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The Perceptions of Faculty and Counselors on the College Readiness of Students at Community Colleges

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Abstract

The purpose of this study was to examine the perceptions of faculty and counselors on the college readiness of students at community colleges. It explored challenges and barriers experienced by developmental faculty and counselors. This qualitative study examined the lived experiences of faculty and counselors in instructing and advising underprepared students at four community colleges using the Conley Four Dimensions of College Readiness Model. In-depth interviews were conducted with eighteen participants. Major barriers to student success included limited proficiency in reading and writing, inadequate mathematical preparation, poor comprehension skills, and deficient problem formulation capabilities.

Keywords: developmental education, unprepared students, college readiness, higher education, postsecondary.

Introduction

College readiness has been a concern in higher education for several decades (Reed & Justice, 2014; Luoch, 2017; U.S. Dept of Ed, 2017; Wickli, 2018). Many students transitioning from secondary to postsecondary education often lack the skills needed to successfully master college-level coursework (Conley, 2008; Reed & Justice, 2014). For some students, not being college-ready has become an obstacle, necessitating reading, math, and English remediation to prepare for college-ready courses. The term remediation has been debated (Conley, 2008; Er, 2017; Ngo et al., 2021). Some have referred to the profiling associated with developmental education while others believe students suffer unintended outcomes because of the stigmas (Deli-Amen & Rosenbaum, 2002). Education practitioners continue to use remediation and developmental education interchangeably (Sachar et al., 2019). Struggling underprepared students may feel stigmatized by the remedial label and not attend classes. While other developmental students may lack motivation in certain remedial classes due to the profiling (Khalifa et al., 2023). Developmental education is a research-based framework that enables underprepared students to experience intellectual, social, and emotional growth (Arendale et al., 2007). Developmental instructional courses afford underprepared students accessibility to career counseling, academic advice, tutoring, and personal counseling (Arendale et al., 2007).

Universities have responded to increased focus on college preparedness by implementing placement tests to assess levels of student college readiness (Reed & Justice, 2014). It is generally accepted that many students transitioning from secondary to postsecondary education lack the skills necessary for college-level coursework (Conley, 2008; Reed & Justice, 2014). Examining postsecondary remediation has been strongly advocated to increase student college readiness skills (Luoch, 2017; Wickli, 2018; VanOra, 2019). It is important to understand the ever-changing landscape of who students are, how student preparedness for college is mediated by social and education experiences, and how to best identify and address the needs of diverse students.

Study Purpose / Research Questions

This study examined the perceptions of faculty and counselors regarding student readiness at community colleges utilizing Conley's Four Dimensions of College Readiness framework (2007). The Conley conceptual model was used to frame study questions around four key problem-solving skills needed for student success.

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The needed skills included cognitive strategies, content knowledge, academic learning behavior skills, and transition knowledge skills. Key cognitive strategies involved problem formulation, research, interpretation, communication, precision, and accuracy. Content knowledge entailed understanding big ideas from core subjects. Academic learning behavior skills encompassed self-management, study skills, goal setting, self-awareness, and persistence. Transition knowledge skills included understanding admissions requirements, college types and admissions, college affordability, college culture, and relations with professors (Conley, 2007; U.S. Dept of Ed, 2017; Wickli, 2018; Khalifa et al., 2023). For this study, the research questions were: (1) What are the perceptions of counselors and developmental faculty concerning student cognitive abilities to college readiness?, (2) What key content knowledge strategies are counselors and developmental faculty implementing to overcome the barriers to college readiness?, (3) What key academic behaviors and learning strategies do counselors and developmental faculty implement to improve the college readiness of community college students?, and (4) What transition practices should be explored for future collaboration with high school counselors and education practitioners to increase college readiness skills in postsecondary education?

College preparation is a multidimensional notion involving various elements both within and outside the class. Study practices, attitudes, available resources, cognitive abilities, and family socioeconomic status are among the variables contributing to the absence of college-ready skills (Akbar, 2019). Developmental coursework is a result of the epidemic of struggling students in higher education (Payne & Lyman, 1996). Unprepared students frequently struggle with issue formation, resolution, evaluating, and successfully utilizing reference information (Brown & Lynch, 2022). From kindergarten to twelfth grade, school counselors have been instructed to prepare students for postsecondary education (Parikh-Foxx et al., 2020). Many students choose to further their education at a college or university to ensure success in their future (Wickli, 2018). However, students frequently are unexpectedly confronted with the reality of enrolling in developmental education coursework. The American College Test (ACT), Scholastic Assessment Test (SAT) and Accuplacer placement assessments indicated that many students lack preparedness for college-level curriculums in community colleges and universities. Among community college students, enrollment in developmental courses has significantly increased (Arendale et al., 2007; Barrington-Brown & Lynch, 2022). Two-thirds of community college students have academic deficiencies in at least one major subject area, which makes it difficult to perform in college (Barrington-Brown & Lynch, 2022; Jenkins et al., 2022). Barrington-Brown & Lynch (2022) believe that developmental education provides underprepared students with open access to higher education who might otherwise be disadvantaged or excluded from postsecondary education due to academic deficiencies. Khalifa et al. (2023) argue that students who are mostly in need of developmental intervention are the ones most deterred by it. They require some handholding or some type of academic support from developmental faculty and staff. Developmental education is crucial for students who possess weak or poor academic skills because it plays a critical role in improving their academic outcomes (Barrington-Brown & Lynch 2022).

Rutschow et al., (2019) consider developmental education as the merging of educational programs and support services under the direction of adult learning and development principles. Developmental education fosters cognitive and effective development in postsecondary learners at all levels of the learning continuum. The American Association of Community Colleges (2015) suggested most first-generation college students and undergraduates who attend college part-time frequently need at least one developmental course. Faculty and counselors have examined methods to bridge the curriculum gaps between what students know in high school and what they should know coming into college (Jenkins et al., 2022).

Underprepared students respond differently to information, but with the assistance of dedicated faculty who work to address identified shortcomings, underprepared students can successfully transition to college-level work (Turk, 2017). Not every student requires the same set of knowledge and skills to become college-ready. Still, some students need supplemental foundation skills to overcome deficiencies in critical areas for academic success (Conley, 2013). Faculty at four-year institutions have advised numerous students who consider themselves to be college-ready. However, the transition from secondary to postsecondary education can be difficult, and even high-achieving students find themselves unprepared for academic success (Holles, 2016).

Shield & O'Dwyer (2017) found that African-American and Hispanic students make up sixty-two percent of remedial education courses at four-year institutions. Faculty are aware of the difficulties that underprepared students face in developmental education, as well as the low completion rates of students who frequently fall through the cracks in secondary schools (Jenkins et al., 2022). Despite, The Common Core State Standards that were created to close college readiness gaps between high school and college entrance requirements (Tierney & Garcia, 2011). For some faculty, preparing underprepared students for postsecondary education has been both a hardship and an ease (Reed & Justice, 2014).

Method

Limited qualitative research has been conducted on the perceptions of stakeholders similar to faculty and counselors on the college readiness of students at community colleges. Marshall & Rossman (2016) advocated for a qualitative method when examining concepts, identifying participant trends, and ascertaining opinions. By utilizing the qualitative approach, the researchers gained a greater insight into developmental program pedagogies and extracted and analyzed key elements of student enrollment, persistence, retention, and matriculation to credit-bearing courses in postsecondary education through in-depth interviews. The interchange of views between the researchers and study participants allowed for capturing rich perspectives of lived experiences from developmental educators at four community college study sites.

Site Selection and Population

Study sites were four colleges within a community college system. The community college system had a student population of 15,653. Sites were selected based on student population, commuter, and on-campus residents enrolled in developmental education courses. Study sites were also assigned pseudonyms for anonymity. The main community college system was Epsilon Community College. The four sites within the community college system were Pi, Sphere, Cube, and Cylinder. Students with low placement scores and those identified as requiring developmental work in core academic subjects were enrolled in developmental education at each campus site. Traditional and nontraditional development courses and online assistance from developmental faculty provided assessment of students experiencing course difficulties.

Sample Selection

The study sample consisted of eighteen participants, eleven faculty and seven counselors within one community college system. Study participants taught and advised first- and second-year developmental students. Developmental faculty had at least three years of developmental teaching experience and counselors had minimally two years of counseling experience. Participants were full-time employees of the community college system serving in the roles of English, mathematics, and reading instructors, and academic counselors. Purposeful sampling was used to select study participants. Using a purposive sampling approach allowed the researchers to recruit participants with similar experiences and knowledge based on established relationships with students. The sampling frame of faculty teaching developmental mathematics, English, and reading was developed from the faculty roster at each institution. An exhaustive list of counselors and instructors from the four campus sites was developed. Emails were followed up with telephone calls. Eleven faculty and seven counselors agreed to participate in the study. Each participant completed a 60-75-minute in-depth interview examining perceptions of student cognitive abilities, instructional strategies implemented, and recommended future practices to increase college readiness skills for non-college-ready students.

Data Collection

In-depth interviews were used to collect study data. Study participants shared perceptions of student college readiness in mathematics, problem formulation, time management, reading, English, and comprehension skills. Interviews were recorded using the Zoom platform. A research journal was also utilized for note-taking. The research journal was vital in retaining the views and reflections of participants regarding study techniques, goal-setting, persistence, collaborative learning, and student ownership of learning towards underprepared students. Demographic data collected included age, gender, ethnicity, present position, and length of service at the institution. Interview data and transcripts were encrypted and saved in a secured file cabinet and room on a secure SanDisk (SD) card. Journal notes were also sealed and placed in a closed file cabinet and room.

Data Analysis Procedures

Data from interviews were evaluated using codes, categories, and themes based on participant responses. The researchers hand-coded participant narratives. Coding involved identifying issues, topics, differences, and similarities of participants. Raw data were transcribed and evaluated after the initial interviews to create codes, categories, and themes for qualitative analysis. Otter software assisted the researchers in accurately transcribing recorded interviews. Transcripts were reviewed by participants for accuracy. The researchers examined the data for remarks that were not germane, repetitious, or overlying (Creswell & Creswell, 2018). Field notes and interview recordings were used to confirm the accuracy and precise depiction of the data source.

Description of Participants and Sample

Eighteen participants included nine (50%) White Americans, eight (44%) African Americans, and one (6%) Hispanic American. Most, thirteen (72%) were females and five (28%) were males enrolled in the research study.

Findings

Interview questions generated an abundance of information from study participants. Several themes emerged from each research question and revealed the lived experiences and perceptions of the study participants. For instance, lack of reading, writing, and cognitive skills that are necessary for higher education. Participants addressed low standardized test assessments that delayed the underprepared student enrollment in credit-bearing courses. Faculty and counselors believed that a recent change in developmental education had occurred and developmental courses were renamed Excel Education in hopes of motivating and promoting self-efficacy in students.

RQ1 asked: What are the perceptions of counselors and developmental faculty concerning student cognitive abilities of college readiness?

Theme 1.1: Poor Reading, Writing, and Mathematic Skills

Participants in the study indicated students were inadequately prepared to master skills needed for success in credit-bearing courses. Participants described the inability of developmental students to develop complete sentences and make grammatical errors including spelling and sentence structure. They described the limited writing abilities of underprepared students enrolled in the developmental courses. For example, some students had poor syntax skills and were unprepared for English Composition which often led to problems comprehending course content and an inability to complete assignments.

Participant Silver stated:

Students lack a basic English foundation they have weak sentence structure they weren't prepared for English Composition I, therefore, requiring them to do more to prepare for class. I would simplify class instructions and assignments to ensure they understood the writing assignments so subject skills would improve. Participant, Dr. Beta, indicated poor writing skills presented a major barrier for the academically underprepared student. "I am amazed at the lack of ability to write effectively, and I mean to write a complete sentence."

Mr. Zinc described student deficiencies in mathematics and language skills development. He said, "that underprepared students have poor skills in mathematics and have not mastered the English language mastery skills. Algebra skills aren't there, they are not prepared for college when they come to us and developmental students' reading level is not up to par." "Students also struggled with word applications in math assignments and tests."

Theme 1.2: Poor Comprehension of Content

Participants described difficulties developmental students experienced related to comprehension performance on assessments, class assignments, and eLearning platforms. Participants felt deficiencies weakened student abilities to comprehend information and accurately respond. Iron noted, "Students were disorganized and had difficulty comprehending lecture materials. Some developmental education students had single digits ACT scores because of difficulty in understanding complex words and were ill-prepared and not college ready." Similarly, Dr. Beta said:

> They do not read enough of the institution's announcements to get an understanding of what is expected from them which, causes them to miss deadlines. Some of my online students receive failing grades or withdraw from my classes because they do not read the entire instructions and I immediately deduct points from assignments on the first day of class."

Theme 1.3: Poor College Readiness Skills

Faculty and counselors felt the developmental students exhibited poor readiness skills that contributed to a lack of comprehension of course content and poor performance on institutional placement tests. Participants indicated students were not prepared for college, they described students as having cognitive deficiencies related to spelling, applying reading concepts, and performing basic mathematical functions factors delaying entry into credit-bearing courses. Neon said,

> Students do not score well on standardized tests or the Accuplacer test. Developmental students are embarrassed or timid during class lectures when faculty ask them to read. They stumble over and mispronounce words whenever I ask them to read something to me. They should have acquired those skills in K-12. They do not understand the college process and are not college-ready.

Tin believed students did not devote adequate time and effort needed to comprehend mathematical constructs and applications. He said, "You have to practice math applications several times a week to keep it fresh. They used a calculator for basic mathematical questions. There is a lack of confidence in knowing simple timetables. I know it is too late to reteach those skills."

RQ2 asked: What key content knowledge strategies are counselors and developmental faculty implementing to overcome the barriers to college readiness?

Theme 1.4: Proving eLearning Support

Faculty described additional eLearning platforms that had been employed by the institutions to assist developmental students in core subject areas such as electronic apps and videos that delivered course refreshers in grammar, sentence structures, and mathematics. Gamma said, "We still look at theories, and theoretical approaches to assist students with cognitive learning because there is no one way to teach a student all theories." Copper commented,

There is a Distance Learning Office that has available resources for our online students. We make every effort to ensure all students have the educational resources that are needed for academic success at this campus. Tin also spoke about how she created and prepared activities, and videos, and assigned students to review YouTube materials to prepare for class lectures, especially after the onset of the COVID-19 pandemic in 2020.

Participants felt eLearning resources were important for student persistence, retention, and graduation. Developmental students gained access to platforms such as Canvas modules, grammar activities, and mathematical computations that strengthen cognitive areas. Krypton spoke about various platforms that she utilized to minimize underprepared student grammatical errors. She said:

> In my class students utilize a platform called Plato and it has been very useful and helpful. As well as quill.org, and noredlink.com provides a refresher on grammar, because I noticed that developmental students, many of them, have forgotten those grammatical rules even with punctuation. Every semester, I always have one or two students who struggle to know where to place a period. There cannot be a straight lecture every day, students need hands-on interactive materials.

Theme 1.5: Promote Strong Reading Skills

Counselors and faculty agreed on the importance of students becoming strong readers. Participants indicated developmental students had low reading scores, were self-conscious, and were reluctant to seek assistance. Participants encouraged and motivated students to enroll in developmental reading classes because classes were smaller and staff expressed concern and empathy for the needs of students. Neon said, "We encourage developmental students to enroll in reading courses to build reading skills in all subjects. Underprepared students are told that developmental reading is a necessary class and it builds reading skills for all subjects."

Radon agreed:

> Having smaller classes is another component of preparing students to become better readers. Being able to identify who needs assistance and providing it to developmental students because this is a community college compared to a four-year institution. Just focusing on smaller numbers and empathizing with students means a lot to them.

Equally, Krypton cited, "Promoting reading skills is essential to attaining college success, employment opportunities, and improving written and verbal communication skills. When students lack simple reading skills, it impedes growth to becoming successful students and progressing at a community college level."

Theme 1.6: Expand Faculty Pedagogies

Participants felt pedagogical courses were implemented to improve the skills of the underprepared students in developmental courses. Faculty members agreed that changes needed to be made because of the diversity of learners. Faculty believed there was a need to reconstruct pedagogies that stimulated student interest in learning and promoted student academic growth. Neon described how the developmental faculty revamped developmental education courses and how the courses were taught. Dr. Cobalt said, "As faculty, we have changed it up and there cannot be straight lectures every day. There have to be interactive websites and apps added to our pedagogies to expect developmental students and this new generation of students to learn and enjoy class. Some students have mentioned they found it to be beneficial."

Dr. Carbon said,

> To be an effective faculty member beyond content knowledge you have to know your pedagogy to understand the art of teaching. You have to understand how to engage with students. To have some understanding of a learning theory and how students learn best. There are diverse types of student learners and to be an effective faculty member, we have implemented new teaching strategies in our curriculums. That's why this institution has a Center for Teaching and Learning, which is all about helping faculty grow to teach.

RO3 asked: What key academic behaviors and learning strategies do counselors and developmental faculty implement to improve the college readiness of community college students?

Theme 1.7: Extend Instruction Schedules

Faulty participants indicated that they developed strategies to improve instruction for teaching underprepared students. Underprepared students were allowed to enroll in three-or four-hour developmental courses. The additional hours allowed the instructors more time to cover course materials at a slower pace. Participants indicated that students who took advantage of the extended hours had positive results.

Dr. Beta indicated:

> By extending students' allotted times things are broken down in a mode that best helps them to comprehend information. We have to examine our methods of instructing developmental students. Creating more time to engage with students, while having smaller classes will result in a much more positive relationship with staff and students.

Theme 1.8: Encourage Student Persistence

Participants noted that many students in developmental classes lack self-confidence and self-efficacy. Faculty encouraged students to persist despite limited skills and to celebrate the small wins of student success. Calcium said:

> I have been working with our student success center on different projects to mentor developmental students. It is called Excel Mentoring and students are assigned to a mentor. Most individuals have about 20 students and we reach out to them each week to see how they are doing and to encourage them to reach out to instructors and resources.

Silver said, "I encouragingly communicate to my students because they feel defeated and have a lack of self-efficacy. I want them to persist in developmental courses and matriculate to higher-level courses." Krypton cited, "I have had multiple students tell me they feel dumb and stupid and it is heartbreaking to hear that. Therefore, I see it as a positive light to make sure they have the resources and tools that are needed to achieve goals."

Theme 1.9: Goal-Setting Strategies

Counselors and faculty discussed the importance of students setting goals in developmental courses. Participants felt the students did not understand the importance of creating short-term and long-term goals for college matriculation and struggled with making the required efforts to complete assignments. Faculty and counselors participated in supporting underprepared students by focusing on establishing attainable and practical goals. Argon stated:

> I encourage developmental students during orientation to begin taking good notes and other strategies such as developing your listening skills, putting in the time to do your assignments promptly. Especially, utilizing the resources on campus, and to create short-term plans that get you to your long-term goals.

Sodium stated:

> Developmental faculty break information down to the smallest nuts and bolts and they begin to rebuild the equation. We begin not only with a foundation but every step of the middle as well. We aid students in learning what they need to know because that same strategy has to be applied to every course. It is understanding the foundation of math, it is the core.

Theme 1.10: Reexamine Pathways Models

Faculty and counselors proposed that administrators and curriculum specialists consider reexamining pathways models to determine effectiveness in improving the skills of underprepared students. They felt there was a need for a more effective strategy that provided students with developmentally appropriate instruction that is

structured, clear, and coherent. The Pathways Models were designed to encourage enrollment and help underprepared students complete their studies.

Dr. Beta felt a plan was needed that would be better suited to the needs of students. Radium said, "As counselors, we need to understand what is needed in coherent education programs that include milestones and benchmarks. Looking at learning outcomes that are aligned with decision-making skills especially to ensure our students will succeed and further education and employment."
Tin noted:

> The Pathways Models need to be rethought, as far as curriculums with the Institution of Higher Education is concerned. Our students need more, they need to know how to manage time and study. Some students lack the concept of certain skills necessary for higher education. Nickel said, "Our state educators should study the pathways models to determine if they are structured to cover relevant content for developmental education."

Theme 1.11: Transparency with Students

Participants described the need for transparency with underprepared students concerning placement scores. They felt there was a lack of clarity regarding finances and the complexities of preparing for college. Students need continuity of information to make informed decisions regarding education. Transparency, collaboration, and equity were seen as essential rudiments that should be evident when communicating accountability to students. Neon said, more communication with students was needed so that everyone is on the same page. We all should be expressing the same information concerning college readiness." Nickel stated:

> More communication is needed with high school students to help them understand the stages of preparing for college. Finances are needed to submit deposits, obtain an education, and to live. Families need time to determine options as well as assist with navigating through the complexities of college.

Theme 1:12: Boost College Fairs and Events

Participants agreed that increasing college fairs and prep courses should address the number of non-college-ready students entering two-year institutions. They believed students lacked an understanding of rigorous course schedules, placement scores, and adequate preparation essential to registering for credit-bearing courses. Dr. Beta said, "There has to be more college readiness prep courses to prepare future students for college." Radon said, "More collaboration with high school counselors is a great idea. I think counselors should be more involved and visiting high schools to talk to students would create a better understanding of expectations." Copper said:

> I would like to see more college fairs and things of that nature. Have college recruiters visit schools in addition to inviting college admission staff. Have someone visit the high schools to speak with students and inform them about college entrant tests and how important their test scores are. Invite college admission officers to high school campuses and have them outline the college admission process and tell students the real story about what is done in high school will follow you beyond high school.

Conclusion

The study examined developmental faculty and counselors' perceptions of the challenges and barriers of instructing and advising developmental students. Participants addressed how underprepared students low standardized test scores stalled enrollment to credit-bearing courses and, the lack of resources needed to improve student retention and preparation for college-ready courses. Using Conley's Four Dimensions of College Readiness as a theoretical framework, this study sought to examine the perceptions of faculty and counselors on the college readiness of students at community colleges (Conley, 2007; Conley, 2008; Reed & Justice, 2014). By using the Conley construct to examine Key Cognitive Strategies, Key Content Knowledge, Academic Behaviors, and Contextual Text, researchers were able to acquire a better understanding concerning the number of underprepared students enrolled in developmental courses and techniques, and resources employed to reduce the number of developmental students enrolled at community colleges. Study findings indicate more collaboration is needed between secondary counselors and higher education practitioners to reduce the number of underprepared students entering non-college-ready courses. Future research is needed at public two-year and four-year institutions to evaluate the academic progress of developmental students and the perspectives of faculty and counselors/advisors on the growth of developmental students. Furthermore, additional research is needed to gauge the graduation rate of traditional and non-traditional developmental students to evaluate their progress in streamlined developmental education courses.

References

Akbar, A. (2019). The Effectiveness of Developmental Educational Programs at Community Colleges. Journal of Psychological Research, 42-52.

American Association of Community Colleges. (AACC). (2015). 2015 fact sheet. Retrieved fromhttp://www.yc.edu/v6/strategic-planning/docs/AACCFactSheet2015.pdf

Arendale, D.R., AuCoin, D., Boone, L., Clark-Thayer, S., Cole, J., Pullen, W. & Zerda, P. (2007). Innovative Developmental Education Programs: A Texas Model. Journal of Developmental Education, 2-18.

Barrington-Brown, Charletta H. & Lynch, Patricia A. (2022). Developmental College Education Courses and Programs: A Review of the Literature. Journal of Research Initiatives, 1-16.

Conley, D T. (2007a). Redefining college readiness. Education Policy Center.

Conley, D. (2008b). Rethinking College Readiness. New England Board of Higher Education, 24-26.

Conley, D. (2013, December 5). Deconstructing College Readiness. (P. I. Literacy, Interviewer).

Deli-Amen, R. & Rosenbaum, J.E. (2002). The unintended consequences of stigma-free remediation. Sociology of Education, 75.

Er, S. N. (2017). Mathematics readiness of first-year college students and missing necessary skills: perspectives of mathematics faculty. Retrieved from Journal of Further and Higher Education: http://www.tandfonline.com/doi/abs/10.1080/0309877X.2017.1332354

Holles, C.E. (2016). Student Perceptions of Preparedness for College. In Flinder, Curriculum and Teaching Dialogue (pp. 119-137). Charlotte: Information Age Publishing.

Jenkins, D., Lahr, H., & Fink, J. (2022). Rethinking community colleges to serve 21st-century students and communities: Lessons from research on guided pathways. New Directions for Community Colleges, 2022 (197), 107-120.

Khalifa, F.B., Veetil, M., & Sakhamuri, R. (2023). Fighting Stigma: Remedial vs Supplemental Instruction. International Journal of Linguistics, Literature and Translation, 6(3), 97-106.

Luoch, T.O. (2017). Readiness: the Key Factor in Remedial Teaching and Learning. Retrieved from ProQuest: http://www.proquest.com/docview/186263178/61866D52C8514AECPQ1?accountid=28943

Marshall, C. & Rossman, G. B. (2016). Designing Qualitative Research. Thousand Oaks, CA:SAGE Publications, Inc.

Ngo, F., Velasquez, D., & Melguizo, T. (2021). Faculty Perspectives on Using High School Data in an Era of Placement Testing Reform. Retrieved from Community College Review. https://eds-a-ebscohosy-com.hinds.idmoclo.org/edsdetails?vid=9&sid=86037Id4-9e81-467f-a296-4659c4clcb7%40.

Parikh-Foxx, S., Martinez, R., Baker, S. B., & Olsen, J. (2020). Self-efficacy for enhancing students' career and college readiness: A survey of professional school counselors. Journal of Counseling & Development, 98(2), 183-192.

Reed, E. & Justice, M. (2014). College and High School Educators' Perception of Current College Readiness Levels. International Journal of Humanities and Social Sciences,37-44. Retrieved from International Journal of Humanities and Social Science.

Rutschow, Z., Scott Cormier, E., M., Dukes, D., & Cruz Zamora, D.E. (2019). The Changing Landscape of Developmental Education Practices. New York: MDRC.

Sachar, C. O., Cheese, M., & Richardson, S. (2019). Addressing Misperceptions of Underrepresented Students: A Case Study at a Public American University. Global Education Review, 1-18.

Schak, O., Metzger, I., Bass, J., McCann, C., & English, J. (2017). U.S. Department of Education, Developmental Education Challenges and Strategies for Reform. Retrieved from https://www2.ed.gov/about/offices/list/opepd/education-strategies.pdf.

Shields, K. A. & O'Dwyer, L. M. (2017). Remedial Education and Completing College: Exploring Differences by Credential and Institutional Level. Retrieved from Routledge Taylor & Francis Group: http://dxdoi.org/10.1080/00221546.2106.1243943

Tierney, W.G., & Garcia, L.D. (2011). Remediation in Higher Education: The Role of Information. Retrieved from American Behavioral Scientist: DOI:10.1177/0002764210381869

Turk, J. M. (2019). Estimating the Impact of Developmental Education on Associate Degree Completion: A Dose-Response Approach. Research in Higher Education, 1090-1112.

VanOra, J. P. (2019, June 6). The Impact of Learning Communities on the Experiences of Developmental Students in Community College: A Qualitative Study. Retrieved from Learning Communities Research and Practice.

Wickli, H., M. (2018). Are High School Students Really Prepared for College?. WRIT: Journal of First-Year Writing. 2.10.25035/writ.02.01.01. Retrieved fromhttps://scholarworks.bgsu.edu/writ/vol2/iss1/1.