
// Research Article //

A Community College Case Study on Curricular Maps
and Student Retention

Amy M. Ertwine, EdD, MSN, RN
aertwine@ccbcmd.edu

From the Nursing Department, School of Health Professions, Community
College of Baltimore County, Baltimore, Maryland.

CURRICULAR MAPS & STUDENT RETENTION

To understand retention, evaluation of GP implementation is an important tool. In an effort to help students succeed, colleges often give students a specified set of core courses and a specific or even prescribed pathway to complete their general education requirements.

ABSTRACT

To understand retention, evaluation of guided pathways implementation is an important tool. In an effort to help students succeed, colleges often give students a specified set of core courses and a specific or even prescribed pathway to complete their general education requirements. Retention efforts are always a topic with administrators at community colleges across the United States. The Community College of Baltimore County (CCBC) incorporated GP into retention efforts in the fall of 2015. Over the past 4 years, CCBC has incorporated more activities focusing on increasing knowledge about GP. The pathways are Arts; Business, Law and Education; General Studies; Humanities and Social Sciences; Science and Health Careers; and Technology, Engineering

and Mathematics. Vincent Tinto's framework is often presumed to be inappropriate to the study of student persistence at community colleges because social integration is considered unlikely to occur for students at these institutions. Community college students are thought to not have the time to participate in activities like attending concerts, joining clubs, or exploring art galleries that would facilitate social integration. This study examines student and faculty perceptions of GP at CCBC and whether they help with retention of the students for sequential semesters. I interviewed students who were enrolled in English 101 for the first time starting in the fall of 2015 through 2018. I also interviewed full-time faculty who taught English 101 on the same campus.

INTRO — DUCTION

Student retention at community colleges is a problem in the United States. This study looks at the Community College of Baltimore County (CCBC), a large multicampus suburban community college in the Mid-Atlantic.

As community colleges look for ways to increase student retention, studying why students do not continue education was also important to focus on. There are many reasons why students do not stay in school, whether it be financial or even lack of desire. This study focuses on student and faculty perceptions of the implementation of curriculum mapping at CCBC. Curriculum mapping provides students with clear, educationally coherent program maps that include specific course sequences, progress milestones, and program learning outcomes (Bailey, Jaggars,

& Jenkins, 2015). Building upon the results of this study, practitioners may more easily identify barriers to student retention, which in turn would create positive social change. It is important to retain students in higher education because it can have a positive impact in increasing human capital and governmental revenue (Pluhta & Penny, 2013). According to the National Center for Education Statistics, the average student unfortunately does not complete an associate degree within the first 2 years (NCES, 2011a).

METHODS

One important problem at CCBC is low student retention (CCBC Fact Book, 2022). CCBC has approximately 28,000 credit students enrolled per year, and the retention rate for students returning is approximately 50% (Public website for CCBC, 2020). Nationwide, 2-year community colleges and for-profit 4-year schools have average completion rates below 40% (Nadworny, 2019).

This study only looked at students who entered English 101 between fall 2015 and fall 2018. I selected participants on a first come first serve basis. I did not quantify male versus female participants as I was just looking for the students' perceptions of retention strategies. CCBC has a larger population of females who attend (Public website for CCBC, 2020). Participants were first-generation students on one of the main campuses.

Semi-structured interviews took place either by phone, Skype, Zoom or face to face. The face-to-face interviews were conducted by me and took place in my office with the door closed for privacy.

To assess one student retention initiative, I conducted semi-structured interviews with students and faculty to gain their perception of guided pathways (GP) in regard to retention at CCBC. The examination of perceptions, feelings, and experiences are commonly established from qualitative studies and reflect a constructivist perspective, meaning that reality is subjective and based on the perspective and experience of the individual (Burkholder et al., 2016). Quantitative researchers examine numerical data, but because this study does not quantify the variables, the goal is to gain perspectives of students and faculty regarding low student retention.

Research Design and Rationale

I used a basic qualitative methodology to enable me to examine CCBC's data. Researchers use case studies to explore, explain, or describe in research and examine current events in context (Yin, 2014). Case studies are versatile, and researchers can examine different variables, but a variety of different sources are required for data triangulation (Yin, 2014). The researcher determines the case which may be an individual student or faculty member (Sinha & Hanuscin, 2017), an organization, or a school (Parylo & Zepeda, 2015). This case study was conducted at CCBC at one of the main campuses.

Role of the Researcher

I am a full-time associate professor at CCBC, and I teach on a different campus in a different department. I interviewed students and faculty while maintaining the data in a secure fashion. A password protected device was used solely for the research, and I was the only person with the password. Documents were secured in a locked drawer in my office. I did not have any type of relationship with the students as I do not teach general education courses. I also did not have any type of relationship with any of the faculty that were interviewed. This avoided researcher bias.

Methodology

According to Rubin and Rubin (2012), by using qualitative interviews, researchers can explore important personal issues. The use of qualitative methodology allows the researcher to gather the type of data most appropriate to the study's purpose and research questions. Qualitative research is a form of in-depth study that utilizes data collected in person and through observation from individuals in their natural environment (Creswell, 2003 and 2012). Unlike quantitative methods that present results as numerical data, qualitative research produces narrative responses in the form of words (Creswell, 2012). The researcher analyzes the data to determine trends associated with the study's variables (Saldaña, 2015). The characteristics of the case study were compatible with the scope and features of the study. The implementation of GP is a contemporary event situated in a unique community college environment that has multiple campuses.

Participant Selection

I asked for participants from CCBC since it has implemented the GP model. A qualitative researcher must ensure they can access their participants and that the participants have experience with the phenomenon under study (Ravitch & Mittenfelner, 2016). I reached out to the Planning, Research and Evaluation (PRE) director at CCBC to identify relevant participants for the study. From the list of names, I drafted an e-mail to possible participants asking for volunteers to participate in the study. From the participants that responded, I selected on a first-come, first-serve basis, so there was no bias or conflict of interest. I initially contacted potential participants via email. The email included informed consent and an explanation of the study along with a request to participate. Reaching out with an email that offers an introduction and explains the purposes of the study, with a request for help, is the first part of establishing

We began at the outset with a larger dataset of potential covariates that might explain student performance in courses, including the cumulative GPA of the student which we collapsed into GPA ranges to simplify our model (the GPA ranges were 0.5 steps of GPA, such that GPAs between 3.75 and 4.0 were rounded to 4, 3.25 to 3.74 were rounded to 3.5, 2.75 to 3.24 were rounded to 3, and so forth).

contact. A follow up e-mail may be necessary for students who have already transferred or graduated. Sample email and informed consent material is available upon request to the author.

I sent an email to all full-time faculty who teach English 101 at one main CCBC campus, requesting volunteers. Selecting the faculty who taught in the English department was important since this is one course that is required for almost all of the degree programs at CCBC. The faculty would possibly have a better understanding of GP. These faculty members may have also taught some of the students participating in the study, but the faculty would not know the identities of the students in the study. I accepted the first 5 respondents to my request from each semester (fall 2015–2018) to participate in the survey. I also asked for 3–5 full-time English faculty on the same campus to volunteer to participate. From the selected pool of participants, I contacted the volunteer participants to set up the interview. Interviews took place via phone, skype, zoom, or face-to-face meetings.

Procedures for Student Recruitment, Participation, and Data Collection

Student participants were identified with the help of Planning, Research and Evaluation (PRE) at CCBC. Participants were selected among the population exposed to GP from 2015–2018. I asked PRE to supply names and email address from all students that were enrolled in English 101 at one main campus in the fall semesters from 2015–2018. Participation in research was voluntary, and each participant received an introductory letter explaining the purpose of the research. Prior to the interview, each participant received an informed consent form to allow the participants to state whether they are willing to participate in the interview

and alerts them that the interview can be stopped at any time. Informed consent also notified the participants that they do not need to answer any questions that they do not feel comfortable answering. I will maintain a copy of the signed informed consent with all other research documents locked in a secure drawer in my office for 5 years. After weeks of recruiting participants, I had 15 students and four faculty that agreed to participate in this study.

Because it was important to consider the comfort of the participant, holding the one-time, one-hour, semi-structured interviews via phone, Zoom, or in person allowed for flexibility, comfort, and privacy. To ensure privacy for the phone or Zoom interviews, I conducted interviews in my office with the door closed. To ensure suitable space for the in-person interview, it was important to coordinate with the participants to determine an available room that was most conducive to gathering information.

I audio recorded and transcribed each interview. In order to provide anonymity, each participant received a number. Confirmation of contact information at the end of the interview was necessary to send a transcript of the interview to them for their review. Having participants examine transcripts of the interview ensured the precision of the data collected, contributing to the credibility of the study (Devault, 2018). The storage and protection of all research materials is vital. Transfer of all electronic files of transcripts, recordings, and informed consents to a flash drive for storage are part of the process of keeping track of the data. I will keep the flash drive combined with all memos, journals, and research notes, for 5 years under lock and key to protect confidentiality.

INSTRUMENTATION

Interviews from students and faculty were the primary data collected. Each interview included a standard set of questions and the interviewer used additional questions to clarify information or encourage participants to expand their answers. I created the following interview protocol and questions related to my research question that focus on the participant's perception of GP:

Start interview protocol with quick explanation of what GP is: "GP is a student retention initiative that CCBC implemented in the Fall of 2015. It's a student-centered approach that can increase the number of students earning community college credentials. Creating a curricular map for students using GP helps students know exactly what courses they need and prevents them from taking unnecessary coursework."

For student participants, ask the following questions related to RQ1: "How do students perceive the relationship between student retention and implementation of GP?"

- Can you tell me how you first came to the decision to attend CCBC?
- What classes did you take your first semester at CCBC?
- Describe your understanding of GP.
- Do you know what pathway you were placed in and why?
- Describe any activities that were directly related to GP and the pathway you were placed in.
- How do you manage your time commitments outside of school? (Work, family, or other activities)
- Do you feel your faculty encourage you to participate in the events?
- What do you feel CCBC is doing well in regard to student retention?
- What do you feel the value of GP is?
- What do you feel could be improved?
- What would you like to see done in terms of student retention at CCBC?
- Do you participate in any clubs and/or organizations on campus?
- If yes: Which ones interest you?
- If no: Why not?
- Is there anything else that you would like to tell me about barriers or successes with student retention at CCBC?
- Is there anything else you would like to tell me?

METHODS

For faculty participants, ask the following questions related to RQ2: “How do faculty perceive the relationship between student retention and implementation of GP?”

- How long have you been a full-time faculty member at CCBC?
- Why did you choose CCBC?
- Describe your understanding of GP.
- Where you part of the implementation of GP at CCBC?
- How do you feel the process of implementing GP has helped CCBC?
- What do you perceive is working well in regard to student retention?
- What do you perceive are barriers to implementation of GP in higher education?
- How would you recommend overcoming those barriers?
- What kind of impediments have you experienced or witnessed to career advancement in higher education?
- What do you feel CCBC is doing well in regard to student retention?
- What do you feel could be improved?
- What would you like to see done in terms of student retention at CCBC?
- Is there anything else that you would like to tell me about barriers or successes with student retention at CCBC?
- Is there anything else you would like to tell me?

Data Analysis Plan

I collected data for analysis from semi-structured interviews and verified or refute the interview information with a document review of the activities related to GP. During the interview, I took note of how the interviewee was answering questions including body language. When conducting qualitative research, it is important to maintain reflective journals, and to write memos, to allow for immersion with the data. I kept a reflective journal throughout the process and wrote memos as I analyzed the data. The writing of a researcher journal and analytic memos during the process assisted with reflection on my own feelings, biases, and beliefs as I sorted and reviewed the data. I logged all data according to location and by participant in a numbered system that provides for confidentiality, but keeps the information organized.

METHODS

By asking the interview questions, data was gathered to determine if the retention strategy did in fact increase retention.

After the participants approve the transcripts, I reviewed and interpreted the data from the interviews using open coding and thematic analysis (Saldaña, 2015). Following a thorough review of the transcribed material, I organized the data using the qualitative data analysis software NVivo. Then, I coded quotes into categories, and developed emerging themes. Coding is an iterative process and requires examination and reexamination of the data, followed by a development of emerging themes (Ravitch & Mittenfelner, 2016).

Ethical Procedures

Using a qualitative procedure allowed the research to be more naturalistic and depend on personal observations in a real-world setting (Ravitch & Mittenfelner, 2016). All instruments were created by the same research. I also implemented, analyzed, and coded all of the data. This process could possibly contain errors due to the researcher's bias or subjectivity (Leung, 2015).

Elaborating on a respondent's answer puts words in their mouth and, while leading questions and wording aren't types of bias themselves, they can lead to bias or are a result of bias (Ravitch &

Mittenfelner, 2016). To avoid this bias, I only asked the questions created and did not ask leading questions. Some participants required additional prompting. I anticipated interviews would last no more than one hour, which was the case. Interview questions were not personal, and no one appeared to be upset over any questions.

By asking quality questions at the right time and remaining aware and focused on sources of bias, researchers can enable the truest respondent perspectives and ensure that the resulting research lives up to the highest qualitative standards (Ravitch & Mittenfelner, 2016).

Using reflective journaling, the researcher kept track of biases and personal assumptions (Cope, 2014). I had the participants review the data for accuracy. I also had the option reach out to PRE at CCBC to determine my next course of action if I was unable to deal with the bias alone. Institutional review board approval was obtained through Walden University and CCBC before any interviews took place.

All documentation being used was examined by both entities and approved. Site permission for the interviews was also obtained before data collection.

RESULTS

This study focused on student and faculty perceptions of the implementation of curriculum mapping at the CCBC. The first research question considered in this study was: How do students perceive the relationship between student retention and implementation of GP? If students felt that GP was the reason they continued to take coursework, that would show that the implementation of this strategy was an effective tool for retention (Mann Levesque, 2018).

The second research question used for this study was: How do faculty perceive the relationship between student retention and implementation of GP? This question would focus on the faculty knowledge of GP. This question also considered how faculty may be implementing strategies to aid in student retention. (Mann Levesque, 2018). Themes that developed from student participants differed from those of faculty participants and appear in separate sections.

Students were identified by “S” and the number they were assigned. For example, the first student I interviewed was S1. Based on responses from students in the early phase of implementation (fall 2015), they did not clearly understand what GP are. Students in the later years (fall 2017 and fall 2018) had a better understanding of why GP were implemented. Students did not always know they were placed in a specific pathway and even why they were placed in a specific pathway.

The first question asked of the students was “Can you tell me how you first came to the decision to attend CCBC?” Students were able to answer right away.

Statements related to why they attended include:

- S1: "Family wanted me to do better, I started in 2015 and graduated in 2018 with an associate in Associate of Applied Science: Air Traffic Control."
- S2: "Family wanted me to do better, I started in 2016 and transferred to another university in 2018 to obtain a bachelor's degree in accounting."
- S3: "CCBC was the most affordable alternative in my decision to begin my career in Mathematics. I am currently at a university finishing classes to be a math teacher."
- S4: "I was not ready for SAT exam for a 4-year college since I only did 3 years of high school in this country therefore, I decided to start from community college."
- S5: "Single mom, tired of working two and three jobs at a time. No previous college and it was a good starting point for me."
- S6: "I chose CCBC as it was the local community college and just made sense."
- S7: "I was a Senior in high school, and I do not know how, but I was placed to go on a field trip to CCBC to do a placement test. I ended up doing the "Parallel Enrollment Program". Took my high school classes in the morning and went to CCBC in the afternoons."
- S8: "My cousin was in her last semester of nursing school at CCBC and talked about how much she enjoyed the program, professors, and staff. Also, after seeing how much money I would save attending a community college as opposed to the private university, I was in. I was completely convinced. I am glad I made the switch and can see a huge difference in my happiness."
- S9: "I first started attending CCBC because I was eligible for dual enrollment my senior year of high school (2015/2016) and while still being a high school student the college classes were much less expensive. I ended up staying after high school because it was the better financial option for college."
- S10: "It was my Aunt who suggested that CCBC is a good school. Her son went to CCBC for his 1st 2 years and finished a bachelor's degree in another University and is now very successful. And it is only 4 miles away where I live."
- S11: "I didn't want to take out student loans, so I chose community college as the cheaper route."
- S12: "It was my local community college and close to home."
- S13: "I wanted to start some prerequisites in my senior year of high school."
- S14: "While I was in high school, I was enrolled in a dual enrollment program."
- S15: "I ended up at CCBC 2017, 23 years old, single mother of a 7-year-old, no guidance, no support system, an idea of going into computer science but no idea of how to reach that goal."

THEMES

Throughout data analysis on student responses, 92 codes emerged. Those codes merged into 5 categories which were then condensed into 3 main themes. Those themes were cost (theme 1), support (theme 2), and time constraints (theme 3).

Theme 1: The average cost of attending a community college varies based on location (Feldman & Romano, 2019). There are more states that are trying to offer free college to students who meet certain criteria. The cost per credit at CCBC is approximately \$110 per credit, plus fees (Public website for CCBC, 2020). Students indicated CCBC had lower costs than universities and that was the main reason for choosing the community college. According to Nadworny (2019), students who are working part-time or full-time are often struggling financially, with college affordability as a major factor in their success. Students tend to drop out because of financial pressures they are facing. Student participants used terms like cost, affordability, convenience, and fair tuition and fees. Statements demonstrating participants' understanding of cost include:

S1: "I am attending CCBC due to cost and affordability."

S2: "Free college would be easier. I am thankful my parents paid for my college but not everyone has that."

S11: "I am happy with how CCBC offers an affordable and fair tuition/fee schedule."

Tuition and fees, as a percentage of public 4-year institution tuition and fees, increased approximately 2 % from 49.7% to 51.7%. CCBC is currently above the benchmark of less than 50% of the average tuition and fees at a 4-year public institution in the eastern part of the United States (Public website for CCBC, 2020).

With the economy today, it is harder for students to attend school without having to work. The College Promise Scholarship was implemented for students who do not meet requirements for the Pell Grant. According to the Maryland Higher Education Council, "The Community College Promise Scholarship is a last dollar award, available to students that plan to enroll in credit-bearing coursework leading to a vocational certificate, certificate, or an Associate's Degree; or in a sequence of credit or non-credit courses that leads to licensure or certification; or in a registered apprenticeship program at a Maryland community college for the 2020-2021 academic year" (MHEC.org, 2020).

Since this is a new program, making sure advisors are aware of all the resources for students is important. This can help students prepare for their education knowing that cost is not going to prevent them from starting classes.

Understanding what students want regarding support is important as well. When students were asked “What do you feel CCBC is doing well in regard to student retention?”

The responses were:

- S1: "Making it affordable for students and convenient. It's nice to know we have support when making choices for classes."
- S2: "Having advisors help me choose classes based on my major is convenient."
- S3: "The cost is one great reason it's very affordable versus a university and Student Life always has something going on giving students a reason to hang around on campus staying interested in actually being there also it's plenty of resources where you shouldn't fail."
- S4: "Faculty and instructors are very encouraging and helpful to make students successful. Furthermore, CCBC has smaller size classes compared to a four-year college which benefits students and instructors to ask questions and provide extra support if needed."
- S5: "I think the majority of people that go to community college are often trying to get the first few years done at a cheaper cost OR ones that have been out of school for a long time and looking to finish a degree or change of careers, so I feel the retention in those ones is automatic because they are there for a specific reason. As for the students who are fresh out of high school that chose CCBC as their total college experience ... things like on campus activities, sports, or free things is probably very appealing to them and might help with retention."
- S6: "Convenient and affordable."
- S7: "I have no idea what CCBC is doing regarding anything, I am just trying to take the classes I need. I don't pay attention to anything other than registration."
- S8: "Having other programs besides degree programs is really good for CCBC. If it was not for the certificate program I am in, I would not have returned to this school for any degree."
- S9: "I think it is helpful that CCBC sends out emails and text alerts geared towards student success and will include some of the resources available to students."
- S10: "Not sure about student retention. I think really good, encouraging professors encouraged me to stay and finished what I started."
- S11: "For me, CCBC offers an affordable and fair tuition/fee schedule. CCBC is also very flexible regarding availability of class times, program options, etc."
- S12: "They are really welcoming to students and are very affordable. I was assigned an advisor who helped me select classes that I needed."
- S13: "I think so, most people I know either started their classes at CCBC or got a degree from CCBC and return to continue to further their education in their current area or to start with a new degree."
- S14: "Pretty well, they always have someone you can speak to help you along the way."
- S15: "They offer a variety of support services to help students become successful. I was assigned an advisor, discussed my goals, helps plan my schedule, given a list of services available if needed, and signed a contract. This alone encourages me to do well because what excuse can I give if I'm not successful? Also, the advisor evaluates my grades and has to sign off on next semesters schedule."

Students who understood what GP' purpose was indicated that student retention strategies were working. According to Prystowsky et al., (2015) colleges need to increase meaningful connections across the campus community.

Students who understood what GP' purpose was indicated that student retention strategies were working. According to Prystowsky et al., (2015) colleges need to increase meaningful connections across the campus community. GP encourages students to connect through the pathways. To assist students better, advisors need to be trained to have those difficult conversations with students to determine if they are prepared for college courses. During this process, difficult conversations advisors should discuss include time management, commitment, and ways to overcome obstacles (Ferdousi, 2016). There should also be an online advising support icon beside the instructional lab provided on the campus. Students should be able to have access to online tutoring, library, counseling, and financial aid icons (Ferdousi, 2016). Students who participated in the scheduled pathway events indicated they were more supported. The pathway events were scheduled throughout the year and were promoted through social media. The pathway events included get involved fairs offering student success support and activities that were geared toward successful degree and certificate completion, transfer, and career suc-

cess. The students that I interviewed all returned for multiple semesters. They either graduated with a certificate or degree, or they transferred their credits to a university.

CCBC is always looking for ways to improve student retention. As of today, students who enter the General Studies pathways are assigned a mentor. This mentor is expected to assist them in selecting classes while utilizing the curriculum map. The "General Studies pathway" was selected as the group that received mentors to help guide students if they chose to switch pathways as they were taking classes. An estimated 20% to 50% of students enter college as undecided, and an estimated 75% of students change their major at least once before graduation (Horn & Moesta, 2019).

Students also benefit from getting to know one another. Even if the students are in a cohort and already familiar with most of their classmates, use classroom exercises to force them to occasionally interact with classmates they don't normally hang out with (Steinhauer, 2017). Offering the activities with the pathways will continue to help the students feel like they belong.

Theme 3: Students shared they would often avoid extracurricular activities related to GP due to their busy personal schedules. Most students verbalized they still had to work, or they were dually enrolled. The dually enrolled students were either junior or seniors in high school while taking college level courses.

Participants answered the question “How do you manage your time commitments outside of school? (Work, family or other activities)”

- S1: "I was fortunate enough that since my parents wanted me to go to school that I did not have to work. My job was school. I tried to attend all the activities."
- S2: "I did not have to work. My job was school."
- S3: "One thing at a time.... I'm happy that my tenure at work allows me the freedom to study and complete assignments for class and I don't have any children, yet which is also a bonus as far as any other activities if it doesn't involve studying, I can't make it."
- S4: "First two years of college were not as challenging but later on I had to cut down my work hours and personal pleasure activities such as video gaming. I have always lived with my parent since it is our culture, and it has been a big help as a student."
- S5: "I struggle finding good balance; but basically, family comes first and then I try juggle everything else. I think once I finish school, I can better manage commitments properly."
- S6: "I sacrifice sleep most days. I am a single mom of two toddlers, and I also help take care of my elderly parents. I am the first person in my family to go to college, which also puts more stress on me to do well. I do my best to have my children help when they can around the house, basically I am a one woman show."
- S7: "I have a planner and write everything down. When I took my first class, I wrote down everything and tried to stay involved with all the activities that were going on."
- S8: "My planner is my bible. I keep a handheld planner on me wherever I go and keep a desk calendar in my room, therefore I plan any activities according to what I have scheduled each week. For example, if I have an exam the upcoming week my close friends and family know that it means I am not going out very much that weekend, but if I don't have important deadlines or exams then I allow myself to have some fun and go out on the weekend."
- S9: "I originally put work before school because I had too financially. I've changed that approach since being in school. I put school as the focus and priority and even left my job for the year to be able to focus on school as much as possible. My second priority would definitely be family and I try to spend as much time as possible with them."
- S10: "It is hard to manage time outside of school. I had to send my only daughter to my parents in another state so they could look after her and help her study. I am the first person in my family to go to college and I want to make my parents and children proud. I worked the night shift, and it is hard to stay awake during the day. Sleeping less but trying to compensate with good nutrition."
- S11: "I've learned to say no if I cannot do something (attend a family event, stay over at work)-I have a self-schedule option at my job, which is a great help in balancing school and work. -I use a calendar to keep track of everything in both my academic and personal life."
- S12: "When I first started school, it was easy, I was single and was able to go to school full-time. Fast forward to today, I am married and have a daughter. My husband helps a lot with my daughter, I do school-work when my daughter sleeps, and I work two days a week. Everything else I planned. I thought I would finish school in two years, but life happens."
- S13: "I try to prepare myself as much as possible prior to starting a course then while I am in the course I try to focus as much time as possible on the course while my family is busy at work during the days, and I dedicate my weekends to working and my weekdays to schoolwork."
- S14: "Planning, I am a huge planner, I sit down once a week and make sure everything is as organized as it can be. When I took my first class, I thought it would be easy to do but I know that my education needs to be priority."
- S15: "I had to save and financially plan. Now I'm only working on weekends, which allows me ample time for studying without having to stress about bills and any additional school cost."

Students in the early implementation of GP did not always know what pathway they were in, or even what GP were. Participant S11 stated “I do not have enough knowledge of GP or any type of pathway to answer this question.”

As the years passed after CCBC first implemented GP, faculty and staff did a better job of explaining to students and offering more information to advisors. Participant S4 had a better understanding of GP by stating: “I kept in touch with the advisor who initially helped me to register for the classes. I also used CCBC website to explore different majors and careers.” Students want to do well and want support. Participant S9 stated “I feel that the faculty are way more involved in the students and the campus. In one semester, I have already participated in more campus events and activities than I did in when I first started in 2018. GP has increased support for me. I know that I have support from faculty and staff.” According to Aljohani, (2016a) higher retention comes from administrative support. Faculty advisers’ job is to help students plan their schedules, be successful in their course work, and prepare for their careers (Ferdousi, 2016). By having faculty and staff encourage students, students will more than likely return for subsequent semesters.

Students were from the same college and knew that they were interviewing about the GP. There were no discrepancy cases. Students were sent an e-mail asking for participation in the study. Although they did not know the

questions I was going to ask, the e-mail described the purpose of the study. Students were selected on a first come–first-serve basis. Even though not all the students knew what Guided Pathway they were in, they knew enough to volunteer for the study. Approximately 67% of first-time students required at least one developmental education course in fall 2018 (Public website for CCBC, 2020). This study only focused on students taking English 101 as their first course. Future research could be done on a broader student population. This study only focused on students that were enrolled in English 101 as their first course. Students do not always start with English 101 and that could be why there was no discrepancy cases.

Results from Faculty

I was able to formally interview 4 faculty members that teach in the English department on the same campus the students I interviewed attended. I conducted one-on-one interviews with faculty. I reminded them their answers were confidential, and I wanted honest answers. During data collection, faculty were identified with an “F” then numbered in order as F1, F2, etc. This helped to maintain confidentiality. I did not personally know the faculty who were interviewed as I do not teach on the same campus.

THEMES:

Throughout the data analysis of the faculty interviews, 52 codes emerged. After reviewing the data, 2 main themes emerged during the interviews: community and advising.

Faculty I interviewed all had vested interests in the college. Most of them mentioned they attended CCBC for their undergraduate work and wanted to give back to the community. Just like student responses, faculty all mentioned that CCBC needs more advisors for the GP to be a strong retention strategy. I only interviewed 4 faculty members, so there was less variety in faculty interview data than there was among students.

Theme 1: Working at a community college has lots of benefits. Faculty are usually from the area, which can increase retention rates with knowing that faculty return to the school they attended for their undergraduate studies. In a study completed by Pons et al., (2017), faculty were asked why they chose community college over a university. Approximately 68% of the faculty stated they preferred to work at a local college that they were familiar with and 54% of the faculty stated they chose to work at the community college for the students.

When asked "Why did you choose CCBC?" the responses were clear:

F1: "I chose the community college because they offered me the opportunity to teach English to students at all ability levels and to help students realize their dreams, as well as to grow professionally and personally in a non-restrictive non-threatening environment. I live in the area, and it just made sense to work here, and I have been here for a long time."

F2: "I was born and raised in the county and feel like I know the area well and its student population. I also enjoy teaching at CCBC because of the plethora of professional development opportunities that are offered

and also my wonderful students and generous, collaborative, and like-minded colleagues. Plus, CCBC is one of the only local colleges/universities still hiring full-time faculty members! (Every other school where I've taught has moved exclusively to an adjunct model.)"

F3: "I have always lived in the area; I went to school here before the campuses were combined. I felt that I wanted to give back to my community. CCBC also has tons of professional development for me as well as new faculty. I like how the college puts us in front like they put the students first. Keeps most of us here. That's why I stay, our administration is very supportive."

F4: "It's my alma mater. I grew up in the area and knew I wanted to teach here when I finished school."

Having faculty invested in their students is a great attribute to CCBC. Faculty that live in the area can also help with guiding students to obtain jobs. The faculty that I interviewed all had strong ties to the community. They enjoy working for the community college.

Theme 2: Faculty indicated CCBC needs more advisers to help guide students. There are times when students just come to the college to take classes, but do not really know what they want to do. For students that do not have a declared major, at the time of registration, they are placed in the General Studies pathway. After taking some classes, students have a hard time switching to another pathway, as they do not know how or who to talk to. Faculty responses for the question "What do you perceive are barriers to implementation of GP in higher education?" were:

Faculty responses for the question “What do you perceive are barriers to implementation of GP in higher education?” were:

F1: “Students placed in pathways do not have as many opportunities to explore fields outside of their designated track. So, once they are placed in a pathway, they may feel stuck or not know what else is out there that they would be interested in or excel in if given the opportunity to explore other pathways. Also, they might feel as though they cannot be interested in different majors/areas outside their own pathway. For example, drawing and biology are housed in two different pathways, but someone might want to be a medical illustrator. They would have to have both a science degree and an art degree; but those two areas are in very different pathways with little overlap.”

F2: “It’s always baffled me that students are not required to meet with an academic advisor, who could help them navigate their chosen pathway or even identify one if they’re not sure which might be the right fit. I assume this is not a requirement because we have so many students and only so many advisors, but it’s never made any sense to me why every student isn’t automatically set up with an advisor who regularly checks in and helps them manage their course load at CCBC.”

F3: “Advising. I think we need more advisors. The advisors are stretched so thin that some students don’t get the opportunity to meet with them. There are students who just don’t know what to do and they spend way too much money on trying to figure it out. I like that we have implemented more strategies to help students but advising needs to be beefed up to be more effective.”

F4: “Students not understanding the pathway process, and how to navigate through the college for help. We need more advisors to help support the students.”

Faculty need to have a better understanding of what the advisors deal with on a day-to-day basis. The faculty interviewed all suggested that CCBC was increasing strategies to improve student retention and they all knew the purpose behind the initiative of GP.

F3 stated “I think with all the incentives that CCBC has implemented it’s hard to determine which one is working better than others. We have initiatives like College Promise will also help with retention, but that remains to be seen.” Again, with all the initiatives that are implemented, it is hard to determine if one strategy works better than others in a short amount of time. Each year, CCBC learns more of how GP can increase student retention. To help students stay on track, the college strengthened its advising and degree-planning processes—2 critical elements of the GP model (Public website for CCBC, 2020). According to data from retention rates at CCBC, retention increased from 36% to 43% after implementation of GP (Public website for CCBC, 2020). Although there is no true data to show GP was the only reason for the increase, more research is needed.

Evidence of Trustworthiness

After I completed data analysis, I had a peer reviewer from PRE at CCBC review all my documentation to make sure it is credible and dependable. The reviewer did not work directly with any participants and their anonymity was assured with the removal of all personal identifiers. With the data collected, I can show transferability as student retention did increase. According to retention rates at CCBC, retention increased from 36% to 43% after implementation of GP (Public website for CCBC, 2020).

DISCUSSION & CONCLUSION

A main concern for CCBC is low student retention. Retention from fall to spring was 36% in 2015 and has increased to 43% since the implementation of GP (Public website of CCBC, 2020). In 2015, CCBC initiated a new retention model to help increase student retention. Data is currently being collected to assess the overall effectiveness of this initiative. Future plans can include disaggregating outcomes by ethnicity.

After completing a 1:1 participant interview, the data suggests that GP has improved retention over the years. In the beginning years of implementation, students did not even know what GP was. In the later years, students had a better understanding of the pathway they were placed in and why.

DISCUSSION & CONCLUSION

According to data, faculty that were not involved in the implementation did not fully understand how GP helped with student retention.

In the later years, students had a better understanding of the retention strategy. Faculty were more vested as the retention strategies improved. Both students and faculty indicated that advisors need to be more knowledgeable of the retention module. Both students and faculty expressed positive and negative experiences related to GP.

The first common theme that emerged from the data was the cost of going to school. The cost of college is a main issue when assessing why students attend or do not attend college (Feldman & Romano, 2019). According to Watson and Chen (2019), offering more educational resources to students can increase student retention. The federal government provides grants for students attending community college. Most types of grants, unlike loans, are sources of free money that generally do not have to be repaid (Grants, 2020). Not all students are eligible for these types of grants. CCBC now offers additional governmental funding like the College Promise Scholarship. These additional benefits can open up opportunities for students who may not have been

eligible for grants and scholarships like the Pell Grant. One of the challenges of offering these additional governmental benefits is that the college has to increase student retention. Another area that colleges are looking at are partnerships and apprenticeship programs. CCBC has entered into partnerships with local business to help students afford to pay for college.

Another common theme that emerged from the data was advising. Referring back to Tinto's (1975) theory of retention, students want to feel part of a community. Providing student support service programs is relevant to Tinto's integration model as it can provide intrusive student support to students which can contribute to academic integration. Tinto's model can also be an attribute to the social integration through making students feel a sense of belonging by alleviating the sense of alienation and isolation and ultimately meet the needs of those who are first generation during the early years of the college experience (Nall, 2017). Community colleges do not have the same amenities as universities.

DISCUSSION & CONCLUSION

Students who seek out academic advising support are more likely to continue in the program

(Glew et al., 2019).

Offering more support is key to keeping students on campus, enrolled, and returning. Participant students who were interviewed did return for multiple semesters. Some student participants graduated with a degree or certificate where others transferred to a university to complete their graduate degree. CCBC has partnerships with some local universities to make it easier for transfer students.

Limitations of the Study

One limitation of the study was that only 1 community college was used to gain perceptions of students and faculty. I only interviewed students from 1 of the campuses that took English 101 as their first course. Future research could also be done with a variety of faculty. Some students need to take remediation coursework first. With only interviewing 5 students from each year, the data did not come from the full population of first-semester students.

Recommendations

The first recommendation is to increase the knowledge of the advisors and faculty. Having more advisors available to students at all times, not just at the beginning of the semester, can help keep students on track. Students need support year-round. According to Burge-Hall et al., (2019) identifying the need for adequate

and proactive advising programs to foster student success is important. As the evidence shows, more advisors are important. Academic advising offers a path to promote student retention and persistence to graduation (Kulls, 2016). Most of the students stated they did not have the needed support, or their advisors were overwhelmed.

The use of videoconferencing tools, such as GoToMeeting, Skype, or Zoom, provide real-time support services to distance learners. Videoconferencing replicates an in-person advising session. Virtual advisors and students have the opportunity to familiarize themselves with each other and review documents more efficiently with the use of this tool (Ohrablo, 2016). Implementing videoconferencing sessions helps virtual learners feel connected and engaged with their program of study and college. Consequently, another benefit is the ability to record the session for future reference.

In today's world we are learning that we have to support our students. Further research could be done with students on other course work. I selected English 101 because most of the majors at CCBC require English 101. There have been a lot of improvements in the GP model since its implementation in 2015.

DISCUSSION & CONCLUSION

This study presents clear evidence that student retention remains an issue. One retention strategy does not fix all the issues

Faculty and staff have a better understanding of the GP, and they are more involved in the pathway events. CCBC has also added more advisors to assist students and increased the pathway events each semester.

Today, CCBC students are placed in a pathway upon admission to the college. To refer back to Tinto, (1975) theories of retention are that students will be much more likely to continue in school when they feel part of the college community, both socially and academically. By placing students in similar classes, this can increase social engagement (Soria & Taylor Jr., 2016). Students feel more connected to the college if they are in similar coursework. In a study on retention in first-year college students completed by Connolly et al. (2017), students had higher retention rates when students were enrolled in the same classes. This increased the student support system as students as a first-year student can be stressed, encouraging students to enroll in the same courses helps them stay motivated. The results of their study showed increased retention rates. At CCBC, students are encouraged to take the same classes to build friendships.

In addition to what CCBC is already doing with student retention, increasing activities

like high-impact practices (HIPs) into curricula will increase student engagement. HIPs are a relatively new concept in the classroom. HIPs are tools for teaching and learning which have proved to have positive effects on student retention (Hall & O'Neal, 2016; White, 2018).

HIPs are being used in some courses, but could be added to more courses to increase retention. The more we can support our students, the higher retention we should see. Future researchers should look at these student experiences and how the experiences shaped a student's decision to leave their educational pursuit. Future research could also investigate the programs or services offered at the community college to retain students and their effectiveness.

Implications

This study presents clear evidence that student retention remains an issue. One retention strategy does not fix all the issues. Educators need to do a better job of supporting their students to keep them returning. Literature suggests that students want a clear map of what they need to take. Taking unnecessary coursework puts a strain on students emotionally and financially, and GP may be one mechanism to reduce this stress.

REFERENCES

1. Aljohani, O. (2016a). A review of contemporary international literature on student retention in higher education. *International Journal of Education and Literacy Studies*, 4(1), 40-52.
2. Aljohani, O. (2016b). A comprehensive review of the major studies and theoretical of student retention in higher education. *Higher Education Studies*, 6(2), 1-18.
3. Bailey, T., Jaggars, S., & Jenkins, D. (2015). *Redesigning America's community colleges: A clearer path to student success*. Cambridge, MA: Harvard University Press.
4. Burge-Hall, V., Garrison, L., Giles-Brown, L., Lepore, D., McNall, M., Pauly, C., ... Vaughn Jordan, L. (2019). Taking the LEAP (Learner Engaged Advising Programs): VCCS Advising Practices and Recommendations. *Inquiry*, 22(1).
5. Burkholder, G. J., Cox, K. A., & Crawford, L. M. (Eds.). (2016). *The scholar-practitioner's guide to research design*. [Apple Edition]. Retrieved from <http://mbsdirect.vitalsource.com>
6. Connolly, S., Flynn, E. E., Jemmott, J., & Oestreicher, E. (2017). First year experience for at risk college students. *College Student Journal*, 51(1), 1-6.
7. Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, 41(1), 89-91.
8. Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed methods approach*. Thousand Oaks, CA: Sage.
9. Creswell, J. (2012). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage.
10. Devault, G. (2018). Establishing trustworthiness in qualitative research: What are qualitative research processes? The Balance; Small Business. Retrieved from <https://www.thebalancesmb.com/establishing-trustworthiness-in-qualitative-research-2297042>
11. Feldman, D. H., & Romano, R. M. (2019). Drivers of community college costs and prices. *Change: The Magazine of Higher Learning*, 51(3), 21-27.
12. Ferdousi, B. (2016). Addressing student retention and persistence issue in online classes. In Proceedings of the 2016 American Society for Engineering Education North Central Section Conference, Mt. Pleasant, MI.

13. Glew, P. J., Ramjan, L. M., Salas, M., Raper, K., Creed, H., & Salamonson, Y. (2019). Relationships between academic literacy support, student retention and academic performance. *Nurse Education in Practice*, 39, 61-66.
14. Grants. (2020). Retrieved from <https://studentaid.gov/understand-aid/types/grants>
15. Hall, B. H., & O'Neal, T. J. (2016). The residential learning community as a platform for high-impact educational practices aimed at at-risk student success. *Journal of the Scholarship of Teaching & Learning*, 16(6), 42-55. <https://doi.org/10.14434/josotl.v16i6.19585>
16. Kulls, J. (2016). An alternative approach for advising online students. Retrieved from https://www.naspa.org/images/uploads/events/An_Alternative_Approach_for_Advising_Online_Students.docx
17. Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine & Primary Care*, 4(3), 324-327.
18. Mann Levesque, E. (2018). Improving community college completion rates by addressing structural and motivational barriers. Retrieved from <https://www.brookings.edu/research/community-college-completion-rates-structural-and-motivational-barriers/>
19. Maryland Higher Education Commission, (2020). Community College Promise Scholarship. https://mhec.state.md.us/preparing/Pages/FinancialAid/ProgramDescriptions/prog_MDCommunityCollegePromiseScholarship.aspx
20. Nadworny, E. (2019). College completion rates are up, but the numbers will still surprise you. Retrieved from <https://www.npr.org/2019/03/13/681621047/college-completion-rates-are-up-but-the-numbers-will-still-surprise-you>
21. Nall, B. Q. (2017). The effects of a student support services program on first-generation and low-income student retention (dissertation). Trevecca Nazarene University.
22. National Center for Education Statistics (2011a). Undergraduate graduation rates. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=40>
23. National Center for Education Statistics (2011b). Web tables: Community college student outcomes: 1994-2009. Retrieved from <https://nces.ed.gov/pubs2012/2012253.pdf>

24. Ohrablo, S. (2016). Advising online students: Replicating best practices of face-to-face advising. Retrieved from <http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Advising-Online-StudentsReplicating-Best-Practices-of-Face-to-FaceAdvising.aspx>
25. Parylo, O., & Zepeda, S. J. (2015). Connecting principal succession and professional learning. *Journal of School Leadership*, 25, 940-968. <https://doi.org/10.1177/105268461502500506>
26. Pluhta, E., & Penny, G. (2013). The effect of a community college promise scholarship on access and success. *Community College Journal of Research and Practice*, 37(10), 723-734. <https://doi.org/10.1080/10668926.2011.592412>
27. Pons, P. E., Burnett, D. D., Williams, M. R., & Paredes, T. M. (2017). Why do they do it? A case study of factors influencing part-time faculty to seek employment at a community college. *Community College Enterprise*, 23(1), 43-59.
28. Prystowsky, R., Koch, A., & Baldwin, C. (2015). Operation 100%, or completion by redesign. *Peer Review*, 17(4), 19-22.
29. Public Website for CCBC. (2020). Retrieved from <https://www.ccbcmd.edu/Programs-and-Courses/Degrees-and-Certificates/Pathways.aspx>
30. Ravitch, S., & Mittenfelner, N. (2016). *Qualitative Research: Bridging the conceptual, theoretical, and methodological*. Thousand Oaks, CA: Sage.
31. Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data*. London: Sage.
32. Saldaña, J. (2015). *The coding manual for qualitative researchers*. Los Angeles: SAGE.TABLES.
33. Tinto, V. (1975). Dropout from higher education: a theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125. <https://doi.org/10.3102/00346543045001089>