on first-time full-time students. This approach directs focus to the issues of academic progress, retention, and completion that generalizable to all students regardless of age; enrollment status; whether blended, online, or attending courses traditionally presented on campus; or whether they attended Union from a for-profit or not-for-profit institution. "Before we undertook this work, few institutions inventoried the interventions they had used to improve student performance, persistence, retention, and completion at various points in the course-completion life cycles" (Wagner & Longanecker, 2016, p. 57-58). *Lumina* identified eight *Cornerstones of Success* (see Appendix C) to serve as guidelines for how to help attain post-secondary education success – including:

- Making it easier for adults to earn a credential or degree (see Core Concept #1)
- Enhancing partnerships between business and education (see Core Concept #1)
- Expanding work experience programs (Core Concept #1)
- Growing high school and senior college partnerships (see Core Concept #4)

IV – Where do we want to be?

With collaboration among Academic Affairs Division, Institutional Assessment, Planning, and Research, and Institutional Technology, Union could be at the forefront of PA. Specific Union student data on enrollment, tutoring, class attendance, assignment completion, course completion, credit accumulation, GPA, learning outcomes achievement, advisement participation (with advisors, academic specialists, and/ or faculty members), and graduation, and transfer outcomes would help us better support our students. How do these data differ for part-time versus full-time students? How do these data points vary by program of study? How do these data points differ by ethnicity and/ or age? These are only a few of the variables that could help us better predict student persistence and success.

We want to have these identified data points available in real-time, at any-time, and available to relevant faculty and staff in order to improve key metrics. Moreover, a genuinely useful PA would provide specific recommendations for actions based on the combination of variables at-hand. For example, knowing that a student with 45+ credits has recently lost his job, did not receive his expected financial-aid package, reduced ALC attendance from five hours to one over the past month, program-specific course grades have declined over the past semester, did not pass his milestone course for the program, is no longer involved in SGA engagements, and registered in the last weeks of registration may help us make better informed recommendations about how to intervene than only seeing grades at the end of the semester. Supporting student success is both an 'art and science.' Having a robust formula that takes into account these and other key variables is the science part; making recommendations and decisions based on this wide-ranging information coupled with the experience and knowledge of our faculty and staff is the art.

A robust PA program with centralized and transparently shared data will help us continue to enhance both institutional and student success outcomes – enrollment, retention, and graduation. PA can guide students as they select-classes and programs of study. A large-scale data set can help us make effective course and programming suggestions to students – much akin to the way companies such as *Netflix* provides personalized movie recommendations based on previous movie selection and satisfaction (see TasteHit, 2016). PA could revolutionize how Union interfaces with and support each student. By understanding student behavior across a variety of contexts, PA can better support Union in its mission, "*Transforming Our Community…One Student at a Time*."

V – The Next BIG Thing

1. Use PA to move graduation rates ever higher.
2. More fully utilize data that is currently available to more fully support student success.
3. Harness the potential of Predictive Analytics to more fully support student success.

VI – Action Plan

Recommendations	Responsible party (& Partners)	Timelines
Strengthen institutional and student success outcomes by utilizing data grounded in Predictive Analytics by:		
a) identifying a key set of variables that help forecast student success, e.g.: 1) student enrollment 2) re-enrollment 3) course completion 4) grades of a 'C' or better 5) multiple attendance of ALC 6) multiple attendance of advisement 7) graduation 8) transfer after graduation	Academic Division Deans, (Director of Institutional Technology, Exec. Director of Institutional Assessment, Planning, & Research, Student Development)	2019-2021
b) implementing and refining the use of the above PA data points to evaluate the degree to which they have improved all of the above variables	Academic Division Deans, (Student Development Deans)	2021-2024
c) improving data collection and usage via centralization efforts of student progress information by requiring that all teaching staff record attendance and grades in C*anvas*	Academic Division Deans	2019-2021
d) expanding and utilizing promising practices from special program/areas including: ALC, American Honors, Athletics, EOF, Online, Operation Graduation, and *STEMpact,* through a systematic approach to assessing information and data	Academic Division Deans, Dean of Curriculum, Accreditation & American Honors, Asst. Director ALC, (Student Development Deans)	2020-2022

Recommendations	Responsible party (& Partners)	Timelines
e) assessing the accuracy and value of milestone courses for each academic program	Academic Division Deans, GPS leaders	2019-2022
f) utilizing intrusive "push" notifications for student registration action as part of Canvas or other tools	Director of Instructional Design, (Student Development Deans)	2019-2020

Core Concept 4: *Developing Collaborative Partnerships for Student Success*

I – What does Success look like?

Developing strategic partnerships will help Union boost enrollment and consequently resources. Connecting with County high schools, senior colleges, and community organizations and businesses (see Core Concept 1), will also help us expand experiential learning and transfer opportunities for our students, while concurrently enhancing the marketing of our products and great College. Success here would endorse a seamless and value-added pathway for students, whereby high school graduates from Union County would enroll at Union County College with credits earned as part of a dual-enrollment arrangement, engage in various ELOs while at Union due to the vast array of fruitful community partnerships. This would enable our graduates to transfer to one of the many senior colleges with which we have forged a robust articulation or joint enrollment agreement. For those students who want to enter the workforce upon graduation, Union's strong relationships with businesses would afford these graduates with a range of above median pay job opportunities. For genuine collaboration to occur, we must ensure that regular and clear communication transpires both across the College's divisions, at every level, and across to our diverse partners.

II – Where are we?

Union has dual-enrollment (DE) agreements with several local high schools. We should work more closely and strategically with County Superintendents, principals, and guidance counselors to vastly grow our DE efforts. In addition, we should identify and remedy any barriers to DE expansion. For example, it appears that Union does not accept Linden's International Baccalaureate (IB) high school program's credits. Other institutions, including Kean University for example, unofficially accepts their credits. Allowing full transfer in of such credits and also credits for prior learning (PLA) is an essential next step for Union to expand and foster relationships with partners and also attract students to the College. Efforts should also be made to ensure that we are offering ideal courses to the right partners. Currently, Union offers over a dozen general education courses in these high schools including:

- BUS 101 - Introduction to Contemporary Business
- BUS 105 - Organizational and Management
- BUS 208 - Principles of Marketing
- COM 100 - Communications Technologies
- ECO 201 - Principles of Economics I
- ENG 101 - English Composition I
- ENG 128 - The Dynamics of Communication
- ENG 129 - Public Speaking
- FIA 108 - Appreciation of Art
- MAT 119 - Algebra
- PSY 101 - General Psychology
- PSY 102 - Psychology of Personality

- SOC 101 - Principles of Sociology

We currently have more than fifty transfer/articulation agreements per the 2017-18 College Catalog. While the *Lampitt Law* assures transfer of credits into the senior college from program to program we must continue to review and update our priority agreements and map program courses in order to maximize transfer. Note that while Lampitt does not guarantee admission to a county college graduate with an A.A. or A.S. degree if the graduate has been accepted, then this law respects and protects those program degree credits which the student has earned up to half of the coordinating Bachelor's degree. More specifically, the law instructs the senior college or university to accept all of the A.A. or A.S. degree credits to completely satisfy that college's Freshman and Sophomore year earned credits. However, senior college may have course prerequisites that additional credits to the final degree requirements.

As discussed in Core Concept 1, we should develop relevant new programs that meet workforce and transfer demands. In addition, our official partnerships with local business seem to be somewhat limited; we work with the Disney Corporation, for example, as part of our Business program. Our Career Services has noted unofficial affiliations with over 1200 professional registrants, including following companies: Wells Fargo, Tesla, SolarCity, Jiffy Lube, Walgreens, and New York Community Bank. We must have a clearer sense of our partners for ELOs, jobs, high schools, and senior colleges.

III – Current Research & Promising Practices

Dual-enrollment agreements according to the Community College Research Center [CCRC] (2012), are when "high school students are enrolled in a college course and complete all the assignments that would normally be completed as part of the course. At the end of the course, students are given a final grade on a college transcript and course credit that can be applied toward a college degree. Dual-enrollment programs differ from Advanced Placement and International Baccalaureate programs in that students take college courses rather than high school courses with college-level content" (CCRC, 2012, p. 1). Because of NJ Statute 18A:61C-6, we have implemented procedures to ensure that high school students are not excluded from the program due to inability to pay; other community colleges have implemented a registration fee that every student pays, but the tuition is waived when a student is in a reduced or free lunch program; this only applies when the course is taught at the high school by a high school teacher, paid by the district (Rutgers Law School, 2017).

There are technology-based high schools located on the main campuses of both Middlesex County College and Brookdale Community College which are excellent examples of high school and community college collaboration. Students are enrolled in college courses while attending high school which gives them a head start and better prepares them for the college experience. Atlantic Cape Community College hosts Associate to Bachelor's Degree Programs, and "Students can earn four-year or graduate degrees without leaving Atlantic Cape's campuses. Ocean County College has joint admission and transfer programs, and a Kean presence on their campus.

Based on a postsecondary student success report from Lumina, college leaders know that students with credits for prior learning are approximately two-in-a-half times more likely to graduate (Carlson, 2017). While it may be a great persistence boosting strategy, more research on PLA must be conducted to develop a standard practice of prior learning evaluation – the American Council on Education may be a good starting point.

To further support enrollment efforts, the University of Arizona embraced 'micro-campuses.' "Rather than build its own brick-and-mortar branch campuses, the University of Arizona (UA) is embarking on a plan to open more than 25 'microcampuses' at international partner universities over the next three years, creating a network that it hopes will be capable of educating more than 25,000 students around the globe. Arizona's plan is for each of the microcampuses to offer at least one, and in most cases several, dual-degree programs in which degrees are conferred by both Arizona and a partner university. Each microcampus will be housed at the partner university, which agrees to provide classrooms and a UA-branded space" (Redden, 2017).

IV – Where do we want to be?

We must continue to earnestly partner with County schools to expand and improve our face to face and DE agreements and offerings for in-county residents. We want to implement a system so that high school students graduate with up to fifteen college credits to help them build momentum towards a degree at Union. Strengthening partnerships with the County Superintendents may encourage them to offer Union courses in their institutions. The Scotch Plains campus offers an opportunity to partner with the Union County Vocational School and develop an academy in a high need area. Supply Chain Management, one of our current programs, offers such an opportunity as this discipline prepares students for jobs at varying educational levels. Additionally, Scotch Plains offers the opportunity to provide Liberal Arts and Liberal Studies programs. These programs can provide stepping stones to many four year programs. Scotch Plains could also function as a University Center allowing us to attract four year institutions so that students could complete a baccalaureate degree in a relatively seamless manner.

In addition, we should expand and strengthen articulation agreements with our top feeder schools to help us provide a value-added rate on return. Accordingly, we should continue to advance greater oversight of the agreements and tracking of students to appreciate the value of these agreements. Union must continue to grow, improve, and evaluate our business and community partnerships. Working in a closer manner with our non-credit offerings provides an in-house approach to converting CEUs and other non-credit courses into academic credit hours.

Faculty members across all of our disciplines should work more closely with folks from our Advisory Boards, Career Services, Continuing Education and Workforce Development department, and the Foundation to both understand the industry needs for our students and build such partnerships with various industries. We must continue to collaborate with the various areas of the College that have already established business and community partners; employers must play an integral part of our process to develop and revise academic programs. Formalizing these

agreements will help us in connecting, strengthening, and leveraging such partnerships in order to provide students with more robust educational and experiential learning activities that will better prepare them for careers and transfer. Union County has a host of potential community partners that would benefit our students in multiple ways. For example, such associations would not only provide relevant ELOs, but may generate donors who could contribute financially towards student scholarships. Union could become recognized for our collaborative enterprise with local businesses and organizations.

V – The Next BIG Thing

1. Forging a University Center, a Supply Chain Academy, and a Liberal Arts and Liberal Studies Center at our Scotch Plains Campus (see Appendix E) will enhance Union's reputation, expand opportunities for students in select program offerings, and increase our overall enrollment and graduation rates, and revenue.
2. Developing a Prior Learning Assessment (PLA) framework to improve our enrollment and revenue, especially with the returning to college adult population.

VI – Action Plan

Recommendations	Responsible Party (& Partners)	Timelines
Advance institutional and student success by strengthening and leveraging partnerships with high schools, senior colleges, and industry partners by:		
a) instituting a University Center, a Supply Chain Academy, and Liberal Arts and Liberal Studies Programs at our Scotch Plains Campus to increase our overall enrollment, graduation rates, and revenue	VPAA, Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors, (VP's of Financial Affairs, Student Development, IT)	2019-2024
b) expanding high school participation in dual-enrollment, especially with school districts in the Western part of Union County	Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors	2019-2024
c) identifying and remedying barriers to DE expansion	Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors	2019-2022
d) ensuring that we are offering ideal DE courses to the right high schools	Dean of Curriculum, Accred., & American Honors, Dean of Students, (Academic Deans, Director of Enrollment)	2019-2022
e) evaluating the value of earned DE credits on boosting College enrollment	Academic Division Deans, Director of Instructional Design	2019-2023
f) assessing the value of DE credits for matriculated students in helping them graduate within 150% of time	Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors, Director of Instructional Design	2019-2023

| Recommendations	Responsible Party (& Partners)	Timelines
g) reviewing articulation agreements with our top feeder 4-year institutions to certify that they are current, and update outdated or inaccurate agreements in order to maximize student advisement and transfer support	Dean of Curriculum. Accreditation, & American Honors	2019-2024
h) identifying and exploring the feasibility of converting unofficial affiliations into official ones via a Memorandum of Agreement	Dean of Curriculum, Accreditation & American Honors	2019-2022
i) growing, strengthening, and leveraging partnerships with local business and community organizations to afford students with an array of experiential learning opportunities	Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors, (Director of Career Services)	2019-2024
j) refining the tracking of students' experiential engagements and usage of other support services	Academic Division Deans, (Director of Career Services)	2020-2022
k) improving communication among all partners across the College's divisions, at every level, and across to our diverse partners	Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors	2019-2024
l) developing and evaluating the viability of a Prior Learning Assessment (PLA) framework	Academic Division Deans, Dean of Curriculum, Accreditation, & American Honors	2019-2021

Conclusion

In order to realize our mission to, "*Transform Our Community…One Student at a Time*" and goal of putting *Students are # 1*, the diverse AMP Team worked diligently over the past six months and has made an array of solid recommendations to advance Union through 2024 and beyond. The team's recommendations were based on a review of various data sources and promising research practices. The guiding principles and themes of this five-year AMP were carefully determined by academic leaders to help ensure the viability of Union County College and its stakeholders. To further ensure its current value and accuracy, Academic Affairs will review this AMP by the end of 2022 and make appropriate updates. Union will be well-positioned to thrive well into the next decade by improving enrollment, learning outcomes, graduation rates, and partnerships with businesses, high schools, and senior colleges through the implementation of the bold recommendations as part of the action plan based on the following four intertwined Core Concepts:

1. Aligning academic policies with workforce needs to improve student success;
2. Applying creative and engaging strategies for teaching to improve student success;
3. Using targeted data and predictive analytics to improve student success; and
4. Developing collaborative partnerships to improve student success.

Interestingly enough, the common themes demonstrated by the top 150 community colleges as presented by the Aspen Institute (2014; see Table 4.1), are nearly identical to the above four Core Concepts as identified by Union's academic leaders. In actualizing the bold recommendations set forth in this AMP, we are hopeful that we will be well-positioned to be recognized for consideration for the 2021 *Aspen Prize for Community College Excellence*. Moreover, for Union County College to flourish through the next decade, it's integral that we indeed focus our attention on continually refining our *products* through various institutional *processes* for the *people* that we serve – which include all of our stakeholders, including students, alumni, staff, faculty, and our Union County community members.

Table 4.1: Themes characterizing the institutions that achieve exceptional outcomes for students by the Aspen institute
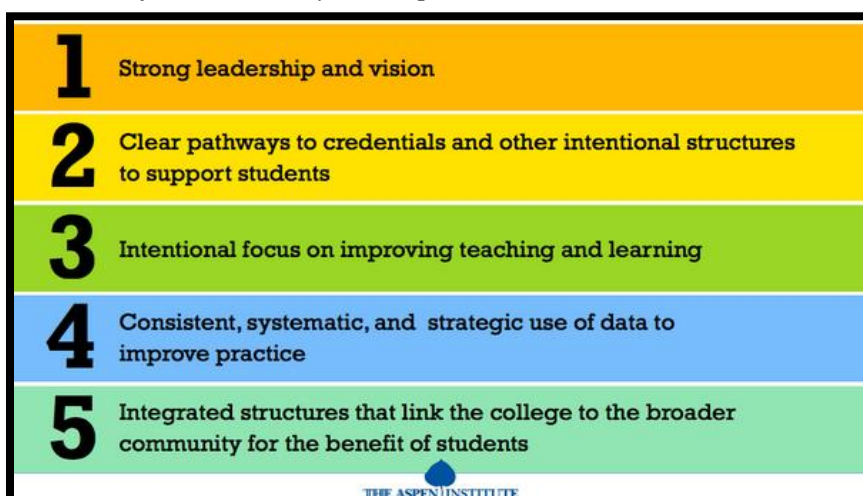
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Appendix B – Summary of the 2015 Report on ETS Proficiency Profile Results

Skill Dimension	Proficiency Classification		
	Proficient	**Marginal**	**Not Proficient**
Reading, Level 1	35%	26%	39%
Reading, Level 2	10%	16%	74%
Critical Thinking	1%	5%	94%
Writing, Level 1	28%	40%	32%
Writing, Level 2	5%	20%	75%
Writing, Level 3	2%	6%	92%
Mathematics, Level 1	26%	28%	46%
Mathematics, Level 2	9%	17%	74%
Mathematics, Level 3	2%	5%	93%

Appendix C – Lumina's Eight Cornerstones of Success- 65 to 25: Many Paths, One Future*

Provide career awareness.
All individuals need access to high-quality, reliable information to make decisions about their education and their career. This information is being provided by high schools, colleges, community organizations and libraries through the state's Career Connections network.

Grow high school/college partnerships.
These partnerships provide students an opportunity to earn a credential and college credit while in high school and can assist students in transitioning to college.

Expand credit-bearing credential programs in colleges and universities.
These programs help students get on a pathway to a college degree while obtaining industry-valued skills. The state's STEM Pathways Network, Talent Networks and Talent Development Centers are working in colleges and universities to expand these programs.

Strengthen two- and four-year college partnerships.
These efforts create pathways to a four-year degree while increasing access and affordability. A statewide transfer articulation agreement, reverse transfer agreements and new, innovative connections are all critical to this effort.

Enhanced commitment to equity.
Recognizing the rich diversity of the state's population, officials will identify gaps in opportunity and attainment, expand best practices to close equity gaps, and strengthen the role of higher education through New Jersey's Coalition of Anchor Institutions and Coalition for Excellence and Equity in Education.

Make it easier for adults to earn a credential or degree.
The state is expanding the use of Prior Learning Assessments and competency-based assessment and building partnerships with the military. These efforts will help more adults obtain college credit for work and experience and ultimately help them to earn a credential or degree.

Expand work experience programs for students.
Internships, apprenticeships, structured learning experience, and mentoring all provide an opportunity for students to learn valuable skills on the job while helping to inform their career decisions. The state's Many Paths, One Future Internship program is helping businesses hire paid-interns. Service-learning opportunities with Campus Compact are helping students obtain valuable experience.

Enhance the partnerships between business and education.
Employers play an essential role by informing curriculum and instruction and assisting colleges and universities to be real-time response to changing demands.

*Excerpted from: http://www.njbiz.com/article/20170920/NJBIZ01/170919823/new-jersey-commits-to-65-educational-attainment-rate-by-2025

Appendix D – AMP 2019-2024 Team membership

Dr. Bernard A. Polnariev (AMP chair)
Dr. Susannah M. Chewning & Ms. Lauren Falkowski (AMP liaisons)

Core Concept group #1 - *Aligning programs with Workforce Needs to support student success*	
Prof. Marc Postiglione (Chair)	SSBH faculty
Dr. Gina Kabak	SSBH faculty
Prof. Joanne Gouveia	Humanities faculty
Prof. Dori Vicente	STEM faculty
Mr. Robert Case	Student Development/Career Services staff
Mr. Phil Halek	American Honors student, Class of 2018

Core Concept group #2 - *Engaging & Creative Teaching for Student Success*	
Dr. Melissa Sande (Chair)	Humanities faculty member
Dr. Valerae Hurley	SSBH faculty member
Prof. Tarik Lagnoui	STEM faculty member
Prof. Joseph Michael Margiotta	SSBH adjunct faculty member
Ms. Beth Ritter-Guth	Academic Affairs/Distance Learning staff
Mr. Evin Guinan	American Honors alumni, Class of 2017

Core Concept group #3 - *Use targeted predictive analytics for Student Success*	
Dr. Kessler McCoy-Simandle (Chair)	STEM faculty member
Prof. Pedro Cosme	SSBH faculty member
Mr. Christopher Flynn	Academic Affairs / Distance Learning staff
Asst. Dean Sara Lacagnino	Humanities staff member
Mr. Inder Singh	(former) Chief Information Officer, Financial Affairs
Ms. Gissella Gamboa	American Honors student, Class of 2018

Core Concept group #4 - *Developing Collaborative Partnerships for Student Success*	
Dr. Melinda Norelli (Chair)	SSBH faculty member
Prof. Adrian Novio	STEM faculty member
Ms. Rosangela Perez	(former) SSBH academic specialist
Mr. Michael Hegarty	Humanities academic specialist
Ms. Beatriz Rodriguez	Student Development / Enrollment Services staff
Mr. Matthew Gallardo-Vega	American Honors student, Class of 2018

Appendix E – Scotch Plains Campus Proposal for Liberal Arts and Liberal Studies

Developmental Courses

1. English
   - ENG 081, Accelerated Introduction to College Reading II
   - ENG 087, Introduction to Language Arts
   - ENG 091, Accelerated Introduction to College Writing II
   - ENG 096, Introduction to College Reading and Writing I
   - ENG 097 Accelerated Introduction to College Reading and Writing II.
2. Mathematics
   - MAT 017, Introduction to Elementary Algebra I
   - MAT 019, Introduction to Elementary Algebra I for Advanced Math Students
   - MAT 021, Introduction to Elementary Algebra II for Advanced Math Students
   - MAT 022, Introduction to Algebra

General Education

1. Communications
   - ENG 101, English Composition I
   - ENG 102, English Composition II
   - ENG 129, Public Speaking
2. Mathematics/Science/Technology
   - Mathematics;
     - i. MAT 119, Algebra
     - ii. MAT 125, Survey of Special Topics in Mathematics
     - iii. MAT 127, Elementary Statistics
   - Science
     - i. BIO 101, Introduction to Biology
     - ii. CHE 101, Chemistry ENG 129
   - Technology
     - i. COM 100, Communications Technologies
3. Social Science
   - PSY 101, General Psychology
   - PSY 102, Psychology of Personality
4. Humanities
   - SPA 101, Beginning Spanish I
   - SPA 10, Beginning Spanish II
   - FIA 105, Music Appreciation
5. History
   - HIS 101, Introduction to Western Civilization I
   - HIS 102, Introduction to Western Civilization II
6. Diversity; ENG 209, World Literature I

Additional Courses needed

Liberal Arts (AA) Additional 15 credits of electives

1. ECO 201, Principles of Economics (Fall)
2. ECO 202, Principles of Economics II (Spring)
3. GOV 201, American Government & Politics (Fall)
4. GOV 202, American National Government (Spring)
5. ENG 200 level (Fall)
6. ENG 200 level (Spring)

Liberal Studies (AS)

No additional courses needed other than those cited on pages 38 and 39.