

Effective Academic Support Practices to Improve
Student Retention and Success at Technical and Community Colleges

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Abstract

This paper researches community and technical college's effective practices that aim to reduce drop outs and increase retention. Studies have demonstrated students dropping out and not continuing their program is not only a problem in the United States, but is a global epidemic. Some higher education institutions depend on federal and government assistance to fund the institutions based on students' retention. Therefore, to continue the funds, services, and education delivered to students, community and technical colleges must rectify retention deficiencies. This review of research includes: the history of retention efforts, community college responsibilities, retention challenges, the causes of dropping out, and student support strategies education institutions can model to increase retention.

Keywords: retention, community college, technical college, student success, support, integration (social, academic, economic, and cultural)

The National Center for Education Statistics states that only one in five public community college students graduates with a certificate or an associate degree within three years (Chen, 2020). In 2010, an estimated 13.7 million students were enrolled in post-secondary education institutions. The National Center for Education Statistics (NCES) projected an increase to 20.6 million community college students in 2021. The NCES reported that community college students embodied 34% of all U.S. undergraduates; however, more than half of those students would drop out. The community college student population comprised 45% of first-generation college students (Bonet & Walters, 2016). According to Juszkievicz (2016), community colleges educated over half the college population. Nationally, the community college three-year graduation rate lingered at around 20 percent according to the U.S. Department of Education college scorecard (Gambino, 2017). At four-year universities, the graduation rate is 60 percent higher than at two-year colleges (Chen, 2020). State and federal legislators who provide funding for colleges, have always focused on graduation and completion numbers and have found a 20% completion rate unacceptable. There was also a fear that future students would be even less prepared for college and would be at a higher risk of not completing school without more comprehensive support from the community colleges. The Education Advisory Board (EAB), an education research and technology service company, found that out of 100 students who applied to a two-year college, 56 were lost during onboarding, 23 dropped out after enrolling but before completing their program, and just five were still enrolled after six years. Only nine of the 100 completed an associate degree (Smith, 2018).

Statement of the Problem

What effective academic support practices have encouraged and sustained student retention and success in the technical and community colleges?

Significance of the Study

In the United States, the overall dropout rate for undergraduate college students was 40%, with roughly 30% of first-year college students dropping out before their sophomore year (Bustamante, 2020). The overall unemployment rate for college dropouts was 18.6% in 2018, and community colleges have the lowest completion rates of educational institutions (Bustamante, 2020). The demographic for most community college dropouts consisted of first-generation college students, low-income students, and students who may not have gotten accepted at four-year universities (Bustamante, 2020). In the United States, students without an education reported how challenging it was to make a living, support their families, or remain above the poverty level without a college education. Bustamante (2020) reported people without a college education had a higher chance of becoming unemployed and had few job opportunities. Many students attend college to increase their financial circumstances; dropping out could not only limit their potential, but could also leave some students in an even worse position than before they started due to college loan costs (Bustamante, 2020).

Community college completion in the United States matters. The labor market rates for college graduates with an associate degree was 69.6% compared to 57.7% for those without any college (Bustamante, 2020). Employers in the United States typically expect a college degree for higher-paying jobs and advancement in careers. On average, adults without college degrees earn \$1 less per hour than those with an associate degree and \$5 less than students who have earned bachelor's degrees (Bustamante, 2020). On average, a high school graduate with a professional certificate or vocational training credential earns \$4 per hour more than a college dropout (Bustamante, 2020). This lowered job earnings equates to almost a million dollars difference in a lifetime of work. The socioeconomic consequences for those who drop out of college are

significant. Education has a direct effect on equity. College dropouts or those with no college education tended to stay in low-income brackets, placed more of a demand on government and social services, and struggled in the labor market to advance; students with only a high school diploma are more prone to be in poverty (Bustamante, 2020).

Purpose of the Study

This study's purpose was to research previous findings regarding effective academic support practices to reduce drop out in community college programs. Results related to retention and student success in community colleges were synthesized and summarized in Chapter 2 of this paper to accomplish the study.

Definition of Terms

Community College – education institution with an open-door admissions policies and relatively lower tuition rates, provide access to higher education for many Americans to attain an associate degree, certificate, or technical diploma (Hlinka, 2017).

Cultural Capital - knowledge, culture, and dispositions often inherited from one's family that define an individual's class (Mendoza et al., 2016).

Integration – relationships with and sense of belonging (Mendoza et al., 2016).

Retention – defined as the enrollment of a student that does not discontinue or lapse through formal administrative processes their enrollment or the student fails to undertake any units of study that count towards a degree (Villano et al., 2018).

Social Capital –personal connections that allow individuals to advance in social fields (Mendoza et al., 2016).

Student Success – encompasses but not limited to graduating with an associate degree or technical certificate, transferring to a 4-year college, developing a career-related skill and earning a career (Fagioli et al., 2020).

Delimitations of Research

This research is limited to previous studies on retention and effective student success academic practices implemented at technical and community colleges. The research limit was to peer-reviewed articles identified in the Karrmann Library search engines provided by the University of Wisconsin-Platteville. The search limits were to articles primarily published within the last seven years. An additional search limit was government sites.

Method of Approach

A review of literature related to effective academic practices of retention and student success primarily (2013-present) was conducted. Search engines provided by the Karrmann Library at the University of Wisconsin-Platteville were used to compile the information using terms in the following combinations: "retention" and "technical and community colleges", "student retention" and "student success", "student retention in community colleges", "community college" and "student retention best practices", "academic support practices", "student retention" and "support", "student retention" and "engagement", and "student retention" and "success improvement."

Chapter 2: Review of Literature

Retention Focus

"Look to your left. Look to your right. Next year, one of you will not be here." Imagine those words as the first speech heard from a college professor on the first day of college in a room filled with students. First-year students have listened to those words for decades at universities. Those words represented attendance at college institutions as a privilege; thus, student retention and student success depended on the students themselves. Those same words have become problematic for institutions, especially community and technical (two-year) colleges, to retain students and succeed. Two-year colleges have the lowest completion rates of any higher education institution (Bustamante, 2020). Community colleges' demographic includes first-generation college students, low-income students, and students who may not have met admission standards for four-year colleges (Bustamante, 2020).

Community colleges student population typically have been diverse, from graduates recently out of high school to middle-aged professionals boosting their resumes or changing careers. It has been just as likely for an 18-year-old Caucasian male to attend as it was for a middle-aged African American woman. The average age of a student in community college was 28 (Sands, 2016). There was also a high possibility that the average students attending were employed while complete a degree at a community college (Sands, 2016).

For some time, community colleges around the nation have faced low rates of degree completion. Institutions have had to reconsider their processes, focus, and approaches to student success to increase retention. Generally, to improve institutions' retention and student success, institutions have implemented practices focused on those students that were least likely to graduate (Kolenovic et al., 2013).

History of Student Success and Retention Efforts

Community colleges' student success programs from the 1930s to the 1970s centered around courses and policies regarding the effectiveness of what they labeled special programs for high-risk students on achievement outcomes (grades) and continuance (Hlinka, 2017). Critical efforts to enhance student success included a select few policies and practices community colleges adapted from four-year colleges. Specific programs were reading and learning skill courses and programs (in the 1930s and 1940s), group-oriented programs (in the 1950s and 1960s), and all-inclusive support programs (late 1960s) that combined tutoring, advising, learning centers, and skills courses (Hlinka, 2017). Seidman (2005; as cited in Jobe, 2016) provided a thorough historical perspective of American education over the last 400 years, identifying the emergence of retention as a significant institutional focus that started in the 1960s. Research studies tracking reasons for dropout largely concentrated on the individual during this time, with little consideration for the broader complexity of the student experience Seidman (2005; as cited in Jobe, 2016).

Spady (1971; as cited in Jobe, 2016) was the first to directly bridge the gap between retention and reason students dropped out, asserting that variables such as educational background, academic performance, and interpersonal relationships influenced student's decision to continue or drop out. Tinto (1975; as cited in Jobe, 2016) expanded Spady's (1971) work, emphasizing that a student's retention likelihood was directly related to the student's integration level, both socially and academically in the community college.

By the mid-1990s, the National Resource Center for The First-Year Experience and Students in Transition-NRCFEST (Hatch, 2016), was created to study first-year students in community colleges. The NRCFEST developed a broad range of programs, practices, and policy

issue-related opportunities and access (Hatch, 2016). A decade later, the focus narrowed down to three approaches: (a) advising, counseling, mentoring, and orientation programs; (b) learning communities; and (c) developmental education (Hatch, 2016). Student success practices at community colleges have generally continued the efforts related to the focus in the 1990s.

Current State of Retention

Student retention has remained a critical issue in higher education, specifically community colleges, which are under increasingly high expectations to reduce the number of students who drop out and to increase retention. Students' probability of completing their college degree has been affected by a complex set of interpersonal, social, academic, financial, and institutional factors (Jobe, 2016). In the past, community colleges have thought they have little control over these factors. Community college staff's obligations have been to develop processes and policies to support the students' long-term success; but it was not until the last half-century that this institutional responsibility was embraced or even acknowledged (Jobe, 2016).

Compared to students enrolled in four-year universities, community college first-year students tend to be less college-ready, have access to fewer financial resources, and possess lower social resources (Jobe, 2016). Those conditions are what researchers describe as first year community college students most significant risk factors for dropping out.

Community and Technical College Responsibilities

With open-door admissions policies and low tuition rates, community colleges provide higher education for many Americans otherwise unable to attend college (Hlinka, 2017).

Approximately 45% of traditional-age students begin their college careers in a community college (Hlinka, 2017). According to research by (Mendoza et al., 2016) two-thirds of U.S. students who attend community colleges leave their programs after completing a year or less of

coursework over five years. Higher education student success rates are a widespread concern in the U.S. and globally (Netanda et al., 2019). Despite a healthy economy, many of the jobs that are being filled right now are low-wage ones, while higher-wage jobs requiring post-secondary training, are left unfilled (Nadworny & Larkin, 2019). Nadworny and Larkin (2019) found many adults who reported that as long as they have a job, they don't need to go to college. Those lower-skilled jobs, however, do not have the career or earnings potential to support them in the same manner they could if they completed a college degree. In addition to better earnings over time, research shows that having a college degree means students were less likely to be jobless and more likely to overcome uncertain economic situations, such as a recession (Nadworny & Larkin, 2019). For those who chose to not attend community college immediately after high school, there also could be future negative consequences because for many students it would be much more difficult to attend college when they have additional responsibilities (Nadworny & Larkin, 2019).

The Western Interstate Commission for Higher Education (2012; as cited in Mertes & Jankoviak, 2016) found that nationally, the number of high school graduates in the United States peaked in 2011 and has declined since then. With fewer available high school graduates, colleges must retain their current students to sustain current enrollment levels. Community colleges enrolled 43% of all college students in the United States (Mertes & Jankoviak, 2016). According to the Center for Community College Student Engagement (2012; as cited in Mertes & Jankoviak, 2016), while 79% of students signified a need to complete an associate degree, only 45% of full-time students completed their degree within six years. The lack of completion created severe consequences for the students such as lack of career opportunities and lack of generational success. Community colleges students failing to complete their programs or

graduate also poses a harsh reality for many institutions because tuition revenue has been needed to support academic programs, manage physical plants, and deliver student services (Mertes & Jankoviak, 2016).

Retention and Student Success Challenges

In the U.S. a disturbing forty-four percent of students who had enrolled in community colleges had not returned for their second year (Wilson, 2018). Willans and Seary (2018) conducted a research study that interviewed current community college dropouts. They asked: “What factor(s) led students to withdraw? What are the commonalities and differences among non-persisting students’ stories of their experience?” Their research found personal and institution challenges as the primary source for the issues (Willans & Searcy, 2018). Unique personal challenges included: physical and mental health challenges; and managing multiple life roles including studying, work, and family commitments. Thirteen of the 23 participants reported physical and psychological health issues as reasons contributing to their dropping out. Mental and physical health issues included: illness or injury and increased anxiety, depression, and stress which arose while enrolled.

Institutional causes recognized in the transcribed interviews included: poor support from academic staff, lack of awareness of support services, learning technology issues; and feelings of exclusion and disconnection from the institution. Thirteen of the 23 participants reported these factors as influencing their decision to withdraw. Three participants cited concerns with their lecturer and the lack of empathy or patience with the student (Willans & Searcy, 2018).

Godfrey et al. (2017) referenced other challenges that student who were also parents face. Many students, who also had children at home, face various barriers in pursuing higher education, including poverty and higher debt rates after graduating than nonparents. However,

many students with children also cited their children as motivation to go back to school. One of the factors impacting community college students with children was access to appropriate, dependable childcare. While many institutions offer on-campus childcare support or have other initiatives to help student parents, many students were unaware of the campus initiatives intended to help them (Godfrey et al., 2017).

Retention Factors

Based on research, some universities and community colleges have tested new policies and practices to help resolve students' challenges that lead them to withdraw from their studies. One of the new practices included integration of social and academic initiatives (Roberts, 2018 and Mendoza et al., 2016). A prominent practice which deemed to be influential included academic practices such as social integration, student funding arrangements and personal support. The students' needs were also identified to develop learning and teaching practices which motivated students to engage more with their studies and more with the institution (Roberts, 2018).

The research of Masika and Jones (2018) supported earlier studies and pinpointed three key essential retention areas to consider: curricula and teaching that engages students, interventions, and learning practices development. (Hlinka, 2017) addressed student support and found that retention practices should be tailored to fortify a campus culture to empower and support students. To empower the students, college advisors should work with the students to set clear academic and self-motivation goals (Hlinka, 2017). To support students, it was recommended that institutions create a more welcoming Tutoring Center culture; provide success coaches for personalized mentoring; focus on guiding the selection of solid career goals; and provide quiet study stations across campus (Hlinka, 2017). (Villano et al., 2018) expressed the

importance of an early alert system (EAS) to enhance student retention. EAS was designed for the early detection of at-risk behavior (such as, failing grades during midterms), with the objective to support initiatives aimed at improving student retention, reducing student dropout rates and support students at risk of a failed grade. One feature of the initiative was that it could contact the student to offer additional services.

Roberts (2018) research disclosed Yorke and Thomas's (2002 & 2003) study of student retention and success determined several factors likely to have a positive impact on student retention and success included:

- an institutional climate that was immediately apparent as friendly and supportive;
- support before and during the first year;
- an emphasis on useful assessment in the early part of student's education;
- recognition of the importance of the social element of learning activities and
- recognition from institutions that student engagement in higher education has been shifting and institutions response to the changes

Roberts (2018) concluded that positive relationships between academic staff, professional staff, and all staff and students would be vital to improving student retention.

Mendoza et al. (2016) conducted research on community colleges outside the United States. Their focus was an ecological perspective that identified factors exclusive to specific nations and regions to account for potential influences related to the economic, social, political, and cultural contexts. A two-part descriptive study concluded that students enrolled at a Bogotá, Colombia technical college were not thriving and were at risk of leaving the institution, due in part to a weak sense of community. The research concluded that students who persisted in the

community college, reported a strong sense of community, had meaningful connectedness with others, and considered themselves members of a community (Mendoza et al., 2016).

Student Support Effective Practices

William's (2018) literature research study of student's personal challenges that lead to attrition, resulted in the promotion of support services, and counselors with flexibility and capacity to provide timely responses to students who indicated the need for additional support. Furthermore, (Williams, 2018) recommended implementing asynchronous support for distance students outside of traditional school operating hours to negate disconnection issues and fear of failure. Williams (2018) believed that some students enrolled immediately in their major program courses without the reading, math and study skills requisite needed to be successful. Therefore, an effective recommendation, was to conduct a mandatory pre-entry interview to co-create a personalized contract that outlined students' and staff's expectations and schedules (Williams, 2018).

Hlinka (2017) conducted student interviews at Hazard Community and Technical College (HCTC), a rural 2-year college located in the central Appalachian region of Kentucky. The results of the student interviews reported critical practices that increased retention including: an individualized contact person on campus for assistance; teachers who personally reached out at the end of every class period, via email or phone, to students who missed class to express concern; and emergency funds that discretely assisted students when an unforeseen personal crisis happened. These successful, supportive practices reflected students' community of people that provided the necessary framework of support for students (Hlinka, 2017).

Research by Allen and Nichols (2017) found student's active involvement in their own education was key to retention. These researchers recognized students have an active role and

partnership in constructing their success, and their voice was the essential key component (Allen & Nichols, 2017). Although their research practices were designed initially at a university, community colleges could also benefit. The research model included: student-created associations, student-elected representatives to college committees, and a reporting mechanism for student concerns to be communicated to college administrators. Student's voice was considered fundamental so that their recommendations for change were heard and so they became producers of their own success (Allen & Nichols, 2017).

Green's (2018) study concurred with Allen and Nichols (2017) and found that student engaging practices such as student ambassadors at universities positively influence retention and student success. The student ambassador outreach program engaged with approximately 25,000 people yearly through partnerships with approximately 50 high schools from low socio-economic areas. In Green's (2018) study, community college student ambassadors: delivered powerful personal narratives, embedded career information into their presentations, facilitated hands-on workshops, led campus tours, helped students navigate post-high school pathways, and engaged in one-to-one discussions with prospective students. Green (2018) concluded that student ambassador programs at community and technical colleges could be beneficial to student retention and success initiatives.

Kahu and Nelson (2015) developed a set of conceptual framework factors they found were critical for a successful community college retention program. The student factors included:

- Greater appreciation of the opportunity to accept university studies
- Increased motivation to be successful academically
- Enhanced sense of belonging

- A feeling of accomplishment associated with making a difference
- Service-learning community opportunities
- Improvement of communication skills

They believed mediating mechanisms were important to promote persistence and success when designing a range of student leadership and capacity-building roles, not just those directly concentrating on retention success (Kahu & Nelson, 2015).

The research of Taylor et al. (2019) furthered earlier research work by focusing on incorporating support strategies and programs for higher education intuitions. The systematic database findings from the review recommended the following methods to address inequalities:

- Starting with recruitment and selection, continuing through pre-entry preparation and orientation, education intuitions should include cultural, academic, social and economic support;
- Opportunities for students to connect with other students during orientation and throughout their studies, whether through formal peer-to-peer mentoring programs, student networks or informal social gatherings;
- Flexible instruction delivery;
- Engagement with and input from local community services and health services;
- Evaluation and reflection of efficacy, with the publication of results where possible, so that a body of 'best practice' evidence can be displayed.

The most successful strategies implemented to improve retention were multi-layered and started before the student began instruction at the community college. In addition to the above, other specific practices included: culturally appropriate recruitment and selection processes; comprehensive orientation and pre-entry programs; a supportive and empowering school culture;

comprehensive mentoring and tutoring programs; flexible delivery of instruction; social and financial support to students; and an open-door policy for dropouts to return (Taylor et al., 2019).

Technology Based Support Services

Calvert (2014) reviewed the use of technology to help identify students at risk of dropping out. His research was conducted at Open University of United Kingdom where predictive learning analytics were used to forecast future outcomes and behaviors of their technical college students so that they could individualize the support services students needed to succeed. The indicators and selected variables were specific to students at the OUUK however could be used as part of a retention support at other institutions (Calver, 2014).

The effects of the Emergency Alert System (EAS) used Internet technology programs and algorithms to categorize which students may need support to encourage them to continue was researched by Villano et al., (2018). Although the research was focused on international education institutions, community colleges in the United States could also implement the practices. The research results indicated that the system determined which at-risk students were most likely to discontinue their studies. However, the effect decreased over time, pinpointing that the EAS algorithm could not identify students at risk of quitting beyond week 90 of enrollment. The EAS design focused on identifying students at risk of detachment and not necessarily discontinuation. This result illustrates the link between the EAS system and the risk of student's discontinuing. Furthermore, it showed that the EAS identification process was operating correctly during the critical first year of student enrollment (Villano et al., 2018).

A similar study focused on uncovering student's input on their sense of belonging and engagement with learning together through online communication (Masika & Jones, 2016). The researched

participants reported when they learned together online, their experiences were mainly positive. Early college experiences and retention interventions allowed students to participate in the community's practices and the development of an identity that offered a sense of belonging and commitment (Masika & Jones, 2016).

Another study that examined the use of technology to assist in retention was the Crawley & Fetzner (2013) research on online classrooms. The recommendations from the study, outlined best practices for instructors and other professionals at community and technical colleges to support students inside and outside the online classroom. These practices included service innovations to encourage retention and reduce student success issues. The service innovations were 31 online services factored into five categories. The 31 online services within the categories were: Academic Services (academic advising, academic counseling, retention services, disability services, tutoring, developmental education services technical support, bookstore, library, assessment & testing); Communications (student-to-student communications, staff-to-faculty communications, faculty-to-student communications, faculty-to-staff communications, institution-to-student communications); Administrative Core (financial aid, schedule of classes, course/program catalog, admissions, student accounts, student records, registration); Student Communities (student activities, student population segments); and Personal Services (financial planning, placement services, ethical & legal services, orientation, personal counseling, career services, and wellness services) (Crawley & Fetzner, 2013).

Chapter Three: Conclusions and Recommendations

In summary, this review of research demonstrates the history of retention efforts, community college responsibilities, retention challenges, the causes of dropping out, and student support strategies education institutions can model to increase retention. Historically, student success programs were centered around courses and policies regarding the effectiveness of special programs for high-risk students. The emergence of retention as a significant institutional focus started in the 1960s. The implications largely concentrated on the individual during this time as reasons for students' dropping out. The first researchers to directly bridge the gap between retention and the reason students dropped out of college, asserted that variables such as educational background, academic performance, and interpersonal relationships influenced student's decision to continue or drop out. An expansion of this concept emphasized that student's retention likelihood was directly related to the student's integration level, both socially and academically into college. With this known research, by the mid 1990's the focus transitioned to integration programs for first-year college students. Student retention continues as a critical issue in college's communities; therefore, they are under increasingly high expectations to reduce the number of students who drop out and to increase retention. Community colleges obligations shifted over time to supporting students' long-term success. Students acknowledged, however, that completing their college degree had been affected by interpersonal, social, academic, financial, and institutional barriers especially for first-year students. Community colleges students failing to complete their programs or graduate also posed a harsh reality for many institutions because the decline of tuition revenue had been needed to support academic programs, manage facilities, and deliver student services. It was also found that almost half of students enrolled in a community or technical college never persisted to their second year.

Therefore, one of the primary institutions focus was on students first-year experience. The research literature also suggested that the efforts of community and technical colleges will continue to evolve. Community colleges will continually be in pursuit of new and effective practices to improve student success and retention as more work on this topic is needed due to the influence it has on all aspects of the student's and college institutions livelihoods.

Based on these conclusions, it is recommended that the following practices identified from the research literature be implemented in community and technical college programs to increase retention and reduce drop out numbers. Academic practices were recommended such as social integration, student funding arrangements and personal support. Researchers also recommended identifying students' needs to develop learning and teaching practices which motivated students to engage more with their studies and more with the institution. They also recommended that retention practices be tailored to fortify a campus culture to empower and support students. To empower the students, college advisors should work with the students to set clear academic and self-motivation goals. To support students, it was recommended that institutions create a more welcoming tutoring center culture; provide success coaches for personalized mentoring; focus on guiding the selection of solid career goals; and provide quiet study stations across campus. Another effective method was to employ positive relationships between students and academic, professional, and all other staff. The research determined that students who persist in college, reported a strong sense of community, had meaningful connectedness with others, and considered themselves members of a community. The literature research also focused on institutions implementing asynchronous support for distance students outside of traditional school operating hours to negate disconnection issues and fear of failure. Institutions should conduct mandatory pre-entry interviews to co-create a personalized contract

that outlined students' and staff's expectations and schedules. Researchers recommended ensuring students had the requisite basic reading, math and study skills prior to enrolling in higher-level courses in the major of their choice. Other recommendations for effective initiatives that increased retention included: contact people on campus for assistance; and teachers who personally reached out at the end of every class period, via email or phone, to students who missed class to express concern. Emergency funds were also recommended to discretely assist students when an unforeseen personal crisis happened. These successful, supportive practices reflected students' community of people that provided the necessary framework for the students sense of feeling connected to the institution and its staff. The student's voice was considered fundamental so that their recommendations for change were heard to become producers of their own success. The research model included: student-created associations, student-elected representatives to college committees, and a reporting mechanism for student concerns to be communicated to college administrators. The final recommendation involved technology-based support and the importance of an Early Alert System (EAS). The EAS was designed for the early detection of at-risk behavior (such as, failing grades during midterms), with the objective to support initiatives aimed at improving student retention, reducing student dropout rates and support students at risk of a failed grade.

In conclusion, the review of the literature revealed effective practices that have been successful, however, institutions will have to consider and evaluate their institutions problem areas to develop an intentional plan for increasing student success and retention. Further research is needed at each institution on their current dropout rate, current retention practices, and best initiatives to match their students and programs.

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