



Kempsville High School Entrepreneurship and Business Academy: *Year-Two Implementation Evaluation*

By Stephen C. Court, Program Evaluation Specialist and
Heidi L. Janicki, Ph.D., Director of Research and Evaluation

Implementation
Evaluation Report 2018



Planning, Innovation, and Accountability
Office of Research and Evaluation

Table of Contents	
Executive Summary	6
Key Evaluation Findings	6
Recommendation and Rationale.....	12
Introduction	13
Background.....	13
Purpose	13
Academy Overview	13
Academy Goals and Objectives.....	14
Evaluation Design and Methodology.....	15
Evaluation Design.....	15
Evaluation Questions	15
Instruments and Data Sources	15
EBA Documentation and Program Data	16
VBCPS Data Warehouse.....	16
Surveys	16
Data Analysis	17
Quantitative	17
Qualitative	17
Evaluation Results and Discussion	17
Operational Components	18
Actions Taken Regarding the Year-One Recommendation	18
Implementation	18
Program of Studies	19
Participant Selection	24
Characteristics of Participants.....	27
Student Characteristics	27
Staff Characteristics	29
Progress Toward Meeting Goals and Objectives	30
Goal #1: Academic Preparation	30
Objective #1: Academy Coursework.....	30
Objective #2: Associate Degree/Postsecondary Credit.....	32
Objective #3: Academic Performance	33
Objective #4: Job Shadowing, Mentoring, and Internship	37
Objective #5: Long-Term Project Through Internship/Mentorship	37
Objective #6: Collaborative Agreements With Institutions of Higher Education	37
Stakeholder Perceptions	38
Overall Perceptions	38

Participant Comments	39
Additional Cost.....	41
Recommendation and Rationale.....	44
Appendices.....	45
Appendix A: Entrepreneurship and Business Academy Suggested College Preparatory Curriculum by Strand	45
Appendix B: Entrepreneurship and Business Academy Suggested College Preparatory Curriculum....	50
Academy Electives.....	50
Appendix C: Dual Enrollment and Advanced Placement (AP) Course Options for EBA Students	51
Appendix D: Industry Certifications	53
Appendix E: Community Business Partners	54
Appendix F: Honors, Awards, and Prizes Earned by EBA Staff and/or Students During 2017-2018	55
Appendix G: Guest Speakers and Master Class Presenters During 2017-2018	56
Appendix H: Proposed Entrepreneurship and Business Academy Planning Budget	58
End Notes.....	59

Tables

Table 1: EBA Survey Response Rates.....	16
Table 2: Numbers of Students (N) Eligible for Inclusion in Different Data Analyses.....	17
Table 3: Timeline of EBA Year-Two Implementation With Status.....	18
Table 4: Results of Year-2 Strand Selection.....	20
Table 5: EBA Year-Two Student Recruitment.....	24
Table 6: EBA Staff Perceptions of Professional Learning.....	27
Table 7: Demographic Characteristics of Grade 9 and Grade 10 EBA and Non-EBA Students.....	28
Table 8: Staff Characteristics and Qualifications	30
Table 9: EBA Courses, Enrollment, and Pass Rates for Grade 9	31
Table 10: EBA Courses, Enrollment, and Pass Rates for Grade 10.....	32
Table 11: Grade Averages.....	34
Table 12: Comparison of EBA and Non-EBA SOL Pass Rates for Grade 9 and Grade 10 in Math for 2017-2018	34
Table 13: Comparison of Unadjusted EBA and Non-EBA Pass Rates for Grade 9 and Grade 10 SOL Pass Rates in Science for 2017-2018	35
Table 14: Comparison of EBA and Non-EBA SOL Pass Rates in Social Studies for 2017-2018	35
Table 15: Perceptions of What is Gained From EBA Enrollment	39
Table 16: Examples of Parent Suggestions for the EBA	41
Table 17: One-Time Start-Up Costs for the EBA	42
Table 18: Annual Operating Costs for the EBA's Year-Two Implementation	42

Figures

Figure 1: Stakeholders' Satisfaction With EBA Facilities	19
Figure 2: Participant Perceptions of the EBA's Coursework and Learning Environment	21
Figure 3: Percent of Stakeholders Satisfied With EBA Enrichment Activities.....	23
Figure 4: Parent and Student Perceptions of the EBA Application Process.....	25
Figure 5: Home Middle Schools for EBA Ninth-Grade Students.....	28
Figure 6: Zoned High Schools for EBA Ninth-Grade Students	29
Figure 7: SOL Reading Performance Levels for EBA and Non-EBA Students in Grade 8 in 2016-2017.....	29
Figure 8: Comparison of EBA and Non-EBA Discipline Referrals and Suspensions	29
Figure 9: Agreement That the EBA Provides Opportunities to Gain the Skills Needed to Be Successful.....	31
Figure 10: Percent of EBA and Non-EBA Students Earning Overall Grade Average Equivalents to Letter Grades	34
Figure 11: Comparison of EBA and Non-EBA SOL Math Scale Scores for 2017-2018	34
Figure 12: Comparison of EBA and Non-EBA SOL Science Scale Scores for 2017-2018	35
Figure 13: Comparison of EBA and Non-EBA SOL Social Studies Scale Scores for 2017-2018.....	35
Figure 14: Percentages of EBA and non-EBA Students Who Attempted and Successfully Earned At Least One Industry Certification in 2017-2018	36
Figure 15: Total Number of Industry Certifications Attempted and Successfully Earned in 2017-2018 by EBA and Non-EBA Students	36
Figure 16: Overall Satisfaction With the EBA.....	38
Figure 17: Percent Perceiving Year Two as "Better" or "Much Better" Than Year One	38
Figure 18: Recommend the EBA to Others	39
Figure 19: Student Suggestions for the EBA.....	40
Figure 20: Parent Suggestions for the EBA.....	40

Executive Summary

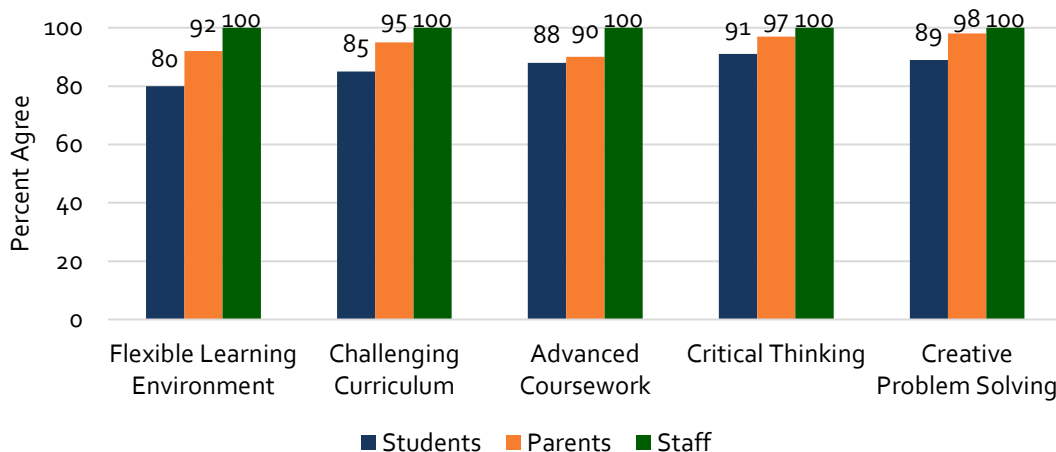
On October 6, 2015, the School Board approved an Entrepreneurship and Business Academy (EBA) to be opened the following September as a school within a school at Kempsville High School. School Board Policy 6-26 requires that new programs be evaluated for the first two years of operation and during the year of full implementation across all grade levels. During the 2016-2017 school year, the academy underwent a year-one evaluation. This year-two evaluation report focused on the continued implementation of the academy, characteristics of students, progress made toward meeting the goals and objectives, stakeholders' perceptions, and the additional cost during 2017-2018. The evaluation was based on both quantitative and qualitative data that were collected through surveys, reviews of documents, and data from the Virginia Beach City Public Schools (VBCPS) data warehouse.

Key Evaluation Findings

Operational Components

- The implementation of the EBA followed the timeline approved by the School Board, except that renovations initially scheduled to occur in two phases during the summers of 2017 and 2018 were consolidated and combined with other infrastructure work at Kempsville High School and rescheduled for the summer of 2018. The construction project began on time, but fell behind schedule due to contractor performance combined with unforeseen building conditions. The project remained on budget and is anticipated to be complete by December 1, 2018.
- Both the ninth-grade and tenth-grade programs of study followed the plan set forth in the approved proposal. It included advanced placement courses and EBA-specific classes designed especially for the academy, as well as classes open to other Kempsville High School students. It also included courses designed to result in certification as a Microsoft Office Specialist (MOS).
- Perceptions of the academy's learning environment were favorable with rates of agreement on all survey items ranging from 80 to 100 percent.

Participant Perceptions of the EBA's Coursework and Learning Environment



- Students selected one of three academy strands toward the end of their freshman year. Overall, 50 percent of students selected the Entrepreneurship and Innovation strand, 26 percent chose the Business Information Technology strand, and 24 percent chose the Corporate Finance strand.
- During 2017-2018, more than 44 guest speakers and Master Class instructors made presentations to the EBA students. Such activities provided students with useful information as well as with opportunities to make useful connections that could lead to mentoring, interning, obtaining financing for entrepreneurial projects, or securing future employment.
- The EBA students participated in 21 field trips during the 2017-2018 school year. Some of the field trips involved all academy students while others involved the students from just one or two classes. Most of the field trips were to local venues such as the Norfolk Forum and the Virginia Beach Convention Center. Other field trips involved travel to Atlanta or Washington, DC, to attend regional and national conferences and competitions.
- Working to fulfill the 100-hour community service requirement also served as an enrichment activity for the EBA students. The community service can be accomplished in a variety of ways such as volunteering to tutor peers or younger students or by serving as a volunteer at a non-profit organization. At the end of 2017-2018, all EBA students were on track to meet the requirement.
- The community partners affiliated with the EBA included academic institutions and businesses. The academic institutions included Tidewater Community College (TCC), Babson College, and Old Dominion University (ODU). They provided professional learning opportunities for EBA staff members and curricular support and resources.
- During 2017-2018, the EBA had partnerships with 49 local and national businesses, a net gain of 10 partnerships over the academy's first year. They included but were not limited to restaurants, law firms, insurance agencies, civic groups and organizations, banks, and retailers.
- The business partnerships are intended to develop meaningful links for students between classroom instruction and real-world experience, creating opportunities for mentoring, networking, and employment. Local business people served as guest speakers or Master Class instructors, and others were appointed to serve two-year terms on the EBA Advisory Committee.
- The academy students garnered multiple awards and recognitions during competitions. During the academy's first Pitch Night where student teams presented their business concept to a panel of local industry experts in a competition for funding, six teams won a total of \$24,500 to launch their businesses. Three EBA teams won at the national World Series of Entrepreneurship competition, the DECA national marketing club competitions led to 108 medals awarded, the regional Virtual Business Accounting Finalists resulted in 27 medals awarded and 15 national qualifiers, and the state FBLA competition led to 29 trophies being awarded with the EBA as a whole also winning two titles.
- The marketing and application process resulted in completed applications from 265 grade 8 students. From this candidate pool, 231 students (87%) received letters offering admission, and 118 (51%) students accepted the offer to form the EBA Class of 2021.
- Fall 2017 enrollment in the EBA's Class of 2021 consisted of 118 freshmen, and the Class of 2020 consisted of 112 sophomores. These 230 students brought the academy to 92 percent of its proposed student enrollment for its second year of operation.
- The EBA staff members unanimously agreed that the professional learning they had received was useful, sufficient, and effective.

Characteristics of Participants

- The demographics of the 230 EBA students were similar to those of the other ninth and tenth graders at Kempsville High School and in the division overall with respect to race/ethnicity with differences in gender, economic status, special education status, and gifted status.
- The incoming grade 9 EBA students came from every middle school in VBCPS and represented each high school attendance zone, although the largest percentages of students had been enrolled at Kempsville (17%) and Larkspur (16%) middle schools and represented the Green Run (20%) and Kempsville (19%) high school attendance zones.
- Among all 230 EBA freshmen and sophomores, the largest percentage of students came from the Kempsville High School attendance zone (25%), followed by Green Run (14%), Salem (12%), and Tallwood (10%).
- The EBA student group had higher performance than the non-EBA ninth graders at Kempsville High School on indicators of academic achievement when they were in eighth grade.
- The twelve instructional staff (i.e., teachers and school counselor) that taught EBA students tended to be female and Caucasian. All the teachers were certified. Seven of the twelve (58%) had earned advanced degrees which was higher than Kempsville High School and the division. All EBA teachers had at least three years of teaching experience, with an average of eight years of experience for all EBA staff.

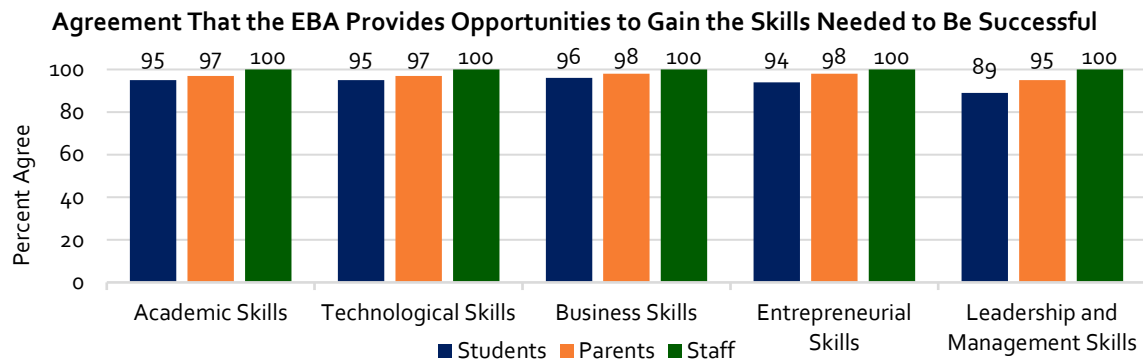
Progress Toward Meeting Goals and Objectives

Goal #1: Academic Preparation

- The academy had one overall goal: “To provide students the business skills and knowledge necessary to succeed in any career related fields of study in postsecondary education and in the workforce.” Although attainment of this academic preparation goal could not yet be evaluated during the EBA’s first or second year, the progress made toward meeting the goal was found, overall, to be encouraging.
- The proposal included five objectives for students and one objective for the academy to achieve.

Objective #1: Academic Coursework

- A review of course offerings and academic requirements confirmed that the academy adhered to the curriculum set forth in the proposal.
- The required, elective, EBA-specific, and certification prep courses for the ninth-grade and tenth-grade students were rigorous in nature. In combination, they provided a sequential program of multiple pathways infused with opportunities to gain skills needed to be successful.



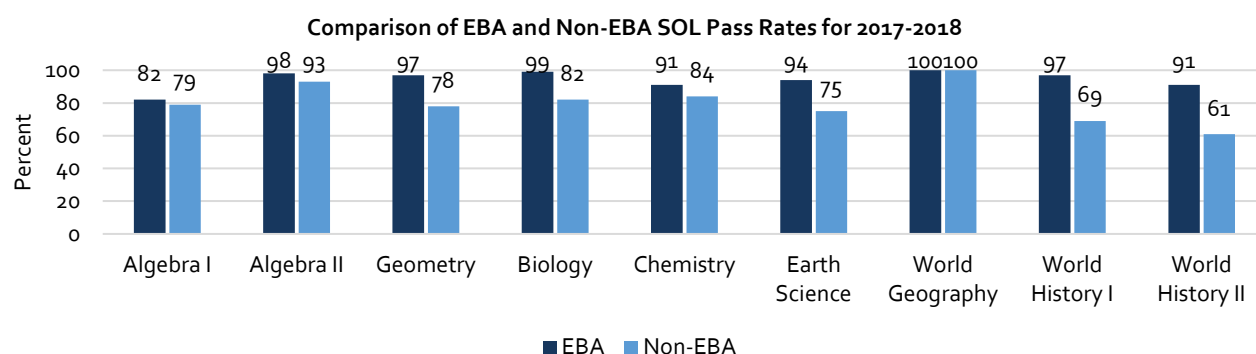
- Students' course performance data showed that for nearly all courses, 90 percent or more of the EBA students earned a grade of C or above.

Objective #2: Associate Degree/Postsecondary Credit

- The primary way that EBA students in 2017-2018 worked to earn postsecondary credit was through Advanced Placement (AP) courses.
- During the 2017-2018 school year, 53 percent of the EBA's students took either AP Human Geography or AP European History, the two Advanced Placement core courses available to EBA freshmen and sophomores. In addition, 19 percent of EBA sophomores enrolled in AP Computer Science Principles or AP Psychology which were both EBA elective courses. All EBA students earned a passing grade in their course.
- Of the EBA students who took the AP exam that corresponded to their course, 56 percent earned a 3 or higher on the AP Human Geography or AP European History exams, and 84 percent earned a 3 or higher on the AP Computer Science Principles or AP Psychology exams. A score of 3 or higher is typically required to earn college credit.
- Dual-enrollment courses with TCC are mainly intended for juniors and seniors. In preparation, 80 EBA students took the Virginia Placement Test (VPT) in February 2017. Another 129 students took the VPT in February 2018. Tidewater Community College also recognized the AP Human Geography class for credit toward the associate degree.

Objective #3: Academic Performance

- The third objective called for EBA students to exceed the objectives of the VBCPS curricula and the Commonwealth of Virginia Standards of Learning (SOL) tests.
- The grade averages of the ninth- and tenth-grade EBA students for both core classes (3.2 and 3.0, respectively) and for all classes (3.4 – 3.3, respectively) taken during 2017-2018 were found to be significantly higher than the grade averages of their non-EBA ninth- and tenth-grade counterparts (2.3 – 2.7).
- A review of 2017-2018 SOL results revealed that the EBA students' SOL pass rates were consistently higher than those of the non-EBA students and ranged from 82 to 100 percent depending on the test.



- All EBA students (100%) took tests to earn an industry-related certification, usually toward becoming a Microsoft Office Specialist (MOS). All EBA students passed at least one of the certifications they took. By comparison, 13 percent of the non-EBA freshmen and sophomores took certification tests and 89 percent passed at least one of the tests.
- Of the 596 certification tests taken by the EBA students, 97 percent were passed. By comparison, the non-EBA students passed 86 percent of the 139 certification tests that they attempted.

Objective #4: Job Shadowing

- In addition to taking classes, the EBA experience involves a variety of enrichment activities, including job shadowing, guest speakers, field trips, and community service.
- The academy's first Job Shadow Day was held on March 22, 2018. On this day, 87 EBA sophomores were paired with 40 business owners and community leaders with whom they spent a day "in their shoes" observing their daily work activities and asking questions.

Objective #5: Long-Term Project Through Internship/Mentorship

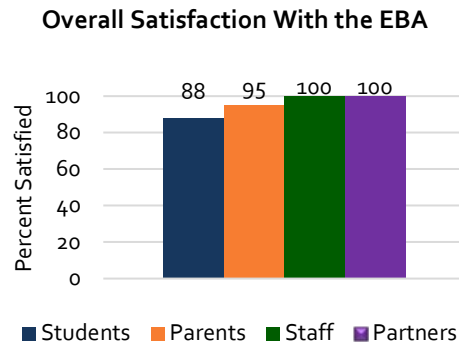
- According to the proposal, all EBA students will complete a long-term project or internship during their senior year. It is envisioned as on-the-job training that will provide each student an opportunity to identify real-world applications of what they learned in school. The experience will culminate with each student developing a presentation for an audience of peers, school staff, and business people from the community.
- Although the project or internship will not formally begin until their senior year, students have already begun to prepare via their classwork, enrichment activities, and choice of strand. Further progress toward meeting this fifth objective was made during the academy's second year with the founding of the EBA Advisory Committee, whose members will be instrumental in helping to design and implement the long-term project and senior internship activities.

Objective #6: Collaborative Agreements With Institutions of Higher Education:

- The sixth objective called for the academy to establish collaborative agreements with institutions of higher education that would result in ongoing program development and assessment.
- Collaboration between the EBA and ODU, especially with the Strome Entrepreneurial Center, has resulted in several opportunities during 2017-2018 for students and staff to attend and participate in lectures, presentations, and other academy-relevant activities.

Stakeholder Perceptions

- Overall satisfaction with the EBA was very high among all stakeholder groups.



- Nearly all EBA students (92%) indicated their intention to continue in the academy, and all but one EBA staff member also indicated their intention to remain with the academy.
- Similarly, 97 percent of parents and 92 percent of students would recommend the academy to others.
- When asked what students gained from being enrolled in the EBA, the most common response was “Knowledge and skills for work or self-employment.” The answer was provided by the majority of the parents and community partners who responded to the survey item. Among students, the most common response involved work experience and business connections followed by knowledge and schools for school and/or college. The most common response among staff involved “soft skills” such as leadership, organization, and critical thinking skills.

Additional Cost

- During 2017-2018, the one-time start-up costs totaled \$446,100 with the bulk of the expenditures for planned facilities improvements that had been delayed one year until the summer of 2018.
- During 2017-2018, the total annual operating cost for the second year of operation totaled \$547,230, which was \$50,147 lower than the planning budget costs.
- Overall for 2017-2018, the proposed planning budget totaled \$1,072,360 for one-time start-up and year-two operating costs. Actual one-time start-up and year-two operating costs amounted to \$993,330 in 2017-2018 which was \$79,030 less than the proposed costs.
- A total of \$1,148,615 was spent on one-time start-up costs for the academy through the 2017-2018 fiscal year which was relatively in line with the total start-up costs that had been proposed through 2017-2018 (\$1,051,481). However, an additional \$435,000 is expected to be spent in 2018-2019 on facilities improvements that are still needed to align with plans set forth in the academy proposal, and the cost for those improvements are expected to be incurred during 2018-2019.

Recommendation and Rationale

Recommendation: Continue the Entrepreneurship and Business Academy within Kempsville High School without modifications. *(Responsible Groups: Department of Teaching and Learning, Kempsville High School)*

Rationale: Continuing the EBA without modifications is recommended because the operation of the EBA was found to largely correspond with what had been set forth in the proposal approved by the School Board. The academy opened on schedule in September 2016. During its first and second years of implementation, the academy made progress toward meeting its goal and objectives. It successfully instituted a rigorous and comprehensive program of study for students interested in entrepreneurship and innovation, business information technology, and corporate finance. The program included a combination of required and elective courses, as well as enrichment and community service activities. Academy students performed well academically, as exemplified by passing grades, successful test scores, and a high number of successful attempts to earn industry-related certifications. The students and staff also earned an array of honors, awards, and prizes during 2017-2018. In addition, its stakeholders continued to perceive the academy favorably.

Introduction

Background

The Entrepreneurship and Business Academy (EBA) opened as a school-within-a-school at Kempsville High School in September 2016 after the academy was approved by the School Board on October 6, 2015. The EBA continued operating during the 2017-2018 school year, offering rigorous academic curricula with business-themed concepts integrated into a combination of core courses and specialized electives. The Class of 2020 progressed from ninth to tenth grade, and the Class of 2021 entered the academy as ninth-grade students. Complete implementation across grades 9 through 12 will be achieved in 2019-2020 when the EBA expects to serve approximately 500 students.

EBA students pursue one of three strands within the program of study: Entrepreneurship and Innovation (E&I), Business Information Technology (BIT), or Corporate Finance (CF). Through studies within their selected strand, students are exposed to dual enrollment opportunities along pathways toward potentially earning their associate degree in business administration before graduating from high school. Regardless of their strand, all students will complete an intensive internship experience in their senior year, which will contribute significantly to their being college and career ready when they graduate from VBCPS.

Purpose

This evaluation provides the School Board, the Superintendent, and academy leadership with information on the year-two implementation of the EBA. School Board Policy 6-26 requires the Office of Planning, Innovation, and Accountability to evaluate new programs for a minimum of two years. In addition, because the EBA will take more than two years to implement fully, the academy will again be evaluated during the year it reaches full implementation (i.e., 2019-2020). The School Board approved the year-two evaluation of the EBA as part of the 2017-2018 program evaluation schedule on September 6, 2017.

In accordance with School Board Regulation 6-24.2, the second year evaluation of the EBA focused on the progress made toward meeting the program's goals and objectives, along with continued implementation. In addition, the evaluation report provides information about student and staff characteristics and the additional

cost to the division compared with the proposed academy budget.

Academy Overview

According to the academy proposal approved by the School Board, the EBA was established to offer a comprehensive program to students who are interested in entrepreneurship, business information technology, or corporate finance. The academy was designed to “provide students with opportunities to study, understand, and explore the ever-changing landscape of business fields and the rise in entrepreneurial ventures that exist in today’s workforce.”¹ Some of the EBA’s key features include opportunities for students to do the following:

- Earn Microsoft Office Specialist certification.
- Take specialized courses within their respective strand.
- Earn an associate degree or postsecondary or Advanced Placement credit.
- Participate in job shadowing and mentoring programs that extend, enrich, and refine student learning and that create linkages with the academic and business communities.
- Complete a long-term project and/or senior internship, spending instructional time within a business-related field of their choice.

According to the proposal, the EBA will focus on providing a personalized, globally-competitive curriculum that equips students with the knowledge and skills needed to make connections among various disciplines, the technology students need to communicate with a worldwide audience, the problem solving and critical thinking skills necessary to meet the challenges of the future, and the service learning expertise needed in industry today.

One hallmark of the academy noted in the proposal is the three academy strands:

- **Entrepreneurship and Innovation Strand:** Students enrolled in the Entrepreneurship and Innovation strand take courses focused on design thinking and the Babson College approach to Entrepreneurial Thought and Action®. This strand relies heavily on the use of the Makerspace within the academy.
- **Business Information and Technology Strand:** Students enrolled in the Business Information and Technology strand have opportunities to take

courses at the Advanced Technology Center. This established partnership increases the number of course offerings for academy students without replicating courses already offered within VBCPS.

- **Corporate Finance Strand:** Students enrolled in the Corporate Finance strand have multiple opportunities to study within the banking- and finance-related career fields. All students in this strand take dual enrollment accounting courses, which assist them in earning their associate of science degree from TCC.

Another hallmark of the EBA is the development of a Makerspace to which all students will have access and exposure during their studies within the academy. Through the Makerspace, as well as the associated courses and enrichments surrounding it, students develop an “entrepreneurial spirit” and discover the importance of creating, producing, and marketing in all industries.

A third academy hallmark involves the academy’s partnership with TCC that provides opportunity for students to take dual-enrollment coursework toward earning their associate of science degree in business administration, technology, or finance while still in high school. With an adequate grade average, students can avail themselves of transfer agreements with a selection of colleges and universities that are both nearby (e.g., Old Dominion University, William and Mary, George Mason) and as distant as Ashford University in San Diego, California.

A fourth hallmark of the academy is its use of social media to “brand” and market the academy, as well as to communicate with students, parents, partners, and the public. In addition to its webpage on the vbschools.com-supported Kempsville High School website,² the EBA maintains a presence on several other social media platforms. These include interlinked accounts on Twitter (@KempsAcademy), Instagram (@KempsAcademy), Facebook,³ LinkedIn, and Weebly.⁴ Posts and tweets on these platforms are used, often in real time, to communicate EBA-related information regarding upcoming events or approaching deadlines. They are used to describe events or other news as they happen in the form of text, photos, and even video. After the fact, descriptions of current events naturally become historical documentation, and they do so in a cumulative manner that promotes the EBA as a very active and supportive educational enterprise, one that practices what it teaches and preaches. Often, the social media posts include links that lead to additional

information posted elsewhere and/or documents in a pdf format that provide more detailed background, forming a virtual community of partnerships that mirrors its real-world community.

Yet another hallmark of the academy during its second year of operation involved the honors, awards, and prizes that its students and staff earned during the 2017-2018 school year. Some were recognitions, such as an EBA staff member being named VBCPS Technical and Career Education Teacher of the Year. Others were awards that EBA student teams won through competition, such as the EBA’s Supply Hut team winning first place in the live pitch category at the World Series of Entrepreneurship competition, which earned them \$10,000, including \$5,000 in venture funding and an additional \$5,000 to split among the team’s three members for college scholarship money.

Academy Goals and Objectives

The overall goal of the Entrepreneurship and Business Academy at Kempsville High School as stated in the approved proposal is to “provide students the business skills and knowledge necessary to succeed in any career-related fields of study in postsecondary education and in the workforce.” (p. 8)

Specific academy objectives include the following:

Students will:

1. Successfully complete a sequential program of study that focuses on specific skills, knowledge, and technology in the fields of entrepreneurship and innovation, business information and technology, and corporate finance.
2. Have opportunities to earn an associate degree/postsecondary credit.
3. Exceed the objectives of the VBCPS curricula and Commonwealth of Virginia Standards of Learning tests.
4. Participate in job shadowing, mentoring, and/or internship programs that extend, enrich, and refine student learning and that create linkages between the academic and business communities.
5. Complete a long-term project through an internship/mentorship experience with a culminating presentation in the senior year featuring an in-depth study of an issue of concern to their related industry and present ideas/solutions as viable options to address the issue to a panel of business and community leaders.

The Academy will:

6. Establish collaborative agreements with institutions of higher education that result in ongoing program development and assessment.

Evaluation Design and Methodology

Evaluation Design

This year-two evaluation focuses on the continuing implementation of the EBA during the 2017-2018 school year, as well as addressing progress toward meeting program goals and objectives. It also addresses the characteristics of the academy students and staff, stakeholder perceptions, and the additional cost of the academy to the division. The final evaluation after full implementation will also examine continued implementation, the attainment of program goals and objectives, and the program's effectiveness. Evaluation questions for this report were derived from a review of School Board policy related to year-two evaluations, the EBA proposal, various academy documents, and discussions with EBA leadership.

Evaluation Questions

The year-two evaluation questions are set forth below.

1. **What were the operational components of the EBA and did implementation of the academy continue to mirror what was proposed?**
 - A. What actions were taken regarding the year-one recommendations?
 - B. To what degree was the proposed timeline followed?
 - C. Were infrastructure improvements and transportation implemented as planned?
 - D. Did the program of study mirror the proposal?
 1. What was the academy curriculum and what courses were offered?
 2. What community partnerships were developed?
 3. What additional enrichment opportunities were provided (e.g., job shadowing, guest speakers, field trips, community service, etc.)?
 4. How was the program of study perceived?
 - E. How were participants selected for the academy, including students and staff?
 1. How was the academy marketed?
 2. What was the student application and selection process?

3. What was the process and criteria for selecting staff?
4. What professional learning did the staff receive and how was it perceived?

2. What were the characteristics of the EBA participants?

- A. What were the characteristics of the EBA students?
 1. What were students' gender, ethnicity, and other characteristics?
 2. From what middle schools and what high school attendance zones were students drawn?
 3. What was the academic achievement of the ninth-grade EBA students when they were in the eighth grade?
 4. What were the characteristics of the EBA staff, including staff's qualifications?

3. What progress was made toward meeting the academy's goals and objectives?

- A. What progress was made toward completing academy coursework for the program of study?
- B. What progress was made toward earning an associate degree/postsecondary credit?
- C. What progress was made toward exceeding the objectives of the VBCPS curriculum and Virginia Standards of Learning?
- D. What progress was made toward students participating in job shadowing, mentoring, and internship opportunities?
- E. What progress was made toward designing and developing a long-term project for students in their senior year?
- F. What progress was made toward establishing collaborative agreements with institutions of higher education?

4. How was the academy's design and implementation perceived by students, parents, staff, and community partners?

5. How did the actual costs of the academy compare with the projected costs specified in the budget section of the academy proposal?

Instruments and Data Sources

Multiple methods of data collection were used to gather evaluation information from multiple data sources for this year-two evaluation.

EBA Documentation and Program Data

The Planning, Innovation, and Accountability evaluators from the Office of Research and Evaluation employed the following data collection methods:

- Examined the EBA Proposal (October 2015) and academy documentation.
- Conducted informational meetings with the academy coordinator and the principal when needed.
- Maintained ongoing communication and periodic correspondence with the academy coordinator.
- Collected implementation-related data from the academy coordinator.
- Collected staff data from the Department of Human Resources.
- Collected student quantitative data from the VBCPS data warehouse for analyzing academy operations, participant characteristics, and progress toward goals and objectives.
- Collected data on students' academic performance in courses, on the Standards of Learning tests, and on certification tests.
- Administered perception surveys to academy students, parents, staff, and community partners.
- Collected cost data from applicable central office departments.

VBCPS Data Warehouse

Some of the student-related quantitative data needed for the year-two evaluation were extracted from the VBCPS data warehouse. These data mainly concerned demographic characteristics, attendance, discipline, and academic outcomes. The data for participating academy students were compared with corresponding data for other Kempsville High School students in grade 9 and grade 10 for the purpose of providing interpretive context.

Surveys

The remainder of the quantitative data and much of the qualitative data needed for the evaluation were collected through surveys. Several EBA participant groups were invited to complete an anonymous survey regarding their perceptions of, experiences with, and feelings toward the EBA. In total, four different survey forms were developed – one for each participant group:

- Academy staff (teachers and the school counselor)
- EBA students (grades 9 and 10)

- The parents/guardians of EBA students
- Community partners

The participant surveys consisted mainly of Likert-type items that focused on perceptions of program operations and year-two program outcomes. In almost all cases, these selected-response items were constructed on a four-point scale: (1) Strongly Disagree, (2) Disagree, (3) Agree, and (4) Strongly Agree. Whenever possible, comparable versions of survey items were included on all or nearly all survey versions. This enabled variations in the perceptions of different participant groups to be analyzed. Further, many of the items contained in the year-one surveys were included in the year-two surveys to enable two additional types of comparison. Comparisons were made between Cohort 1 (the Class of 2020) and Cohort 2 (the Class of 2021). Comparisons also were made between the first cohort's responses as ninth-grade students and as tenth-grade students. In addition, all surveys included open-ended questions regarding what students gained and possible improvements to the academy. Responses to the open-ended questions served as a major source of the qualitative data used in this evaluation.

The surveys for all participants were conducted online between April 30 and May 11, 2018 when 230 students were enrolled in the academy. Table 1 provides the response rates for each survey.

Table 1: EBA Survey Response Rates

Participant Group	Surveys Issued	Surveys Returned	Response Rate (%)
Students	230	258	100+%
Staff	13	9	69%
Parents/Guardians	321	65	20%
Community Partners	41	14	34%

The student response rate exceeded 100 percent because some students took the survey more than once, presumably in different classes. When duplicate records could be identified, they were deleted. However, the patterns of multiple-choice responses and open-ended comments differed enough across individual students that 28 “extra” surveys had to be retained.

The staff surveys were issued to 11 teachers, as well as to a school counselor and an administrative assistant. Nine (9) responses were received.

Data Analysis

Demographic, behavioral, and academic data for both EBA students and the rest of the Kempsville High School grade 9 and grade 10 students were extracted from the VBCPS data warehouse. These data included key demographics such as gender and race. The demographic data were based on EBA and non-EBA enrollment on September 30, 2017. Outcome data such as course grades, grade averages, and assessment results, as well as attendance and discipline data, were based on end-of-year enrollments on June 15, 2018. As a consequence of attrition, the numbers of Kempsville High School students (N) changed over the course of the year, as set forth in Table 2 below.

Table 2: Numbers of Students (N) Eligible for Inclusion in Different Data Analyses

Student Group	Demographics (9/30/2017) N	Outcomes (6/15/2018) N
EBA Grade 9	118	115
EBA Grade 10	112	108
EBA Subtotal	230	223
Non-EBA Grade 9	366	359
Non-EBA Grade 10	302	292
Non-EBA Subtotal	668	651
Grand Total	898	874

The enrollment numbers in Table 2 served as denominators when computing the percentages reported for a particular comparison or analysis of demographic or outcome data between the EBA and non-EBA students.

Quantitative

The academic achievement (grades and test scores) as well as the behaviors (attendance and discipline referrals) of the EBA students and their non-EBA grade 9 and grade 10 counterparts who attended Kempsville High School were compared. These direct comparisons of academy and non-academy student data were not based on matched comparisons. Instead, analysis of covariance (ANCOVA) was used when possible to adjust current group-level results by prior SOL group-level results to ensure that comparisons reflected the same starting point – that is, to level the proverbial playing field. Controlling for prior test scores enabled differences in the more recent test performance to be compared more accurately. For example, their previous grade 8 SOL math results from 2016-2017 were used to adjust the freshmen's 2017-2018 math results. Despite the rigor of the analyses, between-group differences should still be interpreted with caution due to the lack

of student-level matched comparisons. Differences, whether positive or negative, should not automatically be viewed as direct effects caused by the academy. In short, the comparisons between EBA and non-EBA students are provided for purposes of interpretive reference only.

To facilitate interpretation of results from the Likert-type survey items, agreement rates were computed by combining the percentage of respondents who selected either Agree or Strongly Agree. Survey agreement percentages reported in the evaluation are based on those who answered the survey item (i.e., missing responses were excluded from the percentages). In addition, changes in agreement rates were also examined from year one to year two. They are included in this report when those shifts between the percentage of respondents selecting “Strongly Agree” and “Agree” were large enough to be notable.

Qualitative

Open-ended survey responses were coded into thematic categories for qualitative analysis, as well as considered for possible verbatim inclusion in this report. When this occurred, all efforts were made to excerpt typical statements that represented all important perspectives and ideas.

It should be noted that when an open-ended response expressed more than one relevant thought or idea, the idea was counted in each of the categories to which it related. Consequently, the number of responses sometimes exceeded the number of respondents. For example, when writing a reply to a single open-ended survey item, 100 student respondents might have expressed 250 separate ideas.

Evaluation Results and Discussion

This section of the year-two evaluation describes the implementation of the EBA during 2017-2018. Appropriate comparisons are drawn to the year-one implementation during 2016-2017 and the academy proposal. More specifically, this section addresses the year-two evaluation questions associated with the academy's operational components, the participants' characteristics, progress toward meeting goals and objectives, the participants' general perceptions of the academy during its second year of operation, and the additional cost.

Operational Components

Actions Taken Regarding the Year-One Recommendation

The first evaluation question of the year-two report asked, “What actions were taken as a result of the year-one recommendation?” The only recommendation resulting from the year-one evaluation was for the academy to continue without modification. Accordingly, the EBA continued its operations during the 2017-2018 school year with grades 9 and 10, adhering closely to the proposal’s plans for year two.

To accommodate the academy’s growth, the year two slate of academy classes had to be finalized for both the grade 9 and grade 10 students. No major departures from the academy proposal were noted with respect to the core courses, Advanced Placement (AP) classes, the academy electives, and the dual-enrollment courses. Continuing the EBA into its second year also involved not only maintaining but also expanding academy partnerships with parents, with local and national businesses, and with institutions of higher learning. This led to the formation of EBA’s Academy Advisory Committee, which will later be discussed in greater detail. In addition, community service projects for year two were organized, scheduled, and monitored.

It also is worthy to note that planning for the academy’s third year of operation during the 2018-2019 school year also began during year two. The planning included staffing and course scheduling, as well as marketing the EBA to attract candidates to apply for acceptance into the academy’s Class of 2022. In summary, the EBA adhered during 2017-2018 to the year-two plan outlined in the academy proposal.

Implementation

The implementation of the EBA encompasses several components of the academy’s operation. Each will be addressed in turn.

Timeline: A timeline of the EBA’s implementation was included in the School Board approved proposal. Table 3 presents key activities and milestone dates for the academy’s second year of operation based on the academy’s proposal and updated information gathered during the year-one evaluation. The status of each activity is noted by a checkmark or an X.

Table 3: Timeline of EBA Year-Two Implementation With Status

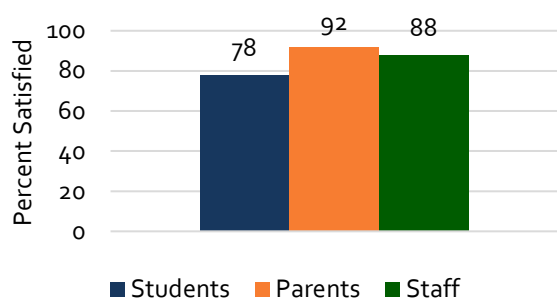
Activity	Date	Status
Start year-two with proposed enrollment of 250 freshmen and sophomore students	September 5, 2017	X
Master classes begin	October 2017	✓
Academy Advisory Committee established	October 2017	✓
Finalized TCC class credit component	November 2018	✓
Applications for freshmen due	January 10, 2018	✓
Job Shadow Day	March 22, 2018	✓
Learning space construction begins	May 28, 2018	✓
Pitch Night	June 6, 2018	✓
Learning space construction finished	August 28, 2018	X

As noted in the table with the checkmarks, all key activity dates and milestones were met with the exception of those in the first and last rows. The academy began its second year of operation with 118 grade 9 students and 112 grade 10 students. The total year-two enrollment of 230 students represented 92 percent of the proposed year-two full enrollment of 250 students. The learning space construction delay is addressed in the Infrastructure section.

Infrastructure: The academy proposal had called for construction of the Makerspace and renovation of other learning and work spaces to occur in two phases during the summers of 2017 and 2018. However, as explained in the year-one evaluation report, the work was consolidated and combined with other infrastructure work at Kempsville High School and rescheduled for one phase in the late spring and the summer of 2018. As indicated in Table 3, the learning space construction began on schedule on June 2, 2018. Although the construction was scheduled to be finished by August 28, contractor performance combined with unforeseen building conditions delayed project completion. It is anticipated that the project will be completed by December 1, 2018. Despite the delay, the renovations to the academy learning space remained on budget.

During 2017-2018, the academy space continued to consist of three classrooms and a temporary Makerspace lab with a laser-cutter, 3D-printer, and other equipment. Despite the postponement of the EBA renovations until the spring of 2018, the vast majority of academy stakeholders continued to express satisfaction with the EBA facilities during year two, as Figure 1 indicates.

Figure 1: Stakeholders' Satisfaction With EBA Facilities



Some decrease in the staff and student agreement rates was noted and warrants explanation. While the staff agreement rate declined from 100 percent in year one to 88 percent in year two, the 12 percent decrease represents just one teacher. The student agreement rate declined by 5 percent, from 83 percent in 2016-2017 to 78 percent in 2017-2018. However, examining the change in agreement rates of only the year-two sophomores revealed a year-two agreement of 84 percent, which represents an increase of 1 percent from year one.

Transportation: Transportation did not pose any serious or widespread issues in either year one or year two. In response to a survey statement that “Bus transportation allows full participation in the EBA program,” the parental agreement rate of 88 percent and the student agreement rate of 74 percent in year two both remained relatively high although small declines were found compared to year one. When compared with year-one survey results, both declined by 7 percent from a parental agreement rate of 95 percent and a student agreement rate of 81 percent in year one.

Transportation for field trips posed no problem. As was the case during 2016-2017, the principal of Kempsville High School assigned buses for academy-wide trips. But since many of the field trips during 2017-2018 were also class-specific, white vans were adequate for transporting approximately 20 students to and from a field trip destination. No irresolvable scheduling conflicts were noted according to the academy coordinator.

When asked in an open-ended survey question to suggest how the academy might be improved, 11 of the 279 students’ comments or suggestions (4%) and one of the 64 parent suggestions (2%) were related to transportation. The student comments involved the afternoon buses with some noting that the transportation schedule did not align with the students’ schedules.

Program of Studies

The EBA comprises three major strands: Entrepreneurship and Innovation (Strand 1), Business Information Technology (Strand 2), and Corporate Finance (Strand 3). All three strands enable students within the academy to explore multiple pathways to being college and career ready. The program of study was intended to enable EBA graduates to be ready for postsecondary education or to enter the workforce or the military. Students who successfully complete the prescribed load of required and elective courses will graduate from VBCPS with an Advanced Diploma. Further, students can elect to pursue AP and dual-enrollment coursework in order to also earn an associate of science degree from TCC. The EBA students take core curriculum courses regardless of their strand and also courses specific to the strand they select. The courses within the strands are immersive, experiential opportunities that serve as a foundation for a multitude of elective options. This enables the students to map out a course of study based on their own personal interests and career goals. The suggested course loads for each strand are set forth in Appendix A.

Because the academy was designed with personalized learning in mind, EBA students are exposed to a variety of learning opportunities offered through partnerships with postsecondary institutions, the Advanced Technology Center, and both local and national business organizations. Students are encouraged to make full use of the academy’s offerings and resources to meet their individual learning needs and interests. They can choose electives from the menu of class options included in Appendix B. They also can choose to take college level classes and even to pursue a two-year associate of science degree through TCC. The slate of dual-enrollment and Advanced Placement courses is provided in Appendix C. Further, EBA students can pursue industry certifications through classwork supplemented by tutorials and practice modules hosted by Gmetrix, an online skills management system. The industry certifications that EBA students may pursue are listed in Appendix D.

The program of studies will culminate when all students complete an internship during their senior year in their selected field of study with a community leader/business partner. During this period of time, students will be required to keep a log of their internship hours and a blog/journal of their experiences in the field. The internship experience will be shared through a multimedia presentation with their classmates, parents,

and community leaders/business partners through an in-depth research-based senior project involving a challenge or issue and a proposed solution to this challenge.

Strand Selection: Each strand within the academy offers required and elective course options for students. The latitude for personalization increases after the EBA students select their strand toward the end of their freshmen year. Until then, the academy lays a curricular foundation for the grade 9 students. All freshmen take a course entitled Introduction to Entrepreneurship and Business Information Technology, which introduces all three strands to students so that they can make an informed decision when they select a strand in which to specialize during grades 10, 11, and 12. Table 4 displays the number of students who chose each strand during year one and year two.

Table 4: Results of Year-2 Strand Selection

Strand	Class of 2021 (N=115)	Class of 2020 (N=108)	Total (N=223)
Entrepreneurship & Innovation	44%	56%	50%
Business Information Technology	28%	24%	26%
Corporate Finance	28%	20%	24%

Table 4 shows that while the Entrepreneurship and Innovation strand remained the most popular, the selections by the year-two freshman students (i.e., Class of 2021) were more evenly distributed than were those in the first year cohort (i.e., Class of 2020).

As did the grade 9 students during year one, the second cohort of EBA freshmen also took two semester-long academy classes: Critical Issues in Business Seminar and Idea Generation and Creative Problem Solving. They also took other classes. Some courses, such as Academy Honors English 9, were attended only by EBA students. Other courses, such as AP Human Geography, were also open to non-EBA students.

Dual Enrollment and Advanced Placement Credit:

Students enrolled in the academy are provided opportunities to take Advanced Placement (AP) courses, industry certification tests, and dual enrollment courses that articulate credit toward an associate of science degree in business administration, technology, or finance with TCC and other postsecondary education partners. The number of dual enrollment and AP class offerings is planned to increase markedly for juniors and seniors.

No dual enrollment classes were planned for EBA freshmen. Based on the academy proposal, a dual enrollment Pre-Calculus I and II class was planned for EBA sophomores during 2017-2018. The course was offered during the summer at TCC; however, the course was not offered during 2017-2018 at Kempsville High School due to not being able to identify a teacher with the appropriate qualifications to teach the dual enrollment course. Examples of other planned dual enrollment courses to be offered to EBA students in partnership with TCC; during their enrollment in the academy include Dual Enrollment Introduction to Project Management, Dual Enrollment Business Analytics, and Dual Enrollment Business Management and Leadership. A full list of dual enrollment and AP options and a list of additional dual-enrollment courses required for an associate degree are provided in Appendix C.

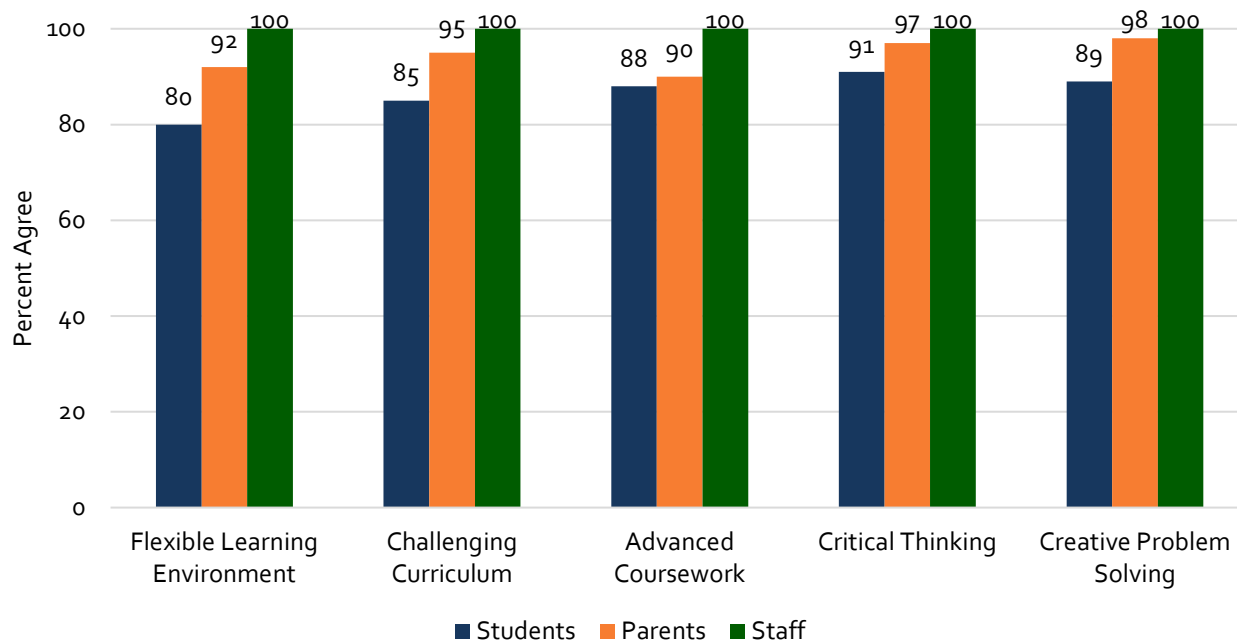
One Advanced Placement course, AP Human Geography, was available to freshmen. Of the EBA students in grade 9, 58 students (50%) took the AP course. An additional 32 EBA students in grade 10 (30%) also took the course. Further, 29 EBA sophomores (27%) took AP European History. In summary, of the 223 EBA students enrolled in the academy in June 2018, 119 students (53%) took an AP core course. In addition, 13 sophomores enrolled in AP Computer Science Principles and 12 sophomores enrolled in AP Psychology which were both EBA elective courses.

Industry Certifications: Students within the academy are expected to complete the VBCPS Technical and Career Education stackable credential model in which students complete the Workplace Readiness Skills for the Commonwealth assessment, the Microsoft IT Academy Specialist certification, and strand-specific certifications that lead students to become both career and college ready when they graduate from high school. Examples of additional industry certifications that students may earn through their enrollment in the academy are listed in Appendix D.

EBA Coursework and Learning Environment: A set of survey questions focused on the EBA's coursework and learning environment. The same five questions were included on the student, parent, and staff versions of the survey. The results are displayed in Figure 2.

All three groups exhibited favorable perceptions regarding the EBA's coursework and learning environment, with agreement levels ranging from 80 to 100 percent.

Figure 2: Participant Perceptions of the EBA's Coursework and Learning Environment



In summary, a review of academic requirements and course descriptions, overall and by EBA strand, confirmed that the academy's program of study during the academy's second year of operation continued to adhere to the curriculum set forth in the proposal approved by the School Board.

Community Partners: Academy partners fell into two broad categories: academic institutions and businesses. Each will be discussed in turn.

Academic Institutions: The leadership of the EBA maintained the academy's collaborative partnerships and agreements with a variety of postsecondary institutions, including Babson College in Wellesley, Massachusetts, as well as locally with TCC and Old Dominion University (ODU). Babson College and ODU provide professional learning to EBA staff. They also provide curricula for the Entrepreneurship and Innovation strand. In addition, VBCPS leadership renewed the agreement with TCC for EBA students to earn dual-enrollment credit toward an associate of science degree in business, technology, or finance.

These arrangements indicate that the EBA leaders have developed collaborative partnerships and agreements in accordance with academy objectives approved by the School Board, specifically Objective 6, which states that the academy will establish collaborative agreements with institutions of higher education. Additional information is provided in the section of the report on progress toward meeting the program's goals and objectives.

Business Partners: During 2017-2018, EBA leadership has also successfully solicited support and partnership from 49 local and national businesses, a net gain of 10 partnerships over the academy's first year. A current list of the partners are provided in Appendix E. Such partnerships were intended to provide students with opportunities for increased career awareness, exploration, and experience. As enrichment, the partners have helped to establish meaningful connections between the book learning that students acquire in school and its application beyond the classroom. In addition, they serve as a pool from which members of the Academy Advisory Committee were identified during the 2017-2018 school year.

Academy Advisory Committee: The academy proposal called for the academy coordinator to convene and maintain an EBA Advisory Committee. Three goals for the committee were subsequently defined and posted on the EBA's Weebly website:

- Engage in discussion that leads to implementation of a Job Shadow Day program for EBA students in school year 2017-18. This program should be sustainable for years to come.
- Engage in discussion that leads to implementation of a Senior Internship program for EBA students in school year 2019-2020. This program should be sustainable for years to come.
- Provide input and suggestions for the Entrepreneurship and Business Academy planning staff relevant to meeting the local business and

community needs that will assist students in becoming productive, responsible citizens.

To select members of the Academy Advisory Committee, EBA leadership implemented a two-step process. First, applications were solicited by social media and word-of-mouth from a wide variety of businesses and other local professionals. Many of these had first been encountered during 2016-2017 enrichment activities, such as guest speakers, field trips, and community service projects. Second, a panel reviewed the 34 submitted applications and selected a total of 14 persons to serve two-year terms on the committee. The committee members include academic and business partners and municipal and community leaders, as well as students, parents, teachers, and administrators.

The committee's first tasks involved reviewing and advising academy leaders on the design of Job Shadow Day and Pitch Night, as well as the internship and the long-term project components of the academy's program.

Enrichment Activities: A variety of academy-related enrichment activities supplement the academy's academic program of required and elective courses.

Job Shadowing: One of the most important of these enrichment activities involves job shadowing, which was deliberately set to commence during the EBA's second year of operation after the EBA students had selected their strand and completed their year-one coursework. Accordingly, the EBA's first Job Shadow Day took place on March 22, 2018. On this day, as the name of the event suggests, 87 sophomores were paired with nearly 40 businesses and community leaders with whom they spent a day "in their shoes," observing their daily activities. The students learned by observing and asking questions. The experience also provided the students with an opportunity to network to begin establishing a relationship with a possible mentor with whom they might intern or receive guidance and even funding for their own entrepreneurial endeavors. A full list of the business and community participants is posted on the EBA's Weebly page.⁵

Pitch Night: Another important enrichment activity was the first Pitch Night, held on June 6, 2018, culminating a year of students' project planning and design associated with the academy's *INCubatoredu* curricular program. Pitch night was an event during which 15 student teams presented their final business concept to a panel of industry experts in a competition for funding. The winners of pitch night were awarded

startup funding for their project and also a chance to compete for additional funding dollars at the National *INCubatoredu* Student Pitch competition in the summer. Start-up funding, ranging from \$2,000 - \$8,000, were awarded to six teams. The funded teams then had an opportunity to launch their business.

Competitions: The EBA student teams also participated in several state, regional, and national competitions. At the annual DECA competition, a national association of high school and college marketing students, EBA teams were awarded 108 medals, and 18 teams were overall winners. At a similar regional competition, the Virtual Business Accounting Finals, 18 EBA students were called to the stage, 27 medals were awarded, and 15 students were national qualifiers. In addition, 57 EBA students participated in the Future Business Leaders of America (FBLA) national competition; 29 students earned trophies and the EBA won second place in the largest chapter category and third place in the most outstanding chapter category. Further, at the national World Series of Entrepreneurship competition, the Supply Hut team won \$10,000 as the 1st place winner in the live pitch competition, and the Cupplapsible and Klean Kicks teams won excellence awards for their table displays, with each team earning \$250. Appendix F contains a list of these honors, awards, and prizes.

Guest Speakers: As was the case during the academy's first year, at least one guest spoke at the EBA each week during its second year of operation. Sometimes, there were two or even three guest speakers during the same week. Many of these guest speakers taught a Master Class during which they made a presentation about their work and met with students to answer questions about their work and their experiences during their career.

The 44 guest speakers and Master Class instructors were not only numerous but also varied in style, with the more popular ones tending to be those whose presentations were practical, inspiring, and interactive. They also were varied in their focus and content. Some guest speakers were academic, in nature – for example, an intellectual property attorney who spoke on the topic of who owns an idea. Similarly, a small business owner explained how to devise a successful sales pitch, a banker spoke about financial management, and a business consultant addressed the issue of cyber security. Several sessions were scheduled during the year for various entrepreneurs to share their own start-ups and experiences, some from a practical perspective and others for inspirational purposes. Nearly all of the sessions were attended by 60 or more EBA students.

Such guest speakers provided not only useful information but also opportunities for EBA students to make useful connections that could lead to mentoring, interning, obtaining financing for entrepreneurial projects, or securing future employment. Appendix H includes a complete list of the speakers, the date of their session, their topics, and the number of students that attended.

Field Trips: Another type of enrichment activity that the EBA provided during both the 2016-2017 and 2017-2018 school years involved field trips. During the EBA's first year, one of the most notable was a trip to the Norfolk Forum to attend a Barbara Corcoran (Shark Tank) lecture and meet-n-greet. During the academy's second year, 21 field trips were taken, with one of the most notable field trips involving travel to Washington, DC, to attend the World Series of Entrepreneurship, where eight teams had table displays of their projects and three competed in the live pitch competition. Other long-distance trips involved travel to Reston, Virginia, and Atlanta, Georgia, to participate in similar conferences and competitions. Most of the field trips, though, remained local within the Hampton Roads area. In June 2018, for example, 11 EBA students competed in the STEM Trifecta Challenge – involving Maker Expo, Robotics, and Cyber Security – which was held at the Virginia Beach Convention Center. In February, 22 Corporate Finance students taking Business Law heard criminal court cases at the Virginia Beach City Courthouse and toured the city jail. In October 2017, 24 Business Information Technology students visited the Advanced Technology Center to observe the various programs to which they can apply for admission.

Community Service: Another EBA enrichment activity involves community service in acknowledgment of the EBA leadership's recognition that being socially responsible, civic minded, and service-oriented is important. Thus, to graduate from the academy, EBA students are required to accrue at least 100 hours of community service during the course of their enrollment. Depending on individual circumstances, a student might accomplish this, for instance, in just one summer, in increments of 25 hours per year for four years or in any other acceptable way that met their individual circumstances and needs. At the end of the 2017-2018 school year, all EBA students were on track to satisfying the community service requirement.

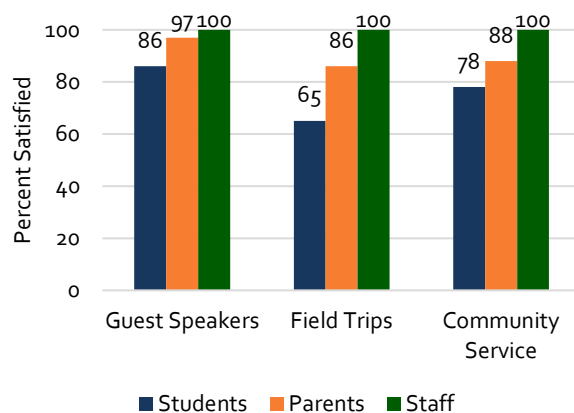
The community service can be and has been accomplished in many different ways. For example, students have engaged in peer tutoring or in tutoring younger students in elementary or middle school. Other

students have served on the mayor's Youth Task Force. Still others have volunteered with a nonprofit organization, provided free babysitting for nonrelatives, or volunteered at the Virginia Aquarium.

Ultimately, fulfilling the community service requirement is intended to encourage students to be civic-minded and service-oriented while acquiring valuable experiences, accomplishments, and connections.

Perceptions: Figure 3 displays the percent of each stakeholder group that was satisfied with three of the more prominent enrichment activities that the EBA provided. As can be seen, the percentages of stakeholders who were satisfied were high, with the exception of students' perceptions of field trips which were somewhat lower. All the EBA staff who responded to the survey items indicated that they were either satisfied or very satisfied with the guest speakers, field trips, and community service. At least 86 percent of the EBA parents who responded to the survey also indicated that they were satisfied with the three types of enrichment activities. In 2017-2018, the student satisfaction levels were lower than they were in year one, especially with respect to field trips, which decreased by 24 percentage points from 89 percent in year one to 65 percent in year two. Analysis of the field trip satisfaction rate by grade revealed a statistically significant difference of 19 percentage points between the freshman rate of 56 percent and the sophomore rate of 75 percent.

Figure 3: Percent of Stakeholders Satisfied With EBA Enrichment Activities



Comments mentioned in the open-ended survey questions provided some insight into the decrease in student satisfaction with the field trips. When asked in an open-ended item how the academy might be improved, 14 of the 218 responses (6%) mentioned field trips. Half suggested in a general sense that additional field trips or more “exciting” field trips be added. Six of these comments were made by ninth graders. The other

half of the comments noted a disparity in field trips among the strands. Six of these came from sophomores who commented that the students in their strand had fewer opportunities to go on field trips than did the students in the other strands.

A discussion with the academy coordinator helped to identify several reasons for the decline in student satisfaction with the year-two field trips. For example, there were fewer field trips for ninth grade students in the EBA's second year than in its first year. In part, this was due to academy leadership being more judicious in scheduling freshmen field trips. It was also partly explained by having to schedule field trips for more than twice as many students in year two than in year one. In addition, field trips for the sophomores became more strand-specific. A strand such as Business Information Technology, whose students focus more on preparing to earn professional certifications, would by design go on fewer field trips than would students in the Entrepreneurship and Innovation strand.

Participant Selection

An important component of implementing the EBA involved selecting students and staff.

Academy Marketing: In collaboration with the Department of Media and Communications and the Department of Teaching and Learning, the Kempsville High School and EBA leadership developed the marketing plan described in the academy proposal. The procedures were similar in both the first and second years of the academy's operation. More specifically, in accordance with the approved plan, various methods were used to market the academy to prospective EBA students who were in grade 8 at the time. A brochure that highlighted the academy's purpose, program of study, and the mission statement was designed and printed. This brochure was used as a marketing tool to disseminate information about the EBA at middle schools and information nights. Additionally, multiple articles were published throughout the year in *The Virginian Pilot*. The EBA website contains documents such as frequently asked questions, enrollment forms, contact information, and press releases. Academy leadership also promoted the EBA on Twitter, Facebook, and other social media. Also, the EBA participated in the Academy Information Night at the Virginia Beach Convention Center on October 18, 2017, and it hosted its own information night on December 6, 2017 at Kempsville High School.

Student Application and Selection: While still in eighth grade, students applied for admission to the EBA using the standard VBCPS academy program application process and timeline. Specific essay questions were formulated around the academy's theme of entrepreneurship, business information technology, and corporate finance. The essay responses helped to identify candidates with a passion for and interest in the fields of study. Additional evaluative criteria included the following:

- Academic achievement, including grades and SOL test scores
- Positive teacher recommendations
- Parent recommendations
- Good attendance and school record

A selection committee of school administrators, teachers, and other professionals independently reviewed each of the 265 applications received, rating each one on a 1-5 numerical scale used by other VBCPS academies. The accuracy and inter-rater concurrence were monitored carefully. If a discrepancy among reviewers was noted, the application was held for additional review and discussion.

Table 5 summarizes the numbers of applications received from students and acceptances extended by the EBA, as well as the number of students who actually were enrolled on September 30, 2017.

Table 5: EBA Year-Two Student Recruitment

	Class of 2021 Grade 9	Class of 2020 Grade 10 Replacements	Total
Number of Applications	265	27	292
Number of Acceptances	231	24	255
Number of Enrollees on 9/30/17	118	16	134

The bottom row of Table 5 shows that a second cohort of 118 grade 9 students entered the academy as the Class of 2021. Another 16 students joined the Class of 2020 as grade 10 students. This brought the sophomore enrollment total to 112.

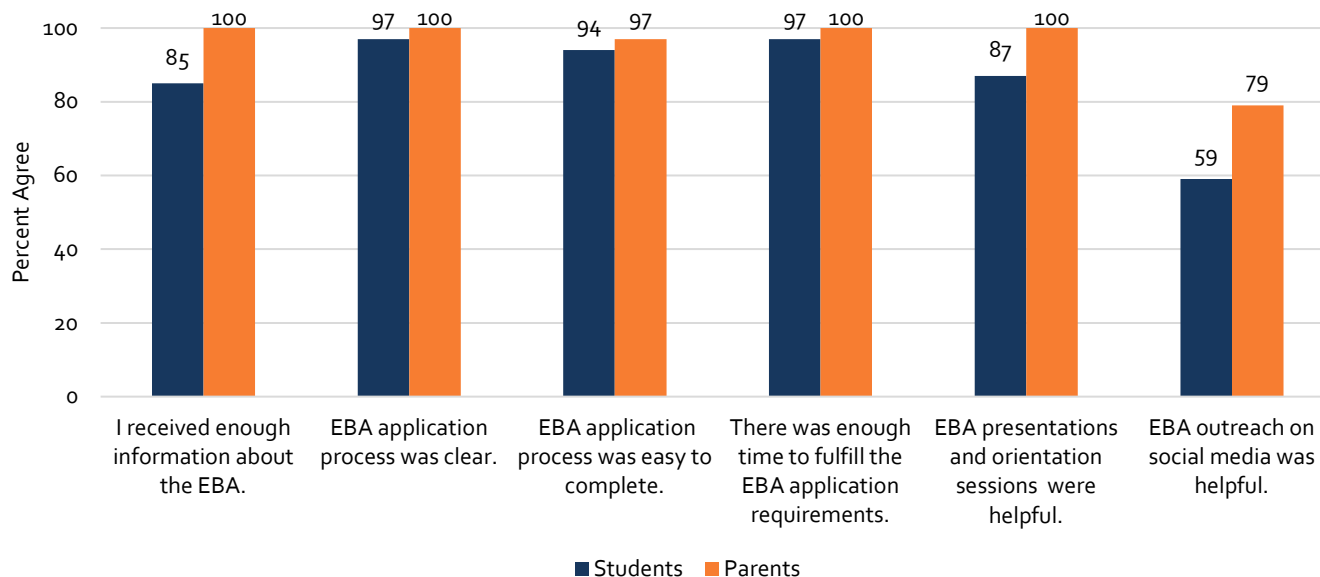
Ultimately, 231 grade 9 students (87%) received letters offering admission. Of the students offered admission, 118 students had enrolled as freshmen on September 30, 2017, which was 94 percent of the 125-student grade 9 capacity in the EBA proposal. Of the 118 September grade 9 enrollees, 115 students (97%) remained in the academy at the end of the 2017-2018 school year.

Similarly, to bring the Class of 2020 closer to its capacity of 125 students, the EBA also brought 16 grade 10 students into the Class of 2020, raising the sophomore enrollment on September 30, 2017 to 112 students. A total of 108 of those students remained enrolled in the EBA at the end of the 2017-2018 school year on June 15, 2018.

New students and parents from both of the EBA's cohorts were asked about their perceptions of the

application and selection process on the end-of-year surveys. Figure 4 displays the agreement percentages of students and parents with several statements regarding the enrollment process. Comparing the year-two results on these items with the year-one results revealed that the changes in the agreement rates were negligible.

Figure 4: Parent and Student Perceptions of the EBA Application Process



High percentages of both parents and students agreed that they had received enough information about the academy to make a fully informed decision about enrolling in the EBA, as well as that the application process was clear and also easy to complete. Similarly, high percentages of parents and students agreed that they had been given enough time to fulfill the application requirements. Though virtually unchanged from the first to the second year, the student and parent agreement rate regarding the outreach on social media remained markedly lower than the agreement rates on the other survey items.

As was the case during year one, additional data showed that 100 percent of the EBA staff members agreed that the admissions process succeeded in enrolling promising EBA students and that the EBA students and parents demonstrated an awareness of the program's expectations. In addition, 93 percent of the student respondents, as well as 98 percent of the parent respondents, agreed that their responsibilities of being a part of the EBA were clear.

Reasons for Enrolling: An open-ended survey item asked students and parents to provide their reasons for enrolling in the EBA. Among the 153 students who responded to the item, the most common reason for enrolling in the academy involved a professional aspiration – mainly, to improve career options, to be one's own boss, or to become wealthy. More than three of every four students (78%) cited such a reason. The second most common reason involved an academic aspiration – mainly, to improve college opportunities or to earn an associate degree before leaving high school. This was cited by 13 percent of the student respondents.

Of the 24 parent responses to a similarly worded open-ended survey item, 12 parents (50%) explained that they had enrolled their children in the EBA because of their child's interest in business. Another 8 parents (33%) cited academic reasons, such as the academy's challenging curriculum, the academy's ability to prepare the student for college and possibly for business school, and the opportunity for their child to earn an associate of science degree while still in high school. The remaining 4 parents (17%) cited a variety of other

reasons: the staff had done an excellent job of presenting the academy during the divisionwide Information Night at the Convention Center; the EBA was the academy that most interested their child; and the child had been the one who decided to attend.

Staff Recruitment and Selection: The academy coordinator's position was a 12-month position. Hired in August 2015, the coordinator, who most recently had served as an assistant principal at a VBCPS middle school, was responsible for writing grants, visiting Virginia colleges and universities to plan seminars, securing guaranteed admissions to undergraduate and graduate programs, and meeting with parents and students at all Virginia Beach middle schools to publicize the program. The coordinator's work during the academy's second of year of operation was similar in scope and function with that of the planning year and the academy's first year of operation. The coordinator oversaw the implementation of the EBA's curricula and instruction and continued planning for the academy's third and fourth years of operation. In addition, the coordinator continued soliciting academic and business leaders, as well as community organizations for support and participation in the academy. As mentioned previously, the Academy Advisory Committee was realized; the Friends of the EBA was continued; academic and business partnerships were maintained and expanded; and guest speakers, field trips, and master classes were arranged. The coordinator also helped to resolve day to day issues, as well as to ensure the successful conduct of classes and other instructional activities. During the second half of the 2017-2018 school year, the coordinator oversaw the selection of students for the third cohort of EBA students who entered the academy as freshmen in the fall of 2018.

Based on the academy proposal, starting in 2016-2017, staffing for the EBA involved the addition of one full-time equivalent (FTE) teacher position per year for the academy to offer specialized academy courses. That continued during the 2017-2018. By 2019-2020, a total of four academy teacher FTEs will have been added to the academy faculty.

Teacher candidates applied for an academy position using the division's standard application process, followed by a full interview process with the coordinator, school principal, and two staff members in the Office of Technical and Career Education (TCE). The staff selection for the EBA was based on the following qualifications:

- Candidates with a Master's Degree preferred.

- Excellence in teaching and the delivery of instruction.
- Endorsements in the fields of study.
- Interest in professional learning for the integration of business, entrepreneurship, information technology, and core subjects.
- Varied professional work experiences in the field.
- Strong technology skills.
- The ability to work flexibly with institutions of higher learning and community business leaders.

The staff members were selected by the Kempsville High School principal, the academy coordinator, and the two TCE staff members based on the criteria and qualifications set forth above, as well as their enthusiasm. Subsequent evaluation of the hired EBA faculty was conducted collaboratively by the Kempsville High School principal and the academy coordinator.

As they did on the year-one staff survey, all EBA staff (100%) agreed with a statement on the survey that the responsibilities of being an EBA teacher were clear.

Professional Learning: According to the approved proposal, professional learning would be based on the needs of the selected staff. Teachers who teach the business, entrepreneurship, and information technology courses would attend professional learning opportunities either on-site or at arranged sites for their particular course area. Teachers would also have an opportunity to gain professional learning by attending national conferences and training with national consultants. Professional learning would include a special emphasis on AVID strategies and globally competitive skills, such as critical thinking. Additionally, after appropriate professional learning, all academy teachers would be expected to integrate technology throughout the curriculum. The principal, the coordinator, the Department of Teaching and Learning, and the EBA staff collaborated to construct each year's professional learning calendar, and the professional learning classes were designed to meet the specific needs of the academy.

As an integral part of planning professional learning for the staff, during the first year of the program, the coordinator and academy teachers established desired outcomes for all professional learning activities. Implementation of the professional learning was evaluated through follow-up surveys and observations by the EBA coordinator and the Kempsville High School principal.

During 2017-2018, professional learning activities for EBA staff included a book study and monthly Professional Learning Community (PLC) meetings. In addition, eight teachers attended the Virginia Association of Supervision and Curriculum Development (VASCD) conference; two EBA staff members attended the INCubatoredu Summit; two teachers attended the National Business Education Association annual convention and trade show; and one teacher attended the Amtek conference.

At the end of each of these professional learning activities, attendees were asked to complete a course evaluation form, as well as to share their experiences with the rest of the EBA faculty. In general, the feedback from these forms indicated that the staff appreciated the opportunities. They felt that the professional learning would help them improve student achievement and that they would be able to use what they had learned in their instructional practice.

On their end-of-year survey, staff were asked to rate their perceptions on several questions pertaining to their professional learning. As can be seen in Table 6, every respondent indicated that they had received sufficient professional learning. All eight respondents (100%) also indicated that the professional learning enhanced their ability to integrate academy content into the curriculum and helped them to meet their students' needs. Further, all eight respondents indicated that the professional learning they received helped prepare them to teach academy courses.

Table 6: EBA Staff Perceptions of Professional Learning

Survey Statement	Percent Agreement (N=8)
Professional learning helped prepare me to teach academy courses.	100%
Professional learning enhanced my ability to integrate EBA-related units/ideas in the curriculum.	100%
Professional learning enabled me to better meet the academy students' needs.	100%
I received sufficient academy-related professional learning.	100%
The academy-related professional learning was sufficient in breadth.	100%
The academy-related professional learning was sufficient in depth.	100%
I received academy-related professional learning in a timely manner.	88%

When asked if they had received academy-related professional learning in a timely manner, seven of the eight respondents answered affirmatively.

Characteristics of Participants

The second evaluation question asked, "What were the characteristics of the EBA participants?" This section of the evaluation report answers that question by providing information regarding the characteristics of EBA students and staff.

Student Characteristics

On September 30, 2017, a total of 898 students were enrolled in the ninth and tenth grades at Kempsville High School – 484 students in grade 9 and 414 in grade 10. Of these students, 118 students (24%) were EBA freshmen and 112 (27%) were EBA sophomores, which brought the total EBA enrollment to 230 students.

Student Demographics: Table 7 shows the demographic characteristics of both the 230 EBA students and the 668 other Kempsville High School students in the ninth and tenth grades. The table also provides the demographics of the entire ninth and tenth grades in VBCPS, including Kempsville High School. The data indicate somewhat dissimilar percentages with respect to gender. The academy had a larger percentage of female students than did the rest of the Kempsville High School ninth and tenth grades (57% compared with 48%). The racial/ethnic composition of the academy approximates that of the non-EBA freshmen and sophomores, as well as the division percentages overall.

Table 7: Demographic Characteristics of Grade 9 and Grade 10 EBA and Non-EBA Students Enrolled at Kempsville High School on September 30, 2017

Characteristic	EBA (N=230)		Non-EBA (N=668)		Division* (N=10,623)	
	N	%	N	%	N	%
Gender						
Female	132	57%	319	48%	5,166	49%
Male	98	43%	349	52%	5,457	51%
Ethnicity						
African American	66	29%	167	25%	2,629	25%
American Indian	0	0%	1	<1%	28	<1%
Asian/Native Hawaiian/Pacific Islander	12	5%	20	3%	757	7%
Caucasian	111	48%	331	50%	5,263	50%
Hispanic	22	10%	99	15%	1,057	10%
Multiracial	19	8%	50	7%	889	8%
Economically Disadvantaged						
Yes (Free/Reduced Lunch)	69	30%	304	46%	3,846	36%
Identified Special Education						
Yes	1	<1%	79	12%	1,081	10%
Identified Limited English Proficiency						
Yes	0	0%	13	2%	177	2%
Identified Gifted**						
Yes	60	26%	55	8%	1,702	16%
Military Connected						
Yes	17	8%	61	9%	1,719	16%

Note. Percentages may not add up to 100 percent due to rounding.

* Combines division data for grades 9 and 10 only.

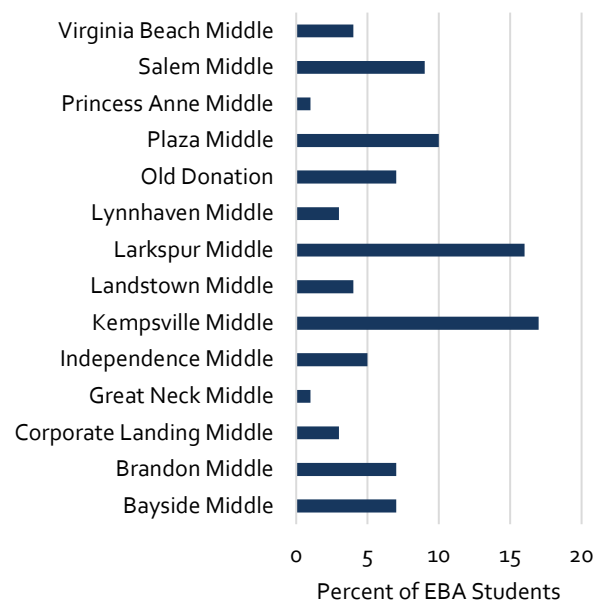
**Includes artistically and intellectually gifted students.

With respect to the other demographic characteristics provided in Table 7, the academy had markedly smaller percentages of economically disadvantaged students (-16%) and special education students (-11%) than did the rest of the Kempsville High School ninth and tenth grades. In contrast, the EBA also had a significantly greater percentage of gifted students (+18%). It may be of interest to note that the percentages changed only negligibly from year one to year two.

Student Geographics: Similar to findings from previous VBCPS academy evaluations, the greatest number of grade 9 students at the academy during 2017-2018 came from the high school's middle school attendance zones. Figure 5 shows that a total of 39 EBA students (33%) had been grade 8 students at either Kempsville or Larkspur middle schools, which are the two middle schools in the Kempsville High School attendance zone. Kempsville Middle School had 20 of the students (17%) and Larkspur had 19 students (16%).

The figure also shows that 12 students had attended Plaza Middle School (10%) while another 11 students had attended Salem Middle School (9%). The remaining 56 students had attended another VBCPS middle school or came from outside the division. In total, the EBA enrollment process drew from every middle school in VBCPS.

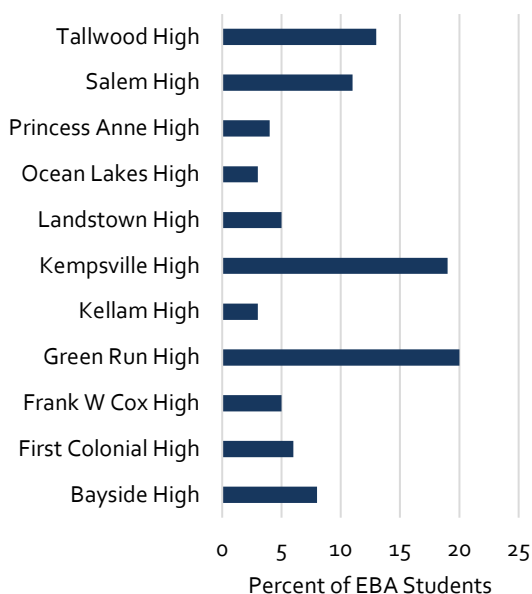
Figure 5: Home Middle Schools for EBA Ninth-Grade Students



In turn, Figure 6 displays the 2017-2018 high school attendance zones from which the EBA freshmen were drawn. Almost one-fifth of the EBA students (19%) resided within the Kempsville High School attendance zone, a 6 percent decrease from the academy's first year of operation. Just three other high school attendance zones accounted for another 44 percent of the EBA enrollees - Green Run (20%), Tallwood (13%), and Salem (11%). Ultimately, the EBA drew students from every VBCPS high school attendance zone.

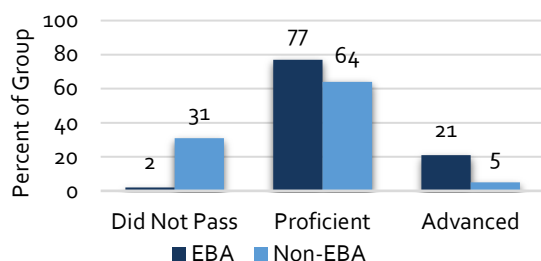
Among all 230 EBA freshmen and sophomores, the largest percentage came from the Kempsville High School attendance zone (25%), followed by Green Run (14%), Salem (12%), and Tallwood (10%).

Figure 6: Zoned High Schools for EBA Ninth-Grade Students



Student Prior Academic Achievement: A comparison of 2016-2017 reading SOL performance levels in reading when the EBA and non-EBA students were in eighth grade revealed that the greatest portions of each group were in the Proficient category, as shown in Figure 7. The two groups differed, however, at all three levels. A larger proportion of the EBA group scored at the Proficient and Advanced levels while, conversely, a smaller percentage of the EBA group did not pass the assessment. In other words, the academy selection process led to the enrollment of higher scoring students into the EBA.

Figure 7: SOL Reading Performance Levels for EBA and Non-EBA Students in Grade 8 in 2016-2017



Similar results were found for the grade 8 writing, math, science, and social studies SOL tests.

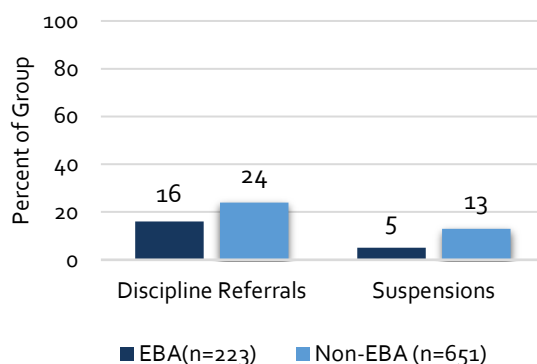
Student Attendance and Discipline During Current Year: The attendance rate for the grade 9 and grade 10 EBA students in 2017-2018 was 97.2 percent compared

to 94.3 percent for their non-EBA counterparts at Kempsville High School. Although a 2.9 percent difference may appear small, it was found to be statistically and practically significant, yielding an effect size of .44. In terms of days present and absent, the EBA students attended school an average of 7 more days than the non-EBA students – more than 171 days compared with fewer than 164 days. Conversely, the EBA students were absent an average of 4.7 days fewer than the non-EBA students – about 5 days compared with about 10 days.

A similar pattern emerged with respect to unexcused absences only. The unexcused absence rate for the EBA students was 1.1 percent compared with 3.1 percent for the non-EBA students. The 2 percent difference was statistically significant. This translates to the EBA students having an average of about 3.3 fewer unexcused absences than the non-EBA students – 5.2 days compared with 1.9 days, on average.

A similar pattern of results was found with respect to discipline referrals and suspensions. Among the 223 EBA students, 36 students (16%) were referred for discipline at least once during 2017-2018. By comparison, 153 of the 651 non-EBA students (24%) received at least one referral. In turn, the percentage of EBA students who were suspended (5%) was lower than the percentage of non-EBA students who were suspended (13%) during 2017-2018. These percentage differences are depicted in Figure 8.

Figure 8: Comparison of EBA and Non-EBA Discipline Referrals and Suspensions



Staff Characteristics

In addition to the academy coordinator, during 2017-2018, the EBA operated with seven teachers who taught EBA courses full-time and four teachers who taught EBA and non-EBA courses. The staff consisted

of three business education teachers, four English teachers, two social studies teachers, one marketing teacher, and one technology teacher. In addition, one school counselor served the students in the EBA.

Table 8 indicates that the average amount of experience among EBA staff (i.e., teachers and school counselor) was eight years, which was lower than Kempsville High School and the division. All 12 EBA staff had at least three years of experience. Six of the 12 EBA staff had between 6 and 10 years of experience. Two staff members had 17 years and 19 years of experience, respectively. Seven of the 12 EBA staff (58%) held advanced degrees which was higher than Kempsville High School and the division.

As noted in Table 8, the gender breakdown indicates that ten of the twelve EBA staff (83%) were female. This was higher than the Kempsville High School and divisionwide percentages of females. The percentage of Caucasian EBA staff was higher than the percentage at both Kempsville High School and the division. Conversely, the percentage of all other ethnicities among the EBA staff was lower than those among Kempsville High School and VBCPS high school faculty.

It is important to note that the relatively small number of staff in the EBA makes it difficult to draw meaningful comparisons. For example, the 17 percent of male teachers in the academy represents only two teachers.

Table 8: Staff Characteristics and Qualifications

Staff Characteristics and Qualifications	EBA* (N=12)	Kempsville (N=104)	Division** (N=1,328)
Male	17%	33%	33%
Female	83%	67%	67%
Caucasian	100%	88%	80%
African American	0%	6%	11%
Asian	0%	5%	4%
Other Ethnicity	0%	2%	5%
Percentage With Advanced Degrees	58%	50%	54%
Percentage New to the Division	0%	14%	9%
Average Years Experience	8 yrs.	14 yrs.	15 yrs.

*Of the 116 Kempsville High School instructional staff, 12 were included as EBA staff while 104 counted as non-EBA staff.

**High school level data for instructional staff only, including Kempsville High School.

Progress Toward Meeting Goals and Objectives

The third evaluation question asked, “What progress was made toward meeting the academy’s goals and objectives?”

Goal #1: Academic Preparation

The EBA proposal, approved by the School Board, included one overall goal, referred to as “Academic Preparation:”

Goal #1: “To provide students the business skill and knowledge necessary to succeed in any career-related fields of study in postsecondary education and in the workforce.”

The proposal then listed five objectives for students and a sixth objective for the academy to achieve. This section of the report will examine progress that has been made to meet these six objectives.

Objective #1: Academy Coursework

Objective #1: Students will successfully complete a sequential program of study that focuses on critical skills, knowledge, and technology in the fields of entrepreneurship, business information technology, and corporate finance.

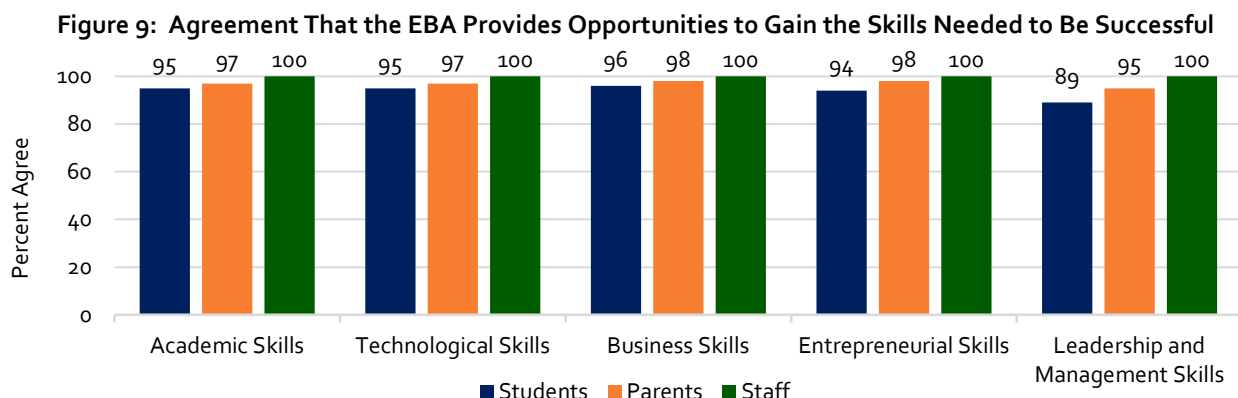
As 2017-2018 was just the second year of academy operation, it was not yet possible to determine how many students will successfully complete the EBA program of study from grades 9 through 12. That determination will be made when the academy is evaluated after full implementation in 2019-2020.

It is possible, however, to assess how well the program focuses on critical skills, knowledge and technology in the fields of entrepreneurship, business information technology, and corporate finance. It also is possible to determine if students are progressing toward meeting this objective based on data from several measures such as course enrollments and grades.

Perceptions: As noted previously in the report, several survey items on the student, parent, and staff end-of-year surveys asked about skills and technology. As Figure 9 shows, all three respondent groups – students, parents, and staff – either unanimously or almost unanimously agreed with each statement that the EBA had provided opportunities to gain the skills

needed to be successful. Only the student agreement rate regarding leadership and management skills dipped below the 90 percent mark. When analyzed by grade,

the freshmen level was 88 percent and the sophomore level was 90 percent.



Course Enrollment and Grades: All 115 EBA freshmen (100%) passed all of their freshmen courses. Table 9 shows the percentages of students who passed their courses with a grade of C or better. Of those students who took EBA Honors English, 113 (97%) earned at least a C. All academy students also took math, and nearly all (at least 94%) earned a grade of “C” or better in their respective math class. The two most commonly taken math classes were Algebra II/Trigonometry (31 students) and Honors Geometry (50 students), with 100 percent of the EBA freshmen earning a C or better. For science, at least 94 percent of EBA students earned a C or better in their course, and for social studies, at least 90 percent of the EBA freshmen earned a C or better.

Table 9: EBA Courses, Enrollment, and Pass Rates for Grade 9

Courses	Overall N	Percent Earning C or Better
Core Courses		
EBA Honors English 9	115	97%
Algebra 1 Honors	18	94%
Algebra 2	3	100%
Algebra 2/Trigonometry	31	100%
Geometry Honors	50	100%
Geometry Series – Parts 1 and 2	13	100%
Biology	83	100%
Chemistry	1	100%
Earth Science	33	94%
AP Human Geography	58	90%
EBA World Studies for Business	57	91%
Academy Courses		
EBA Critical Issues in Business Seminar	56	98%

Courses	Overall N	Percent Earning C or Better
EBA Idea Generation and Creative Problem Solving	57	100%
EBA Introduction to Entrepreneurship, Business, and Information Technology	115	100%
Elective Courses		
French	22	95%
German	6	100%
Japanese	7	100%
Latin	6	100%
Russian	1	100%
Spanish	71	97%
AVID	15	100%
Music (Band, Orchestra, Guitar, or Piano)	13	100%
Other (Art, Theater, Technology, Photography and Printing)	13	100%
Health and Physical Education 1	75	100%

Further, the EBA course load for ninth-grade students during the 2017-2018 school year also included three classes designed especially for the academy. As mentioned previously, EBA Introduction to Entrepreneurship, Business, and Information Technology was a year-long course. The other two academy courses for the ninth-grade students were each one semester in duration: EBA Critical Issues in Business Seminar and EBA Idea Generation and Creative Problem Solving Seminar. All EBA students took these academy-specific courses and all but one EBA freshmen (98%) earned a grade of C or higher.

In addition to the core and academy courses, EBA students chose their remaining classes from a large and

varied menu of courses. In response to academy encouragement, almost all EBA students took a foreign language. The two most common languages studied were Spanish and French. Seventy-one of the 115 students (62%) took Spanish 1, Spanish 2, or Spanish 3. An additional 22 students (19%) took French 1, French 2, French 3, or French 4. The remaining EBA students studied German, Japanese, Latin, or Russian. The percentages of EBA freshmen earning at least a C in their foreign language class ranged from 95 to 100 percent. Students also enrolled in other electives such as an AVID study skills elective based on best practices in writing, inquiry, collaboration, organization, and reading (WICOR), music, or art. Further, 75 students took Health and Physical Education 1.⁶

The menu of EBA courses for tenth-grade students during the 2017-2018 school year was even more varied than the ninth grade course load, as is shown in Table 10. This was due mainly to the grade 10 curriculum being differentiated by strand. All EBA students took their respective strand-specific courses and all but one earned grades of C or higher.

With respect to their core academic courses, all EBA sophomores (100%) passed all their core courses. Table 10 indicates that 95 percent of the EBA sophomores earned a grade of C or better in their EBA Honors English 10 class. In their math classes, the percentage of students earning a C or better ranged from 80 to 100 percent. In their science and social studies classes, the percentages of EBA sophomores who earned a C or better ranged from 88 to 100 percent.

Table 10: EBA Courses, Enrollment, and Pass Rates for Grade 10

Courses	N	Percent Earning C- or Better
Core Courses		
EBA Honors English 10	108	95%
Algebra 2	5	80%
Algebra 2/Trigonometry	55	100%
Geometry Honors	10	100%
Geometry Series – Parts 1 and 2	18	100%
Mathematical Analysis	34	94%
Probability and Statistics	5	100%
Trigonometry	5	100%
Biology	24	100%
Chemistry	80	96%
Oceanography	3	100%
AP Physics	1	100%
Physics	1	100%
AP European History	29	97%
AP Human Geography	32	88%
EBA World Studies for Business	2	100%

Courses	N	Percent Earning C- or Better
EBA World Studies for Business 2	47	100%
Economics	2	100%
World History and Geography, Part 2	1	100%
Academy Courses		
EBA Accounting	23	100%
EBA Advanced Computer Systems	22	100%
EBA Business Law	21	100%
EBA Corporate Finance	21	100%
EBA Design for Entrepreneurs	60	100%
EBA INCubator edu	61	98%
Elective Courses		
AP Computer Science Principles	13	85%
AP Psychology	12	100%
AP Spanish	2	100%
French	10	100%
German	2	100%
Japanese	4	100%
Latin	4	100%
Spanish	63	98%
AVID	7	100%
Music (Band, Orchestra, Guitar, or Piano)	2	100%
Other (Art, Theater, Technology, Photography and Printing)	28	100%
Driver Education Classroom	90	100%
Health and Physical Education 2	89	100%

In addition to the core and academy courses, the EBA sophomores chose their remaining classes from a large and varied menu of additional courses. In response to academy encouragement, 85 EBA students continued to take a foreign language. The two most common languages studied were Spanish and French. More than 74 percent of the foreign language students studied Spanish. An additional 10 students (12%) took French. The remaining EBA students studied German, Japanese, or Latin. Enrollment and performance in other electives is shown in the table, including 90 EBA sophomores who took driver education and 89 of the grade 10 students who took Health and Physical Education 2.⁷

Objective #2: Associate Degree/Postsecondary Credit

Objective #2: Students will have opportunities to earn an associate degree/postsecondary credit.

According to the academy proposal, opportunities to earn postsecondary credit would take two forms. The first mechanism is through Advanced Placement (AP) courses. The only AP course available to the ninth-grade EBA students was AP Human Geography. Of the 115 EBA freshmen who remained in the academy for the entire school year, 58 students (50%) enrolled in AP

Human Geography. By comparison, only 30 of the 359 non-EBA freshmen (8%) took AP Human Geography.

Of the 58 EBA freshmen who took AP Human Geography, all 58 students (100%) passed the course with 52 students (90%) earning a grade of C- or better, 35 students (60%) earning a B- or better, and 13 students (22%) earning a grade of A- or better. By comparison, 28 of the 30 non-EBA freshmen (93%) passed the class. Twenty-seven of the non-EBA students (90%) passed with a C- or better, 15 students (50%) passed with a B or better, and 6 students (20%) passed with an A- or A.

In addition, 32 EBA sophomores took AP Human Geography, and all of them (100%) passed the course - 28 students (88%) with a grade of C- or better, 18 students (56%) with a B- or better, and 5 students (16%) with a grade of A- or better. By comparison, 33 of the 292 non-EBA sophomores (11%) took the course, and 30 of them (91%) passed. Of them, 27 students (82%) passed with a C- or better, 16 students (48%) passed with a B or better, and 7 students (21%) passed with an A- or an A.

Further, 29 EBA sophomores took AP European history, and all of them (100%) passed the course, with 97 percent earning a C- or better. By comparison, 23 non-EBA sophomores took the course, with all (100%) passing and 83 percent earning a C- or better.

Overall across both ninth and tenth grades, 119 of the 223 students enrolled at the end of the year took an AP core course as part of their academy coursework (53%).

In addition, as electives, the largest numbers of EBA sophomores took and passed AP Computer Science Principles (13 students) and took and passed AP Psychology (12 students). Of the 108 sophomores enrolled at the end of the year, 20 individual students were enrolled in at least one of these AP elective courses (19%).

It is important to note that to earn college credit for an AP course, a student must pass the AP exam that corresponds to the AP course. An AP exam is graded on a 1 to 5 scale. Generally, colleges will grant college credit for AP exam scores of 3 or higher. It also is important to note that not every student who takes an AP course also takes the corresponding AP exam. During 2017-2018, a total of 83 freshmen and sophomores took the AP Human Geography exam with 55 (66%) earning a score of 3 or higher. With respect to European History, 25 EBA sophomores took the AP

exam with 5 (20%) earning a score of 3 or higher. Overall, 56 percent of EBA students who took an AP exam corresponding to the two core courses earned a 3 or higher.

For the AP elective courses with the largest numbers of students, a total of 25 AP exams in AP Computer Science Principles and/or AP Psychology were taken by EBA sophomores. Of those 25 exams, 21 were passed with a score of 3 or higher (84%).

The second mechanism for earning postsecondary credit involved dual enrollment courses. As indicated by the current menu of dual-enrollment courses provided in Appendix C, the academy students who choose to pursue an associate of science degree take most of their course load during their junior and senior years in the EBA.

Because many of the dual-enrollment courses were not available for grade 9 and 10 students, their impact on the academy's outcomes will be considered during the final academy evaluation in 2019-2020 after the program has been fully implemented. However, EBA students are preparing for the dual enrollment offerings beginning in grade 11 by taking the Virginia Placement Test. Eighty (80) EBA students took the VPT in February 2017. Another 96 EBA freshmen and an additional 33 EBA sophomores took the VPT during 2017-2018 (total of 129 students).

Objective #3: Academic Performance

Objective #3: Students will exceed the objectives of VBCPS curricula and Commonwealth of Virginia Standards of Learning tests.

Class grades and passing rates were reported previously in conjunction with the course enrollment discussion associated with the first objective. Progress toward attaining the academy's third objective is based on overall grade averages and test scores, including the results of the Standards of Learning (SOL) tests and the certification tests.

Grade Averages: Two sets of grade averages for academy students and non-academy students at Kempsville High School were reviewed. One grade average involved core classes only. The other grade average involved all classes taken during 2017-2018. For both sets, the grade averages of the academy students in ninth grade were higher than those of the non-EBA ninth-grade students. Similarly, the EBA sophomores outperformed their non-EBA counterparts. The grade averages are displayed in

Table 11. The data indicate that the EBA freshmen and sophomores tended to earn higher grades than did the non-EBA students in grades 9 and 10.

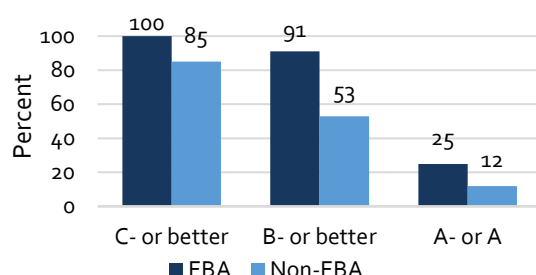
Table 11: Grade Averages

Grade	Average	EBA	Non-EBA	Effect Size
9	Core Classes	3.2	2.3	.82
9	All Classes	3.4	2.6	.87
10	Core Classes	3.0	2.4	.87
10	All Classes	3.3	2.7	.71

Analyses confirmed that the differences between the EBA and non-EBA grade averages in both grade 9 and grade 10 were statistically significant. More importantly, the differences yielded moderate to large effect sizes, which are also displayed in the table.⁸

An alternative way to compare EBA and non-EBA student performance involves examining the percentage of students in each group who earn an overall grade average equivalent to particular letter grades. This is done in Figure 10. For example, 91 percent of the EBA students earned an overall grade average equivalent to a B- or better compared with 53 percent of the non-EBA students.

Figure 10: Percent of EBA and Non-EBA Students Earning Overall Grade Average Equivalents to Letter Grades

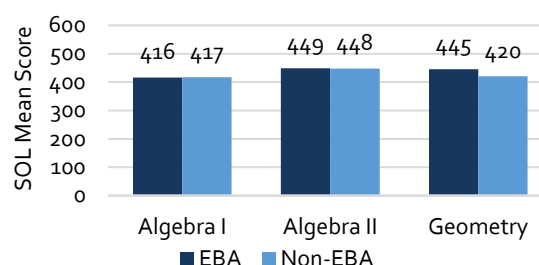


SOL and Other Test Results

As freshmen and sophomores, EBA and non-EBA students participated in a variety of SOL tests. To safeguard both student privacy and the cogency of the results, this report excludes results when either the EBA or the non-EBA group had fewer than 10 students taking a test. In addition, as explained previously, SOL scores from grade 8 are used here as covariates for certain comparative analyses to ensure that the comparison of EBA and non-EBA students is as valid and accurate as possible. When such analyses were conducted, students lacking comparable scores from both years were omitted from the analysis. This ensured that the comparisons were statistically unbiased.

SOL Math Results: Academy students took one of three SOL mathematics tests: Algebra I, Algebra II, or Geometry. The SOL math results of all the EBA students are compared in Figure 11 with the scale scores of non-EBA ninth and tenth grade students at Kempsville High School who took the same test. The results showed that the average EBA scale scores on the Algebra I and Algebra II tests were very similar with those of the non-EBA students. However, on the Geometry tests, the EBA average was significantly higher than that of the non-EBA students. This pattern of results held, regardless of whether or not the results were adjusted by the students' prior scores on their grade 8 math tests.

Figure 11: Comparison of EBA and Non-EBA SOL Math Scale Scores for 2017-2018



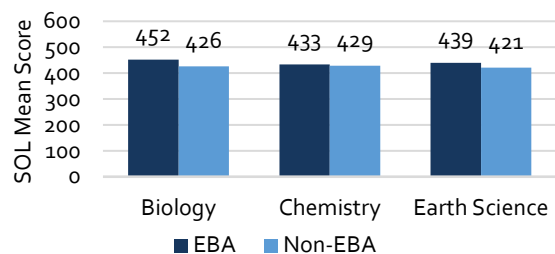
A similar pattern emerged when the scale scores were assigned to performance levels and dichotomized into pass rates. The percentages of EBA and non-EBA students who passed the Algebra I or the Algebra II tests were statistically similar. The Geometry pass rate, though, was significantly higher for the EBA students than for the non-EBA students. These results are displayed in Table 12.

Table 12: Comparison of EBA and Non-EBA SOL Pass Rates for Grade 9 and Grade 10 in Math for 2017-2018

Test	EBA		Non-EBA		Difference
	n	% Pass	N	% Pass	
Algebra I	17	82%	229	79%	3%
Algebra II	92	98%	101	93%	5%
Geometry	70	97%	209	78%	19%

SOL Science Results: Academy students took one of three SOL science tests: Biology, Chemistry, or Earth Science. As depicted in Figure 12, the EBA students outscored the non-EBA students by 26 scale-score points in Biology, by 4 scale-score points on Chemistry, and by 18 scale-score points in Earth Science.

Figure 12: Comparison of EBA and Non-EBA SOL Science Scale Scores for 2017-2018



When their SOL scale scores were collapsed into pass rates, as shown in Table 13, EBA students had higher pass rates on each assessment, including a 17-point difference in pass rates on the Biology test, a 7-point difference in pass rates on the Chemistry test, and a 19-point difference on the Earth Science test.

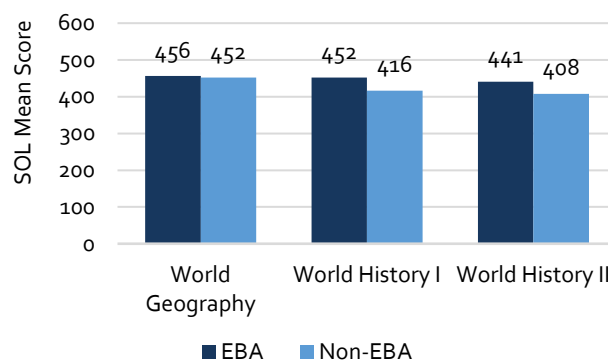
Table 13: Comparison of Unadjusted EBA and Non-EBA Pass Rates for Grade 9 and Grade 10 SOL Pass Rates in Science for 2017-2018

Test	EBA		Non-EBA		Difference
	N	% Pass	N	% Pass	
Biology	105	99%	265	82%	17%
Chemistry	79	91%	67	84%	7%
Earth Science	31	94%	247	75%	19%

For science, conducting analysis of covariance (ANCOVA) on the scores and pass rates of the Biology, Chemistry, and Earth Science tests revealed the following: after adjusting for their grade 8 SOL results in science to enable the EBA and non-EBA students to start from similar points on the score scale, none of the differences in the 2017-2018 SOL science scale scores or pass rates were statistically significant. This finding suggests that the differences already existed in grade 8 and are probably not due to a direct impact of the program.

SOL History Results: The Kempsville High School students in 2017-2018 took one of four SOL social studies tests: Virginia and U.S. History, World Geography, World History I, or World History II. However, only the latter three tests were taken by a sufficient number of EBA and non-EBA students to be reported in this evaluation. As displayed in Figure 13, the average scale scores for the EBA students were higher than the average scores for the non-EBA students on all three tests, especially on the World History I and World History II tests.

Figure 13: Comparison of EBA and Non-EBA SOL Social Studies Scale Scores for 2017-2018



The EBA students outscored the non-EBA students by 36 points on World History I and by 33 points on World History II.

As exhibited in Table 14, the EBA and non-EBA students earned the same 100 pass rate on the World Geography test. In contrast, there was a 28 percentage-point difference in pass rates on the World History I test and a 30 percentage-point difference between the pass rates of the EBA and non-EBA students on the World History II test.

Table 14: Comparison of EBA and Non-EBA SOL Pass Rates in Social Studies for 2017-2018

Test	EBA		Non-EBA		Difference
	n	% Pass	N	% Pass	
World Geography	88	100%	63	100%	0%
World History I	59	97%	270	69%	28%
World History II	76	91%	249	61%	30%

The analyses of covariance conducted on the scores and pass rates yielded different results between the World History I and the World Geography and World History II tests. No statistically significant differences were found between the EBA and non-EBA students on either World Geography or World History II tests after the scores and pass rates for the two groups were adjusted by each student's SOL social studies performance on the eighth-grade tests. However, on the World History I test, a statistically significant difference between the EBA and non-EBA groups remained, even after the current year scale scores were adjusted by the grade 8 scale scores.

Certification Test Results: During 2017-2018, all 223 EBA students (100%) attempted to earn at least one

industry certification. Figure 14 compares the attempts and successes of the EBA and non-EBA students.

Figure 14: Percentages of EBA and non-EBA Students Who Attempted and Successfully Earned At Least One Industry Certification in 2017-2018

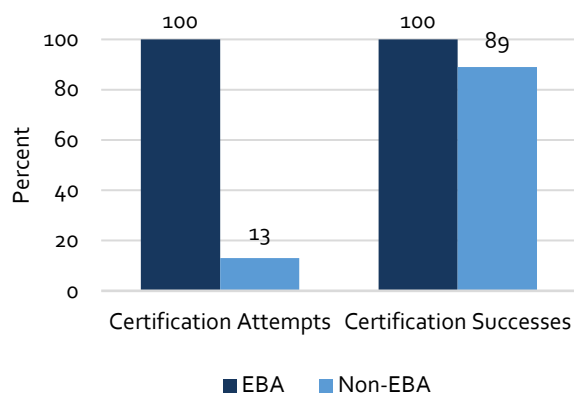
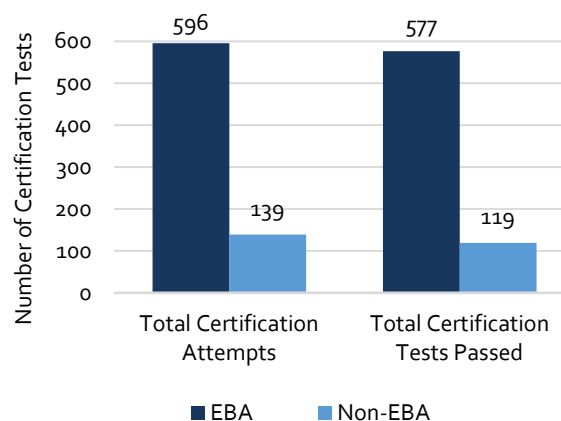


Figure 15 shows that all 223 EBA students (100%) attempted to earn at least one industry certification during 2017-2018. In fact, all EBA students attempted at least two certifications during 2017-2018. Of those EBA students who made an attempt, 100 percent were successful in earning at least one industry certification. By comparison, 82 of the 651 non-EBA freshmen and sophomores (13%) attempted to earn at least one industry certification, and 73 of those 82 non-EBA students (89%) did so successfully.

Most of the EBA and non-EBA students who attempted to earn one certification actually attempted to earn two or more. Thus, it is of interest to compare the total numbers of certifications attempted and successfully earned by the EBA and non-EBA groups. The comparison is displayed in Figure 15.

Figure 15: Total Number of Industry Certifications Attempted and Successfully Earned in 2017-2018 by EBA and Non-EBA Students



In terms of certifications rather than students, the EBA students attempted to earn a total of 596 certifications during the academy's second year of operation. They passed 577 (97%) of them. By comparison, the non-EBA students attempted 139 certifications and passed 119 (86%) of them. Worthy of note is the fact that 27 of the 223 EBA students attempted to earn at least 4 certifications and as many as 11 certifications. Of those students, 19 passed all the certifications tests and the other 8 students passed all but one test.

It also is important to note that these year-two patterns of attempts and successes resembled the patterns noted in the year-one report regarding the 2016-2017 school year. Thus, combining the 221 certifications that the sophomores earned during their first year in the EBA with the 329 certifications earned by the end of their sophomore year in the spring of 2018, the EBA's Class of 2020 had accumulated a total of 550 certifications.

Summary of Academic Performance: Overall, progress continued during the EBA's second year of implementation toward meeting the academy objective that students will meet or exceed the division's academic goals. The EBA students tended on average to outperform the other Kempsville High School freshmen and sophomores on academic measures.

Both the unadjusted and adjusted SOL results showed that academy students performed as well as or better than the non-academy Kempsville High School students on applicable SOL tests. The resulting passing rates on the SOL tests for academy students ranged from 82 to 100 percent, depending on the test, while ranging from 61 to 98 percent for non-EBA students.

Finally, with respect to attempting and earning industry certifications, many more EBA students than non-EBA students took a certification test. All 223 EBA students passed at least one certification test and, overall as a group, the EBA students passed 97% of the 596 certification tests they took.

Objective #4: Job Shadowing, Mentoring, and Internship

Objective #4: Students will participate in job shadowing, mentoring, and/or internship programs that extend, enrich, and refine student learning and that create linkages between the academic and business communities.

As mentioned previously, the first Job Shadow Day occurred on March 22, 2018. Eighty-seven of the EBA's grade 10 students were paired with business and community leaders whom the students "shadowed" for an entire day. Nearly 40 EBA business partners and community leaders participated, introducing students to what their job is really like and giving them a first-hand glimpse into the reality of running a business, agency, or organization. The experience also provided students with opportunities to initiate possible mentoring relationships. Academy leadership considered the event so successful that they scheduled two Job Shadow Days to occur during the academy's third year of operation in 2018-2019. One took place on November 16, 2018 and the second is scheduled for March 22, 2019.

Students have not yet participated in the mentoring or internship processes as they are currently being designed. These areas will be assessed during the full implementation evaluation beginning in the fall of 2019.

Objective #5: Long-Term Project Through Internship/Mentorship

Objective #5: Students will complete a long-term project through an internship/mentorship experience with a culminating presentation in the senior year featuring an in-depth study of an issue of concern to their related industry and present ideas/solutions as viable options to address the issue to a panel of business and community leaders.

All students within the academy will complete a long-term project or internship during their senior year. It is envisioned as an on-the-job training experience that will provide the student an opportunity to identify real-world application of curriculum content and experiences. Throughout the project or internship, students will maintain an online blog about their

experiences, reflections, and connections to related coursework.

The experience will culminate toward the end of the student's senior year in a student presentation regarding an issue or concern addressed within the business they are working and the student's ability to provide solutions or ideas to assist the business in addressing that concern. This presentation will be delivered by the student, and members of the community, business, and school will be present to provide feedback and show support for the student's work through the project. Academy staff will be extensively involved in the required internship program.

Although the long-term project will not formally begin until they are in twelfth grade, students have already begun preparing for their long-term project by participating in the EBA's course of study and enrichment activities during their freshmen and sophomore years.

The EBA's leadership and staff have continued to make progress toward meeting the objective. Perhaps most notably, they formed the EBA Advisory Committee, which has met to work on the design and implementation of the long-term project and senior internship. Because they remain in their formative stages, the long-term project and senior internship will be an important focus of the year-four evaluation in 2019-2020.

Objective #6: Collaborative Agreements With Institutions of Higher Education

Objective 6: The academy will establish collaborative agreements with institutions of higher education that result in ongoing program development and assessment.

Tidewater Community College was the primary college collaborating with the EBA for dual enrollment and associate degree options. Also, during the 2016-2017 school year, all EBA staff members attended a week-long professional learning seminar regarding entrepreneurship and business instruction at Babson College in Wellesley, Massachusetts, which also has been providing the EBA with a variety of curricular and formative assessment resources. In addition, collaboration between the EBA and ODU, especially with the Strome Entrepreneurial Center, has resulted in several opportunities during both the 2016-2017 and 2017-2018 school years for students and staff to attend and participate in lectures, presentations, and other academy-relevant activities. Further, the executive

director of ODU's Strome Center for Entrepreneurship is a member of the EBA Advisory Committee.

Stakeholder Perceptions

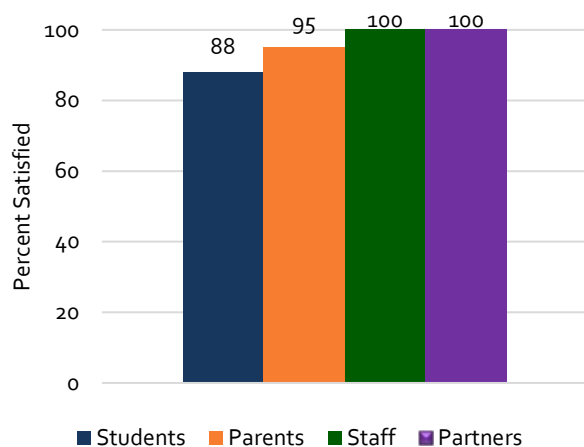
The fourth evaluation question asked, "How was the academy's implementation perceived by students, parents, staff, and community partners?"

This section of the report provides a summary of the general close-ended survey items that were asked of multiple participant groups. The section also summarizes the most common themes from the open-ended survey items. When the year-two survey results differ from the year-one perceptions, the differences are noted. Other survey results regarding the operational components of the EBA were presented previously in the applicable sections of the report.

Overall Perceptions

Figure 16 displays the results for survey items assessing overall satisfaction. Strong positive results were found for all groups of respondents with agreement levels at 88 percent or higher. Only minor variation in satisfaction levels was noted among the respondent groups, and only small differences were found between the year-two and year-one levels.

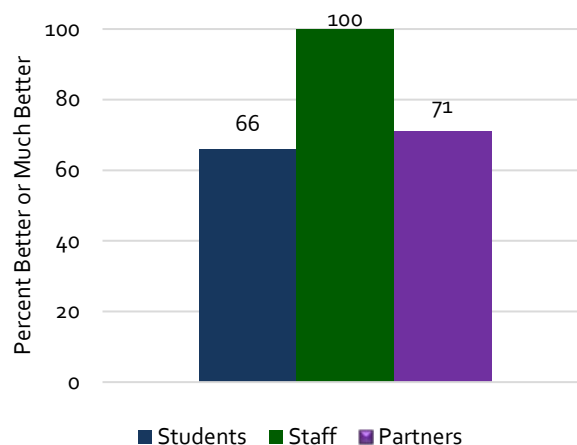
Figure 16: Overall Satisfaction With the EBA



Compared With Year One: Students, staff, and community partners who had been a part of the EBA during both 2016-2017 and 2017-2018 were asked if their second-year experience was much worse, worse, the same, better, or much better than their first-year experience. No respondent chose worse or much worse.

Figure 17 displays the percentages who chose better or much better.

Figure 17: Percent Perceiving Year Two as "Better" or "Much Better" Than Year One

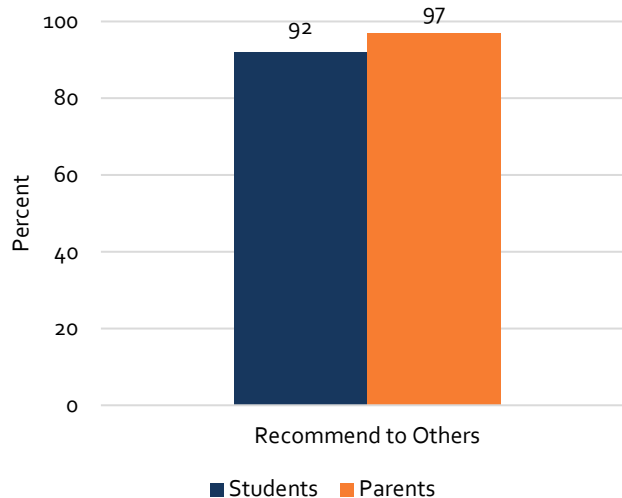


Continued Participation: Students, parents, and staff were asked if they intended to continue their enrollment or employment in the EBA during the 2018-2019 school year. Among the EBA students, 235 of the 256 respondents (92%) indicated "Yes." Of those students who chose to explain why they might leave the academy, only four expressed dissatisfaction with the quality of the program. Most either cited a family relocation or a change in their choice of personal goals away from business, finance, or entrepreneurship.

Of the 59 parents who responded to the survey item, all but one indicated that their child planned to return to the academy, and that parent cited a family relocation out of state. Academy staff were asked on the EBA staff survey whether they would return for the third year of academy operations. Of the eight EBA faculty members who responded to the survey item, seven (88%) indicated their intent to return. The one departing staff members cited a change in profession, not dissatisfaction with the academy.

Affirmation: One of the most compelling indications of satisfaction rests in whether someone would recommend it to others. Accordingly, students were asked if they would recommend the EBA to other students. Similarly, parents were asked if they would recommend the EBA to the parents of other students. As displayed in Figure 18, the vast majority of both the students and the parents indicated that they would recommend the EBA to others.

Figure 18: Recommend the EBA to Others



Participant Comments

Each of the four surveys (student, parent, staff, and community partner) contained open-ended questions about what students gained from being enrolled in the EBA during 2017-2018 and what improvements to the EBA, if any, would the survey respondent suggest.

As mentioned previously, open-ended survey responses were coded into thematic categories for qualitative analysis, as well as considered for possible verbatim inclusion in this report. Note that some individual responses included more than one theme, and the responses could contribute to two or more category percentages. As a consequence, percentages often sum to more than 100 percent.

What is Gained From Being Enrolled: One open-ended survey question asked, “What do you think students gain from enrollment in the EBA?” This question was included on all versions of the survey, not only for students and for parents but also for EBA staff and community partners. Table 15 displays a cross-tabulation of the themes by respondent group.

Table 15: Perceptions of What is Gained From EBA

Enrollment				
	Students (N=223)*	Parents (N=45)	Staff (N=5)	Partners (N=10)
Knowledge and skills for school and/or college	34%	18%	40%	0%
Knowledge and skills for work or self-employment	31%	69%	20%	60%
College credit and industry certifications	16%	16%	0%	0%
Work experience and business connections	36%	7%	20%	40%
A sense of confidence, responsibility, accomplishment, etc.	20%	47%	20%	20%
Soft skills involving leadership, organization, critical thinking, work ethic, etc.	22%	4%	80%	20%
A supportive learning community environment	7%	13%	40%	10%
Unclear, ambiguous, impossible to categorize	10%	31%	0%	10%
Other	7%	7%	0%	10%

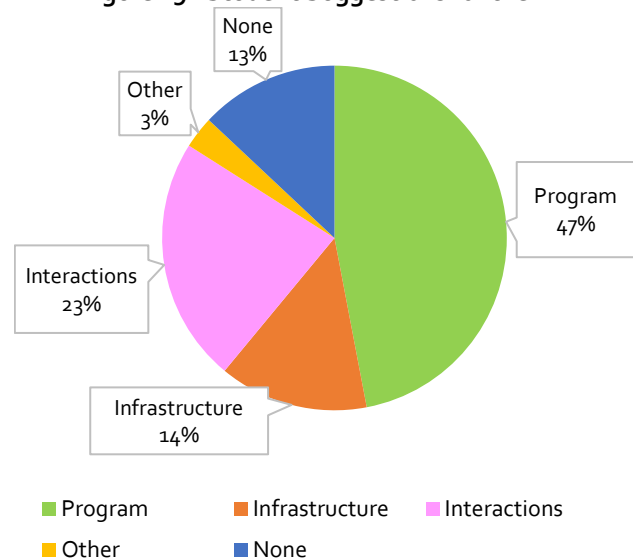
* Note: Column percentages may sum to more than 100 percent if a respondent expressed more than one idea in a particular comment.

The most common student responses focused on work experience and business connections, knowledge and skills for school and/or college, and knowledge and skills for work or self-employment. In contrast, the most common response from parents involved emotional attributes such as greater self-confidence or a stronger sense of responsibility. Staff responses, on the other hand, focused mainly on “soft skills,” with four of the five respondents (80%) citing skills such as organization, critical thinking, and creative problem solving. Further, 6 of the 10 respondents to the partner survey (60%) mentioned acquiring skills for work or employment while 40 percent focused on gaining work experience and making business connections.

Suggested Improvements: All four respondent groups also were asked to suggest ways that the EBA could be improved. No common themes emerged across the participant groups. Only three staff members responded to this open-ended question. One suggested splitting registration night into two sessions; one expressed a desire for more professional learning opportunities; and the third person wanted new furniture in all academy classrooms, not just the EBA wing of Kempsville High School.

Figure 19 displays the students' suggestions. Nearly half of the suggestions from students (47%) referred to the program, such as the design (24%) or the implementation (23%).

Figure 19: Student Suggestions for the EBA



Often the suggestions were contradictory, however. For instance, while seven students suggested that courses should be “harder” and five other students suggested that classes should be “more challenging,” twelve additional students suggested that classes should be “easier” or “less stressful.” Other contradictory suggestions involved increasing or reducing the workload, the number of master classes, and the number of projects and community service requirements. These kinds of contradictory suggestions occurred in relatively small numbers, and for every student who suggested increasing the number of field trips, another student wanted fewer field trips.

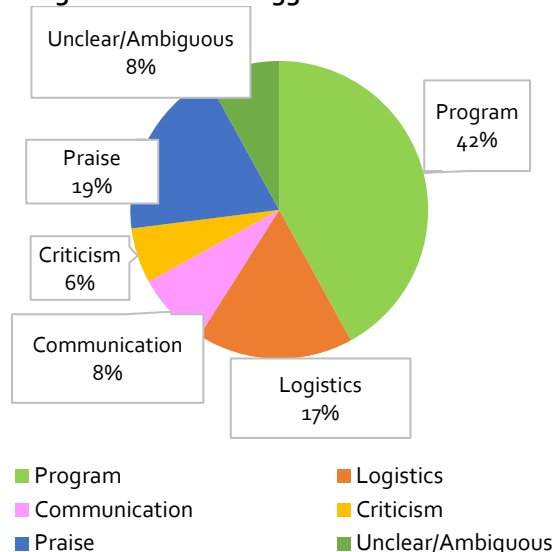
The theme of “Interactions” noted in the chart included suggestions involving relationships among EBA students, with staff, and with non-EBA students at Kempsville High School. With regard to students in the academy, 14 students suggested that students needed to

be more “polite” and more “respectful” to one another. With regard to interactions between students and staff, nine students suggested, for example, that teachers should be “more lenient” while four other students suggested that teachers should be stricter with respect to dispensing discipline. These types of contradictory suggestions were also noted in the report of the year-one evaluation.

New to the year-two survey suggestions were students’ comments that information could be dispensed in a clearer and more timely manner, especially with respect to dual-enrollment class schedules and degree requirements from TCC. For example, one student wrote: “Better information on the TCC, like the dates and times of the classes sooner.” Another student expressed a similar sentiment: “Address the TCC information clearly. When it was first introduced, everyone was confused.”

Figure 20 presents a summary of themes that emerged when parents were asked to suggest improvements to the EBA. The largest percentage of comments (43%) focused on the program itself.

Figure 20: Parent Suggestions for the EBA



The parent responses were quite varied, and few echoed the students’ responses or those of other parents. Table 16 includes typical responses regarding the EBA program and its implementation.

Table 16: Examples of Parent Suggestions for the EBA

"Find ways to challenge freshman who are stuck in ninth grade classes that they could easily test out of."
"Have a basic class for public speaking earlier in the curriculum."
"More research and homework assignments related to businesses in our area."
"As the EBA grows, most of the 'glitches' that I have seen this year should work themselves out. Thus far, we are very pleased with the EBA and the opportunities it has offered our child."
"The teachers who teach the EBA-specific elective classes are awesome! We are very supportive of the EBA and have promoted it to incoming students and families."

In addition, whereas 19 percent of the year-one responses from parents addressed issues related to communication, only 8 percent of the parents made similar comments in their year-two responses. On the other hand, 19 percent of the parent responses in both years contained only praise for the academy's program and/or its staff.

As with the parents, the suggestions from the community partners for improving the EBA were also varied and distinct from each other. One respondent wrote: "Physical space to match the EBA's mission." Another partner wrote: "Full year calendar of events published early with program needs and needed potential partner roles. Using signup genius or another app to have partners fill in with how they can help." Yet another partner declared, "I would hope there is continued financial support for the program, that grants and other outside funding continue to support the great programs already existing and those in the future and that it doesn't just lie on those within the academy to make it happen."

Additional Cost

The final evaluation question asked, "How did the actual costs of the academy compare with projected costs specified in the budget section of the proposal?" These include both (a) the one-time purchase and start-up costs and (b) the year-two operating costs for fiscal year 2017-2018. The academy's budget from the original academy proposal is included in Appendix H for reference.

This section of the report outlines the planning budget that was part of the approved academy proposal as well as the costs of start-up and year-two operation. Information about actual expenditures was provided by the Department of Teaching and Learning, the Department of School Division Services, the Office of

Budget Development within the Department of Budget and Finance, and the Department of Human Resources.

Two types of academy costs in 2017-2018 were included in this section: one-time start-up costs and annual recurring operating costs. Start-up costs were delineated in the EBA proposal as one-time purchases. In general, start-up costs are defined as costs associated with physical or tangible assets that have a useful life of more than one year. In addition, because each subsequent year brings the new implementation of another grade level of the academy due to the phased-in implementation plan, some expenses during each fiscal year should be considered as start-up costs until after full implementation of all of the academy's grade levels. Start-up expenses included costs for items in the following cost categories: instructional materials, curriculum development, equipment and furniture, technology, additional buses needed for academy transportation, and improvements to the facilities.

In addition to start-up costs, annual recurring operating costs are also incurred. Operating costs were defined as annual, recurring expenses for academy operation. Operating expenses include costs for items in the following cost categories: consumable instructional materials, subscriptions, field trip expenses, dues/memberships/fees, consumable office and computer supplies, food services, communication, staff development, personnel, and transportation. These are costs that would be expected each year after an academy reaches full implementation across all grade levels.

Following the methodology of the June 2005 academy cost analysis report, the operating costs reported in the tables are in excess of school-generated funds and the per pupil allocations that travel with the students that would have been expended on the students in any setting.

To answer the evaluation question, the actual start-up and year-two operating costs were compared to the costs specified in the proposal. Costs are rounded to the nearest dollar figure. It should be noted that nonconsumable and consumable instructional materials could not be differentiated. Therefore, all instructional costs are included under operating costs to align with the academy budget proposal which included all instructional materials as a recurring operating cost.

The projected and actual start-up costs for the EBA are presented in Table 17 through the 2017-2018 fiscal year. The one-time start-up costs totaled \$446,100 during 2017-2018 with the bulk of the expenditures for planned facilities improvements that had been delayed one year until the summer of 2018. The amount spent was \$28,883 less than the amount proposed for one-time start-up expenses in 2017-2018.

A total of \$1,148,615 was spent on one-time start-up costs for the academy through the 2017-2018 fiscal year which was relatively in line with the total start-up costs that had been proposed through 2017-2018 (\$1,051,481). However, an additional \$435,000 is expected to be spent in 2018-2019 on facilities improvements related to the academy, and the proposed budget did not include facilities-related start-up costs past 2017-2018. It is anticipated that by the time the academy reaches full implementation across all grade levels, the one-time start-up costs will exceed the originally proposed budget due to transportation needs. Although the proposed budget did not include start-up costs for transportation, a total of \$677,650 was spent in 2016-2017 on seven new school buses, hiring and training seven full-time bus drivers, and an office associate (.2 FTE) for the out-of-zone costs as a result of the academy. Of this amount, 75 percent was allocated to the academy (\$508,238) because after the resources were spent for the start-up of the academy, the buses and drivers were utilized to cover other bus runs or to cover for absent drivers. On a percentage basis, the academy accounted for 75 percent of the bus use.⁹

Table 17: One-Time Start-Up Costs for the EBA

Cost Category	Proposed Budget 2016-17	Actual Cost 2015-16 and 2016-17 Fiscal Years	Proposed Budget 2017-18	Actual Cost 2017-18 Fiscal Year	Start-Up Total Through 2017-18 (Year Two)
Instructional Materials	\$0	n/a	n/a	n/a	n/a
Curriculum Development	\$8,000	\$4,592	\$8,000	\$8,560	\$13,152
Equipment and Furniture	\$75,085	\$77,889	\$0	\$0	\$77,889
Technology	\$53,883	\$106,888	\$0	\$20,800	\$127,688
Transportation - Buses	\$0	\$508,238	\$0	\$0	\$508,238
Facilities	\$439,530	\$4,908	\$466,983	\$416,740	\$421,648
Total One-Time or Start-Up Cost	\$576,498	\$702,515	\$474,983	\$446,100	\$1,148,615

The projected and actual annual recurring operating costs during the second year of the academy are presented in Table 18. The figures in the table indicate that the actual costs incurred aligned relatively closely with the proposed budget.

Table 18: Annual Operating Costs for the EBA's Year-Two Implementation

Cost Category	Proposed Budget	Actual Cost 2017-18 Fiscal Year
Instructional Materials	\$67,500	\$35,970
Subscriptions	\$0	\$5,477
Field Trips	\$0	n/a
Dues/Memberships/Fees	\$0	\$270
Office Supplies	\$1,000	\$1,254
Food Services	\$0	\$4,167
Communication	\$0	\$476
Professional Learning	\$6,400	\$7,351
Academy Specific Personnel*	\$286,744	\$257,269
Transportation	\$235,733	\$234,996
Total Annual Operating/Recurring Cost	\$597,377	\$547,230

*Based on average salaries for academy coordinators across the division and academy teachers at the EBA.

Based on actual cost data from 2017-2018, the total annual operating cost for year two was \$547,230, which was \$50,147 lower than the planning budget costs. Staffing costs included two additional FTE teacher allocations which were provided to the academy during its second year of operation. This allocation was over and above the staffing ratio used for all high schools. Overhead costs for fringe benefits and health insurance for the coordinator and full-time teacher allocations were included (26.13% plus 7,821 for 2017-2018).

Overall, the proposed planning budget for 2017-2018 totaled \$1,072,360 for one-time start-up and year-two operating costs. In actuality, the one-time start-up and year-two operating costs amounted to \$993,330 in 2017-2018. Thus, the actual costs were \$79,030 less than the proposed costs. However, additional facilities improvements are still needed to align with plans set forth in the academy proposal, and the cost for those improvements are expected to be incurred during 2018-2019.

Recommendation and Rationale

Recommendation: Continue the Entrepreneurship and Business Academy within Kempsville High School without modifications. *(Responsible Groups: Department of Teaching and Learning, Kempsville High School)*

Rationale: Continuing the EBA without modifications is recommended because the operation of the EBA was found to largely correspond with what had been set forth in the proposal approved by the School Board. The academy opened on schedule in September 2016. During its first and second years of implementation, the academy made progress toward meeting its goal and objectives. It successfully instituted a rigorous and comprehensive program of study for students interested in entrepreneurship and innovation, business information technology, and corporate finance. The program included a combination of required and elective courses, as well as enrichment and community service activities. Academy students performed well academically, as exemplified by passing grades, successful test scores, and a high number of successful attempts to earn industry-related certifications. The students and staff also earned an array of honors, awards, and prizes during 2017-2018. In addition, its stakeholders continued to perceive the academy favorably.

Appendices

Appendix A: Entrepreneurship and Business Academy Suggested College Preparatory Curriculum by Strand

Strand I: Entrepreneurship & Innovation

Course Type	Grade 9	Grade 10	Grade 11	Grade 12
English	Academy Honors English 9*	Academy Honors English 10*	AP English Language or	AP English Literature or
Math	Algebra, Geometry, Algebra II/ Trigonometry	Geometry, Algebra II/Trigonometry, Math Analysis, Dual Enrollment Pre-Calculus I & II	Algebra II/Trig, Math Analysis, Dual Enrollment Pre-Calculus I & Dual Enrollment Applied Calculus, AP Calculus AB or BC, AP Computer Science Principles, AP Computer Science A AP Computer Principles	Algebra II/Trig, Math Analysis, Dual Enrollment Pre-Calculus I & Dual Enrollment Applied Calculus, AP Calculus AB or BC, AP Computer Science Principles, AP Computer Science A AP Computer Principles
Science	Earth Science**, Biology	Biology, Chemistry	Chemistry, AP Environmental Science, AP Chemistry, Physics, AP Physics, AP Biology or Dual Enrollment Biology	Chemistry, AP Environmental Science, AP Chemistry, Physics, AP Physics, AP Biology or Dual Enrollment Biology
Social Studies	World Studies for Business I or AP Human Geography	World Studies for Business II or AP European History	VA/US History , AP VA/US History, or Dual Enrollment History (Hybrid Course)	U.S./VA Government or AP Government & Politics or Dual Enrollment Government Hybrid
Health/PE Elective	Health/PE 9 (online course encouraged***)	Health/PE 10 (online course encouraged***)	Economics and Personal Finance* or AP Economics*	Senior Internship* Dual Enrollment Course or Academy Elective
Academy Strand (required)	Introduction to Entrepreneurship, Business, and Information Technology*	INCubatoredu*	Dual Enrollment Entrepreneurship* & Dual Enrollment International Business or AcceleratorEDU* or Advanced Entrepreneurship & Innovation*	Senior Internship* Dual Enrollment Course or Academy Elective

Course Type	Grade 9	Grade 10	Grade 11	Grade 12
Elective	Optional Elective: Study Block, EBA Idea Generation & Critical Issues in Business, AVID, Band, Orchestra, Chorus, etc.	Design for Entrepreneurs*	Dual Enrollment Introduction to Business or Academy Elective	Senior Internship*
Foreign Language	Foreign Language I or Higher	Foreign Language II or Higher or Optional Elective	Foreign Language III (if still needed) or Optional Elective	Senior Internship*

(Source: https://khsentrepreneurshipacademy.weebly.com/uploads/1/4/1/0/14107623/courses_formatted_update_july_2018.pdf)

Appendix A: Entrepreneurship and Business Academy Suggested College Preparatory Curriculum by Strand (continued)

Strand II: Business Information Technology

Course Type	Grade 9	Grade 10	Grade 11	Grade 12
English	Academy Honors English 9*	Academy Honors English 10*	AP English Language or Academy Honors English 11	AP English Literature or Dual Enrollment English 12
Math	Algebra, Geometry, Algebra II/ Trigonometry	Geometry, Algebra II/Trigonometry, Math Analysis, Dual Enrollment Pre-Calculus I & II	Algebra II/Trig, Math Analysis, Dual Enrollment Pre-Calculus I & Dual Enrollment Applied Calculus, AP Calculus AB or BC, AP Computer Science Principles, AP Computer Science A AP Computer Principles	Algebra II/Trig, Math Analysis, Dual Enrollment Pre-Calculus I & Dual Enrollment Applied Calculus, AP Calculus AB or BC, AP Computer Science Principles, AP Computer Science A AP Computer Principles
Science	Earth Science**, Biology	Biology, Chemistry	Chemistry, AP Environmental Science, AP Chemistry, Physics, AP Physics, AP Biology or Dual Enrollment Biology	Chemistry, AP Environmental Science, AP Chemistry, Physics, AP Physics, AP Biology or Dual Enrollment Biology
Social Studies	World Studies for Business I or AP Human Geography	World Studies for Business II or AP European History	AP VA/US History or Dual Enrollment History	U.S./VA Government or AP Government & Politics or Dual Enrollment Government Hybrid
Health/PE Elective	Health/PE 9 (online course encouraged***)	Health/PE 10 (online course encouraged***)	Advanced Technology Center Program+*	Advanced Technology Center Program*
Academy Strand (required)	Introduction to Entrepreneurship, Business, and Information Technology*	EBA Advanced Computer Information Systems*	Advanced Technology Center Program*	Advanced Technology Center Program*
Elective	Optional Elective: Study Block, EBA Idea Generation & Critical Issues in Business, AVID, Band, Orchestra, Chorus, etc.	AP Computer Science A* or Computer Programming* or AP Computer Science Principles* or Basic Technical Drawing*	Advanced Technology Center Program* Economics and Personal Finance	Advanced Technology Center Program*
Foreign Language	Foreign Language I or Higher	Foreign Language II or Higher or Optional Elective	Advanced Technology Center Program* Foreign Language III (if still needed)****	Advanced Technology Center Program* Senior Internship*

(Source: https://khsentrepreneurshipacademy.weebly.com/uploads/1/4/1/0/14107623/courses_formatted_update_july_2018.pdf)

Appendix A: Entrepreneurship and Business Academy Suggested College Preparatory Curriculum by Strand (continued)

Strand III: Corporate Finance

Course Type	Grade 9	Grade 10	Grade 11	Grade 12
English	Academy Honors English 9*	Academy Honors English 10*	AP English Language or Academy Honors English 11	AP English Literature or Dual Enrollment English 12
Math	Algebra, Geometry, Algebra II/Trigonometry	Geometry, Algebra II/Trigonometry, Math Analysis, Dual Enrollment Pre-Calculus I & II	Algebra II/Trig, Math Analysis, Dual Enrollment Pre-Calculus I & Dual Enrollment Applied Calculus, AP Calculus AB or BC, AP Computer Science Principles, AP Computer Science A AP Computer Principles	Algebra II/Trig, Math Analysis, Dual Enrollment Pre-Calculus I & Dual Enrollment Applied Calculus, AP Calculus AB or BC, AP Computer Science Principles, AP Computer Science A AP Computer Principles
Science	Earth Science**, Biology	Biology, Chemistry	Chemistry, AP Environmental Science, AP Chemistry, Physics, AP Physics, AP Biology or Dual Enrollment Biology	Chemistry, AP Environmental Science, AP Chemistry, Physics, AP Physics, AP Biology or Dual Enrollment Biology
Social Studies	World Studies for Business I or AP Human Geography	World Studies for Business II or AP European History	AP VA/US History or Dual Enrollment History	U.S./VA Government or AP Government & Politics
Health/PE	Health/PE 9 (online course encouraged***)	Health/PE 10 (online course encouraged***)	Economics and Personal Finance	Senior Internship*
Elective				Dual Enrollment Course or Academy Elective
Academy Strand (required)	Introduction to Entrepreneurship, Business, and Information Technology*	EBA Accounting*	Dual Enrollment Principles of Accounting I* (Semester) or Advanced Accounting* Dual Enrollment Principles of Accounting II* (Semester) or EBA Advanced Accounting*	Senior Internship* Dual Enrollment Course or Academy Elective
Elective	Optional Elective: Study Block, EBA Electives, AVID, Band, Orchestra, Chorus, etc.	Business Law & Ethics* (Semester I), Corporate Finance* (Semester II)	Dual Enrollment Introduction to Business or Academy Elective	Senior Internship*
Foreign Language	Foreign Language I or Higher	Foreign Language II or Higher	Foreign Language III (if still needed)	Senior Internship*

(Source: https://khsentrepreneurshipacademy.weebly.com/uploads/1/4/1/0/14107623/courses_formatted_update_july_2018.pdf)

* Required through Academy Strand

** If student has not taken Earth Science prior to Grade 9, there will be a need for the student to take a science course over the summer, two sciences in his/her senior year, or the student will need to take Economics online in grade 11 in order to earn an Advanced Studies diploma.

*** Taking Health/PE online opens up a student's schedule to take additional courses they have an interest in (Band, Chorus, Orchestra, Art, etc.).

Additional Information:

- The Entrepreneurship and Business Academy program and course offerings are being developed with VBCPS Department of Teaching and Learning, VBCPS Office of Career and Technical Education, Kempsville High School, Tidewater Community College, input from Business/Community partners with the needs and interests of students in mind. Courses and course names are subject to change during the development process.
- Academy elective options within each strand will be developed based on student need and interest.
- Students who wish to pursue a 2-year associate degree through Tidewater Community College will need to enroll in additional courses. This will be discussed with each individual academy student during the construction of their 4-year plan.

Appendix B: Entrepreneurship and Business Academy Suggested College Preparatory Curriculum Academy Electives

Students within the Entrepreneurship Academy will have the opportunity to pursue a variety of elective classes offered at Kempsville High School and specifically through the academy. Students are eligible to take electives based on their interest level. Some courses require certain pre-requisites. Dual Enrollment electives require the student to take and place on the Virginia Placement Test and must be approved through Tidewater Community College. Electives that are offered and encouraged for academy students to take include the following:

Tidewater Community College (TCC)	Kempsville High School (KHS)
College Success Skills (summer on TCC campus)	Basic Technical Drawing / Architectural or Engineering Drawing
Dual Enrollment Introduction to International Business (at KHS)	INCubatoredu
Dual Enrollment Entrepreneurship (at KHS)	EBA Advanced Computer Information Systems
Dual Enrollment Principles of Macroeconomics (on TCC campus)	AP Computer Science A
Dual Enrollment Principles of Microeconomics (on TCC campus)	AP Computer Science Principles
Dual Enrollment Principles of Accounting I (on TCC campus)	Computer Programming
Dual Enrollment Principles of Accounting II (on TCC campus)	EBA Accounting
Dual Enrollment Principles of Public Speaking (at KHS)	EBA Advanced Accounting
Dual Enrollment Intercultural Communication (at KHS)	EBA Business Law & Ethics / EBA Corporate Finance
Dual Enrollment International Relations I (summer at TCC)	Public Speaking
Dual Enrollment Ethics (summer at TCC)	Leadership Skills Development
Dual Enrollment Probability & Statistics for Business & Economics (summer at TCC)	EBA Critical Issues in Business / EBA Idea Generation & Creative Problem Solving
	AP Comparative Government
	AP Microeconomics & AP Macroeconomics
	AP Psychology
	Advanced Entrepreneurship & Innovation
	Electronics I & II
	AP Seminar / AP Capstone
	AVID

Appendix C: Dual Enrollment and Advanced Placement (AP) Course Options for EBA Students

Table 1: Dual Enrollment and Advanced Placement (AP) Courses for Advanced VBCPS Diploma

Dual Enrollment Course Options		Recommended Grade Level
Dual Enrollment Health/PE		10
Dual Enrollment Pre-Calculus I & II		10, 11, or 12
Dual Enrollment Calculus		10, 11, or 12
Dual Enrollment History		11 or 12
Dual Enrollment Macroeconomics and Microeconomics		11
Dual Enrollment Entrepreneurship		11
Dual Enrollment Introduction to Business		11
Dual Enrollment Public Speaking		11
Dual Enrollment Leadership Development		11
Dual Enrollment English 12		12
Dual Enrollment Statistics		12
Dual Enrollment Biology		12
Dual Enrollment Government Hybrid		12
Dual Enrollment electives (TBD)		11 and 12
Advanced Placement (AP) Course Options		Recommended Grade Level
AP Human Geography		9 or 10
AP European History*		10, 11, or 12
AP Psychology*		11 or 12
AP English Language and Composition		11
AP English Literature and Composition		12
AP Calculus AB		11 or 12
AP Computer Science Principles		11 or 12
AP Chemistry		11
AP Environmental Science		11
AP Physics		11
AP Economics		11
AP VA/US History		11
AP Government & Politics		12
AP Computer Science		12
AP Statistics		12
AP Biology		12

(Source: https://khsentrepreneurshipacademy.weebly.com/uploads/1/4/1/0/14107623/courses_formatted_update_july_2018.pdf)

* Courses added after 2016-2017.

Table 2: Tidewater Community College and Kempsville Entrepreneurship & Business Academy Suggested Course by Course Alignment - Courses Needed to Pursue an Associate of Science Degree

Semester	TCC Course #	TCC Course Title	High School Course Title
1	ENG 111	College Composition I	AP English Literature (3)* -or- DE English 12
	MTH 163	Pre-Calculus I	DE Pre-Calculus
	SDV 100	College Success Skills	None – TCC Course
	BUS 116	Approved Business Administration Elective	DE Entrepreneurship
	PED ELE	Health/Physical Education Elective	DE PE option
	HIS 121	History Elective	AP US History (3)* -or- DE History
2	CST 100	Principles of Public Speaking	DE Public Speaking
	ECO 201	Principles of Macroeconomics	AP Econ Macro -or- DE Macroeconomics
	ENG 112	College Composition II	AP English Literature (3)* -or- DE English 12
	MTH 270	Applied Calculus	AP Calculus AB (3) -or- DE Calculus
	CST 229, ENG 125, ENG 211, ENG 241 or HUM 246	Humanities Elective: Options: Intercultural Communication (CST 229), Intro to Literature (ENG 125), Creative Writing (ENG 211), Survey of American Literature I (ENG 241), Creative Thinking (HUM 246)	None – TCC Course
3	ACC 211	Principles of Accounting I	DE Accounting
	BUS 280	Introduction to International Business	DE International Business
	ECO 202	Principles of Microeconomics	AP Econ Micro -or- DE Economics & Financial Management
	GEO 210	Approved Business Administration Elective	AP Human Geography (3)* -or- DE Geography
	BIO 101	Science with Lab Elective	AP Biology (3)* -or- DE Biology
4	ACC 212	Principles of Accounting II	DE Accounting
	BUS 216	Probability and Statistics for Business and Economics	DE Statistics
	PLS 241	Approved Business Administration Elective	AP Government & Politics: Comparative -or- DE Government
	PHI 220 or PHI 226	Humanities Elective: Options: Ethics (PHI 220) or Social Ethics (PHI 226)	None – TCC Course
	BIO 102	Science with Lab Elective	AP Biology (3)* -or- DE Biology

Appendix D: Industry Certifications

Table 1: Industry Certifications that EBA Students May Earn While Enrolled In the EBA

Potential Industry Certifications
Microsoft Office Specialist (MOS) Certification
Concepts of Entrepreneurship and Management Assessment
Customer Service and Sales Certification Assessment
Advanced Customer Service and Sales Certification Assessment
Workplace Readiness Skills for the Commonwealth Examination
National Occupational Competency Testing Institute (NOCTI) Accounting Assessment
Adobe Certified Expert (ACE)
National Occupational Competency Testing Institute (NOCTI) Advertising Design
Microsoft Technology Associate (MTA)
Computing Technology Industry Association (CompTIA) A+
Cisco Certified Entry Level Technician (CCENT)
Cisco Certified Network Associate (CCNA)
Certified Internet Webmaster (CIW)
Financial Accounting College Level Examination Program (CLEP) Examination
Global Standard (GS ₄) Examination
Introductory Business Law College Level Examination Program (CLEP) Examination
Accounting, Advanced Assessment
Accounting, Basic Assessment
Business Financial Management Assessment
Financial and Managerial Accounting Assessment
AutoCAD Examination
Autodesk Certified User Examination
Certified SolidWorks Associate Examination

Table 2: Industry Certification Tests and Outcomes for EBA Students During 2017-2018

Certification Test	Number Taken	Number Passed	Percent Passed
Customer Service and Sales	60	60	100%
IC ₃ : GS ₅ Computing Fundamentals	1	0	
IC ₃ : GS ₅ Key Applications	1	1	100%
IC ₃ : GS ₅ Living Online	1	1	100%
Microsoft Office: Access 2016	2	2	100%
Microsoft Office: Excel 2016	35	34	97%
Microsoft Office: Excel Expert 2016	23	18	78%
Microsoft Office: Outlook 2016	25	23	92%
Microsoft Office: PowerPoint 2016	143	141	99%
Microsoft Office: Word 2016	144	144	100%
Microsoft Office: Word Expert 2016	29	27	93%
NOCTI Accounting Basic	23	17	74%
WISE Financial Literacy Certification	2	2	100%
Workplace Readiness Skills for the Commonwealth	107	107	100%
Total	596	577	97%

Appendix E: Community Business Partners

Community Business Partners
Amerigroup (Anthem)
Antonia Christianson Events
ARDX
Babson College
Bell Tone
Brick House Diner
Chartway Federal Credit Union
Cheryl Tan Media
Chick-Fil-A - Haygood
Coastal Café
Design Elements
Digital Marketing Specialists Tidewater Communications Interactive
Dominion Enterprises
DreamerMade
Edible Arrangements
Gold Key PHR
IHOP – Kemps River
IHOP - Landstown Commons
Junior Achievement of Greater Hampton Roads
Klett Consulting Group Inc.
Law Office of Joel Ankney, PC
Lynn's Beach House
Madison Jewelers
MassMutual Member Wealth Management
Novel Views CO
Old Dominion University Strome Entrepreneurial Center
Operation Smile
Philip L. Russo, Jr. P.C.
Pita Pit
PNC Commercial Banking
Pull Start Fire
Real Property Management Hampton Roads
Rotary Club
Rubin Communications Group
Spectra Venue Management (ODU Ted Constant Convocation Center)
St. Mary's Home
State Farm Insurance - Pierre Granger
The Opus Group
The Rock Gym
Tidewater Community College
TWWS Internet Consulting Company
US Naval Plumbing
VB Public Libraries - Kempsville Location
Virginia Beach Economic Development
Virginia Beach School's Federal Credit Union
Virginia Tourism Corporation
Walter T. Camp, Esq.
WRV Summer Skate Camp
Y Not Pizza & Italian Cuisine

Appendix F: Honors, Awards, and Prizes Earned by EBA Staff and/or Students During 2017-2018

EBA Honors, Awards, and Prizes	
Catherine Bailey – Kempsville High School Teacher of the Year 2018	
EBA Student Spotlight Recipients Continued – two students a month are recognized	
Victoria Thompson Kempsville TCE Counselor of the Year	
Ashley Houchins Kempsville TCE Teacher of the Year	
Ashley Houchins VBCPS TCE Teacher of the Year	
Mary Boubouheropoulos - Earned Master of Arts degree in Communication with High Distinction	
Cupplapsible won Opportunity Inc. Regional Pitch Contest - \$1,250	
EBA Tradin' Post Team wins DECA School-Based Enterprise Gold Certification	
DECA Awards	
<ul style="list-style-type: none"> 151 District Competitors, 108 medals awarded: 18 overall winners from EBA State - 52 state competitors and awards for Gold Certified School-Based Enterprise (SBE), EBA recognized for largest chapter growth Virtual Business Accounting Finalists: 18 students were called to the stage and 27 medals awarded, 15 national qualifiers 	
FBLA Awards - District - 57 competitors; 29 trophies awarded; 2nd place largest chapter; 3rd place most outstanding chapter	
State - 15 competitors; 1-5th place; 1-4th place; Received Honor Chapter status	
Junior Achievement LEAP Event Winning Team - Kupa Koozie	
Approved to begin a charter chapter for National Business Honor Society at Kempsville	
Five EBA students elected to Class Office	
18 EBA students selected as student mentors	
Three teams won awards at the World Series of Entrepreneurship:	
<ul style="list-style-type: none"> Supply Hut won first place in the live pitch, earning \$5,000 for venture funding and \$5,000 to split for scholarship; Cupplapsible and Klean Kicks each won the excellence awards for their table displays, earning \$250 each 	
Nathan Mack - MOS Worlds	
Six teams won startup funding to launch their business at EBA Pitch Night on June 6, 2018:	
<ul style="list-style-type: none"> Team DASA - \$8,000 Team Klean Kicks - \$6,000 Team BusBuddy - \$4,000 Team Supply Hut - \$2,500 Team Beauty Barista - \$2,000 Team Simply Clear Skin - \$2,000 	

Appendix G: Guest Speakers and Master Class Presenters During 2017-2018

Guest Speaker Name(s)	Guest Speaker Affiliation	Date(s)	Purpose	# Classes (Blocks)/ #Students
Steve Goad	ODU Center for Enterprise Innovation	Sept 26	1.4 Group Ideation	3 Classes (2B/3B/4B) - 62 students
Pat Cardwell	Attorney & Congressional Candidate	Oct 4	Entrepreneurial Journey	60
Sabrina Davis	Fulton Bank	Oct 10	Finances	60
Mike Beyrodt	Pull Start Fire	Oct 13	1.7 Value Proposition	3 Classes (2B/3B/4B) - 62 students
Sabrina Wooten	Strategic Impact Alliance	Oct 23	2.1 Customer Segmentation	3 Classes (2B/3B/4B) - 62 students
Cynthia Spanoulis	Virginia Aquarium	Oct 26	Entrepreneurial Journey	60
Quentin Tilman	Professional Dress	Nov 9	Professional Dress	60
Jacqueline Estaris	New Virginia Majority	Nov 11	Getting Voters Registered	2 classes (48 students)
Blade Taylor	3D Printing Workshop	11/13/18		2 Classes (2A/3A) - 58 students
Diana Nyad	Norfolk Forum Speaker	Nov 14	Entrepreneurial Journey	60
Jon McGlothian	Project Manager	Nov 16	Managing Projects	60
Mark Klett	KCG CEO	Nov 30	Cyber Security	60
Richard Braun	The Braun Agency	Dec 4	3.1 Positioning	3 Classes (2B/3B/4B) - 62 students
Ryan Dean	DreamerMade	Dec 5	Entrepreneurial Journey	60
James Whitmore	Government Contractor CPA	Dec 7	Career as an Auditor	1 class (23 students)
Joy Kelly	Art Institute	Dec 13	Professional Dress	60
Sophia O'Neal	Two Pink Peas	Dec 14	3.4 Marketing Tactics	3 Classes (2B/3B/4B) - 62 students
Latrece Williams-McKnight	McKnight Williams & Associates, LLC	Jan 3	4.1 Pricing & Spreadsheets	3 Classes (2B/3B/4B) - 62 students
Steve Marable	Marable Home Team	Jan 9	4.2 Market Sizing	3 Classes (2B/3B/4B) - 62 students
David Elgin	Belfor	Jan 24	4.5 Income Statements/Financial Modeling	3 Classes (2B/3B/4B) - 62 students
Todd McKeating	Ted Constant Center ODU	Jan 24	Marketing	60
Erik Olson	Array Digital	Feb 6	Business and Information Technology	60
Brittany/David Peregoff	Where 2 Wheel	Feb 12	5.2 Web/App Development	3 Classes (2B/3B/4B) - 62 students
Michael Claude	Miguel's Formal Wear	Feb 20	Sales	60
Ali O'Hara	Local Voice Media	Feb 27	Advertising	60
Danijel Velicki	Opus Wealth	Feb 28	Career as Financial Planner	1 class (23 students)
Steve Goad	ODU Center for Enterprise Innovation	Mar 1	Minimum Viable Product Pitch Prep	60
Pierre Granger	Pierre Granger State Farm	Mar 9	6.1 Implementation Planning	3 Classes (2B/3B/4B) - 62 students
Natasha Brown	B&D Brand	Mar 13	Book Publishing	60
Jennifer Saunders	Chartway Federal Credit Union	Mar 21	Financial Management	60
Sabra Mitchell	Samaritan House	Mar 28	Healthy Relationships	60
Kevin Wilson	Buzz Franchise Brands	April 11	Entrepreneurial Journey	60
Joel Ankney	Intellectual Property Attorney	Apr 12	6.5 Legal	3 Classes (2B/3B/4B) - 62 students
Joel Ankney	Intellectual Property Attorney	April 19?	Who owns an idea?	2 Classes (2A/3A) - 58 students
Jason Barnes	Chick-Fil-A - Haygood	Apr 20	7.1 Storytelling	3 Classes (2B/3B/4B) - 62 students
Blade Taylor	3DXtremes	Apr 24	7.2 Marketing Planning	3 Classes (2B/3B/4B) - 62 students

Guest Speaker Name(s)	Guest Speaker Affiliation	Date(s)	Purpose	# Classes (Blocks)/ #Students
Koby Lomax	Ardent Candle Company	April 26	Pitch Prep	60
Martin Joseph	360IT Partners	May 2	7.3 Sales Planning	3 Classes (2B/3B/4B) - 62 students
Trinika Abraham	VB Public Library	May 8	SurveyMonkey & Buzzfeed	60
Kevin Hill	Mass Mutual	May 14	8.1 Finances	3 Classes (2B/3B/4B) - 62 students
Trinika Abraham	VB Public Library	May 16	Infographics via Canva	60
Tom Flake	BCause LLC	May 22	8.2 Funding Requests	3 Classes (2B/3B/4B) - 62 students
Trinika Abraham	VB Public Library	May 22	Cameo Machine	60
Trinika Abraham	VB Public Library	May 30	Stop Motion Commercials	60

Appendix H: Proposed Entrepreneurship and Business Academy Planning Budget¹⁰

	One-Time Purchase and Start-Up Costs				Recurring Costs
Description	FY 16/17	FY 16/17	FY 17/18	FY 18/19	FY 19/20
Equipment and Furniture					
Makerspace	\$75,085				
Technology					
Computers and Printers	\$32,263				
Networking and Switches	\$9,500				
Tablets/Portable Devices	\$12,120				
Office and Computer Supplies		\$1,000	\$1,000	\$2,500	\$2,500
Instructional Materials					
Textbooks/Online Resources		\$30,000	\$30,000	\$30,000	\$15,000
Resource Materials		\$10,000	\$12,500	\$15,000	\$17,500
Supplemental Instructional Materials		\$15,000	\$15,000	\$12,500	\$12,500
Software		\$5,000	\$5,000	\$5,000	\$5,000
Printing		\$5,000	\$5,000	\$5,000	\$5,000
Curriculum and Staff Development					
Teacher Workshop Pay		\$4,000	\$4,000	\$4,000	\$2,000
Consultants		\$4,000	\$4,000	\$4,000	\$2,000
Professional Development		\$6,400	\$6,400	\$8,500	\$10,000
Substitute Pay		\$2,000	\$2,000	\$2,000	\$2,000
Total	\$128,968	\$82,400	\$84,900	\$88,500	\$73,500
Salaries and Fringe Benefits					
Academy Coordinator		\$98,825	\$101,426	\$104,106	\$106,866
FTEs (Year 1 1 FTE, Year 2 +1 FTE, Year 3 +1 FTE, Year 4 +1 FTE)		\$89,281	\$183,318	\$282,330	\$386,546
Total		\$188,106	\$284,744	\$386,436	\$493,412
Facilities Improvements					
Conversion of TCE Classroom		\$439,530	\$466,983		
Total		\$439,530	\$466,983		
Transportation Costs					
Drivers Salaries		\$63,612	\$68,030	\$76,167	\$80,817
Operational Costs		\$100,650	\$118,950	\$137,250	\$148,230
Activity Drivers		\$14,136	\$16,113	\$18,135	\$18,368
Activity Operational Costs		\$23,120	\$32,640	\$38,080	\$40,800
Total		\$201,518	\$235,733	\$269,632	\$288,215
Grand Total	\$128,968	\$911,554	\$1,072,360	\$744,568	\$855,127
Total Implementation					\$3,712,577

End Notes

¹ From October 6, 2015 School Board Agenda Cover Sheet

² Source: <https://kempsvillehs.vbschools.com/>

³ Source: <https://www.facebook.com/khsentrepreneurshipacademy>

⁴ Source: <https://khsentrepreneurshipacademy.weebly.com/>

⁵ Source: <https://khsentrepreneurshipacademy.weebly.com/job-shadowing.html>

⁶ Health and Physical Education 1 and 2 are required VBCPS courses distinct from TCC's dual enrollment Health and Physical Education classes.

⁷ Ibid.

⁸ Commonly used guidelines for interpreting the magnitude of an effect size: 0 - .19 is considered negligible; .20 to .49 is considered small; .50 to .79 is considered moderate; and .80 or greater is considered large. See Cohen, J. (1988).

Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.

⁹ Source: C. Blair, personal communication, August 30, 2017.

¹⁰ Source: Entrepreneurship and Business Academy at Kempsville High School Proposal, September 2015.

Aaron C. Spence, Ed.D., Superintendent
Virginia Beach City Public Schools
2512 George Mason Drive, Virginia Beach, VA 23456-0038

Produced by the Office of Planning, Innovation, and Accountability.
For further information, please call (757) 263-1199.

Notice of Non-Discrimination Policy

Virginia Beach City Public Schools does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation/gender identity, pregnancy, childbirth or related medical condition, disability, marital status, age, genetic information or veteran status in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. School Board policies and regulations (including, but not limited to, Policies 2-33, 4-4, 5-7, 5-19, 5-20, 5-44, 6-33, 6-7, 7-48, 7-49, 7-57 and Regulations 2-33.1, 4-4.1, 4-4.2, 4-4.3, 4-6.1, 5-44.1, 7-11.1, 7-17.1 and 7-57.1) provide equal access to courses, programs, counseling services, physical education and athletic, vocational education, instructional materials and extracurricular activities.

To seek resolution of grievances resulting from alleged discrimination or to report violations of these policies, please contact the Title VI/Title IX Coordinator/Director of Student Leadership at (757) 263-2020, 1413 Laskin Road, Virginia Beach, Virginia, 23451 (for student complaints) or the Section 504/ADA Coordinator/Chief Human Resources Officer at (757) 263-1133, 2512 George Mason Drive, Municipal Center, Building 6, Virginia Beach, Virginia, 23456 (for employees or other citizens). Concerns about the application of Section 504 of the Rehabilitation Act should be addressed to the Section 504 Coordinator/Executive Director of Student Support Services at (757) 263-1980, 2512 George Mason Drive, Virginia Beach, Virginia, 23456 or the Section 504 Coordinator at the student's school. For students who are eligible or suspected of being eligible for special education or related services under IDEA, please contact the Office of Programs for Exceptional Children at (757) 263-2400, Laskin Road Annex, 1413 Laskin Road, Virginia Beach, Virginia, 23451.

Alternative formats of this publication which may include taped, Braille, or large print materials are available upon request for individuals with disabilities. Call or write the Office of Planning, Innovation, and Accountability, Virginia Beach City Public Schools, 2512 George Mason Drive, P.O. Box 6038, Virginia Beach, VA 23456-0038. Telephone (757) 263-1199 (voice); fax (757) 263-1131; 263-1240 (TDD) or email her at maryann.morrill@vbschools.com.

vbschools.com
your virtual link to Hampton Roads' largest school system



No part of this publication may be produced or shared in any form without giving specific credit to Virginia Beach City Public Schools.

December 2018