

Формирование готовности к поступлению в колледж: теории и практика

Цель этого исследования состояла в том, чтобы 1) изучить теории и практику формирования готовности к поступлению в колледж; 2) изучить политику Эфиопии в области подготовки к поступлению в колледж и учебную программу Эфиопии по подготовке к высшему образованию через призму теорий и практики, существующих во всем мире.

Материалы и методы. Для достижения этих целей были проведены обзоры существующей литературы. Для сбора ресурсов использовались международные исследовательские базы данных, такие как Scimago Journal и Country Rank, Web of Science и Google Scholar. Некоторые отчеты местных органов власти и результаты исследований были доступны в печатном виде. Ресурсы, рассмотренные в этом исследовании, состоят из отчетов о количественных, качественных, эмпирических исследованиях с использованием смешанных методов и систематических обзоров. Этот систематический обзор в основном сосредоточен на 1) поиске интервенционистских подходов, теорий и практик формирования готовности к поступлению в колледж в рамках образования к-12, выходящего за границы традиционного школьного преподавания и обучения; 2) как тенденции в формировании готовности к поступлению в колледж сосредоточены на сокращении разрыва между теорией и практикой за счет поддержки учащихся с ранних лет обучения, а также как практика направлена на эффективное управление и мониторинг результатов обучения учащихся.

Полученные результаты. Анализ обзора показывает, что нынешняя практика повышения готовности к поступлению в колледж имеет более глубокие социальные и экологические корни, чем когда-либо прежде. По этой причине традиционное формирование готовности к колледжам на базе школы, как

правило, в большей степени дополняется продвинутой, ориентированной на исследования и основанной на сообществе или экологически обоснованной ранней поддержкой и мониторингом успеваемости учащихся. Учебная программа подготовки Эфиопских колледжей, процессы приема и практика преподавания-обучения в значительной степени основаны на базе школ и являются традиционными по сравнению с современными практиками повышения готовности колледжей во всем мире. Системы раннего предупреждения и поддержки в значительной степени зависят от аудиторных тестов учителей и национальных оценок, которые проводятся только на некоторых уровнях обучения.

Заключение. Повышение готовности к поступлению в колледж является важным фактором, способствующим успеху в колледже и результатам обучения студентов высших учебных заведений. На готовность современного колледжа и переход к высшему образованию в значительной степени влияют многочисленные личностные и экологические факторы, в дополнение к традиционной школе, учебной программе и факторам преподавания-обучения. Многочисленные общинные и ориентированные на исследования ранние вмешательства и системы поддержки должны дополнять роль школьного образования в повышении готовности к поступлению в колледж. Учебная программа и процессы преподавания и обучения должны быть достаточно насыщенными, чтобы сократить разрыв между теориями и практикой. Учителя играют большую роль в формировании готовности к поступлению в колледж.

Ключевые слова: готовность к поступлению в колледж; меритократия; справедливость; качество.

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Building College Readiness: Theories and Practices

The purpose of this study was to 1) explore theories and practices in building college readiness; 2) examine the Ethiopian college readiness policy and the Ethiopian preparatory for higher education curriculum through the lens of the theories and practices around the world.

Materials and methods. To achieve these objectives, extant literature reviews were conducted. The international research databases such as Scimago Journal and Country Rank, Web of Science, and Google Scholar were used for the collection of the resources. Some local government reports and research findings were accessed in hard copy. The resources reviewed in this study consist of quantitative, qualitative, mixed-methods empirical research reports, and systematic reviews. This systematic review mainly focused on 1) searching for interventionist approaches, theories, and practices of building college readiness across k-12 education beyond the traditional school-based teaching and learning arena; 2) how the trends in building college readiness focused on narrowing the gap between theory and practices through student supports from early years of schooling as well as how the practices focused on managing and monitoring student learning outcomes effectively.

Results. The review analysis shows that the current practice of building college readiness has spread its roots in societal and ecological grounds than ever before. For this reason, the traditional school-based

college readiness building tends to be more supplemented by the advanced, research-oriented, and community-based, or ecologically grounded early support and monitoring of student progress. The Ethiopian college readiness curriculum, admission processes, and practices in teaching-learning are highly school-based and traditional compared to the contemporary practices of building college readiness around the world. The early warning and support systems are highly dependent on the teachers' classroom tests and national assessments that are administered at some grade levels only.

Conclusion. Building college readiness is a significant factor in promoting college success and higher education student learning outcomes. The contemporary college readiness and transition to higher education is highly affected by multiple personal and ecological factors, in addition to the traditional school, curriculum, and teaching-learning factors. Multiple community-based and research-oriented early interventions and support systems need to supplement the role of schooling in building college readiness. The curriculum and teaching-learning processes need to be rich enough in narrowing the gap between theories and practices. The teachers play a great role in building college readiness.

Keywords: college readiness; meritocracy; equity; quality.

Introduction

College-ready students are more likely prepared for university education, job, and to participate in the social, and political aspects of citizenship than students who are not college-ready (Moore and et al, 2010). The leading cause of the low college entrance and success rates is the lack of college readiness. For the reason that many underprepared students enter the college and assigned to remediation courses before taking credit-bearing courses, investigating college readiness (CR) has become increasingly important (Arnold, Lu, and Armstrong, 2012).

Advances in technology also required a rise of standards in requirements for CR. The largest percent of the fastest-growing occupations requires some form of postsecondary education or training (Moore, et.al, 2010). Factors, such as a move to mass education, changes in employer expectations, and concerns related to under-preparedness of high school (HE) graduates, have pulled CR to the center of policy discussions. The current CR conversations are focused on aligning CR standards and student college expectations in terms of both quality and equity. CR assessment, standards-based curriculum reforms, and course-taking requirements during graduation are the major innovations in building CR (Pak & Desimone, 2018). Although the countries embarked on widening participation in HE from time to time, the issues of student dropouts have remained a problem.

Amid a hot conversation on the quality of education in Ethiopian research, the concept of CR is not well defined and addressed. The Ethiopian education system has also implemented education policies to promote CR in previous decades. These attempts were reflected in 1) implementing Preparatory for HE Program (PP) that is probably

aimed at exposing students to the college experience through the curriculum; 2) addressing equity issues in the transition to HE, e.g. applying Affirmative Action, use of mother tongue as the language of instruction in elementary and middle schools, expansions of schools and universities across regions.

Even though the international trends are reflected in the Ethiopian CR policy, there are wide theoretical and practical gaps. For instance, although the Ethiopian PP program has similarities with other CR programs, such as Dual Enrollment (DE) and Advanced Placement (AP), there are some mismatches between the theory and the practice. The first problem is the fact that the PP courses are completely detached from college experience when they are college introductory courses. Previous Ethiopian studies did not deal with the specific factors that affect CR in K-12 education; they did not discuss the theories that underlie students' CR; they failed to discuss the trends and practices around the world in building CR. For this reason, the causal roots of the CR problem of college entering students have blindly been attributed to the students themselves and the teachers.

This study opted to 1) Explore theories and practices in building CR; 2) Examine the Ethiopian CR policy and practice through the lens of the CR trends, theories, and practices in another world. Also, the study was guided by the following research questions: 1) what are the theories and practices in building CR around the world? 2) How the Ethiopian CR policy and practice match the CR policies and practices in another world?

Definitions

CR refers to the mastery of curricular content, developing academic behaviors, cognitive strategies, and knowledge about the college environment (Conley,

2012). Studies discussed the measures of CR, such as High school GPA, high school class rank, or standardized college entrance exam scores (e.g., SAT). The intensity of a secondary school curriculum is associated with greater probabilities of entering and completing college (Uy & et al, 2019). CR is also defined as readiness for higher education (HE) learning and career expectations.

Due to the inconsistencies in college and career readiness standards, Conley (2008) and Mattern & et.al (2014) proposed that to be college-ready, students should possess: 1) cognitive skills (e.g., abstract thinking skills, problem-solving skills); 2) content knowledge in some core subjects, mainly Maths and Reading subjects. These courses work as key and basic knowledge for other college-level courses; 3) academic behavior skills that help students to master content and keep up with the pacing of college courses; and 4) college knowledge (Conley, 2012).

Sample of Literature and Methods of the Review

The journal articles, book chapters, policy documents, and reports were the major resources used for the review. The research works of literature were collected from international research databases, local libraries, and offices. The literature used for review is a mix of quantitative, qualitative, and mixed methods research reports. The international research databases, e.g., Scimago Country and Journal Rank, Web of Science, Directory of Open Access Journals (DOAJ), Directory of Open Access Books (DOAB), and Google Scholar were used for searching the resources. All relevant sources found in these databases were selected for the review. The purposive and selective online and hardcopy search of the local literature was also conducted.

A critical in-depth analysis and synthesis of the literature

followed the following two major criteria: 1) analyzing the sample sizes, research designs, and research types, and 2) Analyzing the strength of the studies and literature in building CR and affecting the practice of CR; 3) Observing the unique aspects of building college readiness beyond the traditional school-based activities of building college readiness, especially the interventionist approaches, the early warning, assessment and monitoring systems of student development.

Theoretical Backgrounds and Perspectives of College Readiness

The ecological theory of college readiness

Urie Bronfenbrenner's ecological theory of college readiness is a widely utilized college readiness model (Bronfenbrenner and Morris, 2006). Ecological CR theory considers the role of student individual characteristics and personal agency; the characteristics of multiple, interacting levels of context; the effects of chronological and historical time, and the processes through which all these elements bring about change in students (Arnold, Lu & Armstrong, 2012). A real CR occurs through a reciprocal relationship between the student and the context. For example, the culture and values of the society make an indirect effect on the students. These cultural values can be filtered down to the student classroom learning through the curriculum. Being in the heart of the environment, the individual student interacts with the proximal contexts (microsystems) that play their direct interactions with the student, and the effectiveness of student readiness is realized through what Arnold, Lu, and Armstrong (2012) call the proximal processes that happen as a result of these interactions. The school, teachers, parents, counselors, peers, and others

that make direct interaction with students are the microsystems.

The combined model (Sá & Tavares, 2017) roots the student choice in economic and social factors. The economic view assumes that the assumption of accurate information depends on the estimation that students perform a rational analysis of the costs and benefits to maximize the benefit of attending a college or a field of study. Under the economic theory, students give attention to the labor market of the academic area they choose. On the other hand, the students tend to make a comparative analysis of the costs of attending an institution or training against the returns they get after graduation. According to sociological theory, the social status that is achieved through getting specialized in an academic area is a factor that pushes students to choose a certain field of study. The gender and personality of students also determine student choices.

Self-determination theory states that the school's social and environmental factors affect the degree to which students' basic needs are satisfied in the setting. Also, how the student adapts to or responds to these affecting factors determines the well-being, performance, commitment, and persistence of the student in transition to college. The extent to which the schools and the environments fulfill or fit his/her needs affects the transition to HE (Davidson & Beck, 2019).

Defining the term "meritocracy" as a social system in which an individual's talent and effort, rather than ascriptive traits, determine individuals' placements in a social hierarchy, Carter & et.al (2019) viewed HS to HE transition as a merit-based objective phenomenon that should be based on the objective assessment of individuals' natural talents and efforts. The mandate of the admission system is maintaining and cultivating the meritocratic principle in education that is the basis for performance-

based college admission and developing college-going culture.

Fong & Kremer (2020) viewed the successful transition to HE through the lens of expectancy-value motivational theory stating that personal motivation shares a significant variance in academic success. Another theory that underlies student transition to HE (i.e., student effort and attainment) is the educational expectation that is rooted in the sociological, economic, and psychological factors. According to this model, students' family and social backgrounds and academic intelligence impact their educational achievement. These motivational and career theories relate successful college-going with long-term incentives, such as jobs and other privileges that can be earned after graduation. The cumulative of these factors shape students' educational and career expectations, this also impacts their educational and occupational achievement (Domina, Conley & Farkas, 2011).

Psychological Perspectives on Readiness for College

From the developmental psychology perspective, HS to HE transition overlaps with both adolescent identity development and transition from late adolescence to early or emerging adulthood. It is a period of changing roles, new challenges, and responsibilities for adolescents. It is a critical time for adolescents when a misdefinition of their identity leads them to confusion. For this reason, the period of transition to HE is strongly associated with stress, disruption, and emotions. Family functioning and emotional coping determine the success of transition both to emerging adulthood and HE (Azmitia & et al, 2013).

The social bond, self-care and awareness, cognitive styles, and life skills of college-going students affect HS to HE transition. Also, self-compassion mechanisms

are effective in weathering the difficulties of transition period depressions, while emotion regulation is significantly related to success in college (Srivastava & Tamir, 2009). Generally, to deal with these psychological factors that affect student transition to college, student counseling services are broadly implemented around the world.

The student's college knowledge (i.e., knowledge of application process, college learning, and environment) is among the factors that determine successful HS to HE transition. This knowledge is partially developed through HS and HE partnerships and students' social capital (Conley, 2012). Higher education institutions (HEIs) should focus on the education and psychosocial interventions that target changing parental expectations, and developing students' self-advocacy and self-efficacy to help transition-age youth at risk of poor post-HS employment outcomes.

The adolescent transition to HE is also associated with substance use and addiction. A significant relationship is found between the capacity for resilience and age, marital status, area of residence, school, and the use of drugs and transition to HE; while life event dimensions, such as neglect, separation, or loss and friend satisfaction were found to be strong predictors of resilience capacity in college. The high school adolescents' substance misuse preventive interventions were conducted to study their effects on academic success in college, and it is found that the intervention significantly and positively affected the adolescents' long-term academic success (Spoth & et.al, 2019).

The Role of Curriculum and Teaching-learning

The curriculum is the pillar in college readiness building. The teachers are the first-level facilitators of student learning

and the journey to HE. For instance, Liou & Rojas (2018) studied the significance of racial contract in teachers' college expectancies for students of color. This study analyzed how 27 classroom teachers harnessed school structure and classroom curriculum to support the students of color in their preparation for college. Generally, the significance of teachers' high and equitable expectancy for all students for an equitable and successful transition to college is discussed. Duncheon & Muñoz (2019) also used a sense-making theory when they discussed the effect of teachers' views, definitions, and understandings of CR on their students' readiness for college.

On the other hand, an implementation of a career-based curriculum, e.g., career readiness business curriculum model, at a high school successfully promotes a successful transition to college and the workplace. Course-taking, e.g., completing Algebra II and taking other dual-enrollment courses promotes college success. For instance, the International Baccalaureate (IB) curriculum is credentialed for its gold-standard status of academic excellence, although it was criticized for its elite agency that aims at serving the private international schools with its longstanding liberal arts curriculum. Recently, the IB has turned its face to the public through the incorporation of a new career readiness program that benefitted applied learners' needs of college and career readiness. The IB and AP are gradually changing from elite nature to more inclusive. For example, the early colleges are the advanced and more inclusive CR programs (Phelps & Chan, 2017; Winne, 2013).

Also, the periodical curriculum revisions include curriculum integration and configuration process that is used to integrate career readiness curriculum in high school curriculum to develop career readiness of high school students. The current competency perspectives on building CR assert

that the twenty-first century skills, such as learning strategies, self-regulated learning, adaptability, communication skills and cooperative attitude, technology use, creative problem solving, critical thinking and decision making skills, time management, self-management, life skills, and study skills are highly needed to be embedded. The English language, as a heritage language and language of instruction and the mathematics knowledge, had had significant effects on CR. On the other hand, overdependence on the depth of achievement in specific subjects across grade levels (i.e., horizontal transition), rather than interdisciplinary knowledge building creates disciplinary disjuncture in HS to HE transition curriculum (Gallagher-Brett & Canning, 2011). Poor teaching and content-based curriculum in high school, poor mathematics learning, lack of Science, Technology, Engineering, and Maths (STEM) preparation, and difficult transition contributes to students' decision to leave STEM. The misaligned HS and HE curriculum standards and pedagogy are the causes for the increase in the need for remediation in HE. Taking applied STEM courses in high school significantly lowers the chances of dropout, increases mathematics test scores, and the chance of college access. Those students from specialized STEM schools perform significantly better on mathematics and science tests, they are more interested in STEM, and they more likely to earn STEM degrees compared to students in traditional schools (Plasman & Gottfried, 2018).

The K-12 and HE partnerships are created on the alignment of HS and HE teacher education to remedy the poor teacher quality, drop-out, and attrition. Teachers align the curriculum with the standards in the teaching-learning process, update the curriculum in line with the current developments, and maintain the linkage with the college

requirements of student learning. For instance, the use of quality management tools and curriculum articulation strategies supported high school mathematics teachers to prioritize the policy demands. Using these tools, teachers analyzed how the district-level maths curriculum deviated from the Federal level's common core maths standards and discussed how these inconsistencies may affect CR and quality assessment (Arnould, 2006). Also, the type of high schools the students attend significantly determines the nature of CR.

The Role of Convergence between K-12 and Higher Education

Studies reported some major factors that have significant contributions in creating a convergence between K-12 and HE. *Governance* was stated as a source of convergence between K-12 and HE. Both the lines of divergence and convergence in k-12 and HE are related to governance. The required mandates, incentives, norms, and pressures that span the K–16 education play a great role in converging the k-12 and HE. The cross-sector bodies, the system of government (e.g. Federalism), and the spread of privatization, and the public-private framework are some of the governance factors that shaped K-12 and HE convergence. The equitability of the *funding* system for all social groups by levels and sectors of K-12 education and HE can be a source of convergence. *Standardization* of the external assessment of students for both the K–12 and HE sectors, despite the vast differences in the populations, are also one of the mechanisms that is used to converge K-12 and HE. Emphasizing the teacher quality of the valued-added to enhance convergence is also used as a mechanism. A policy that is focused on making schools and colleges responsible for the improvement of *measurable student outcomes* also plays a significant role in convergence. Also, the

studies viewed the K-12 and HE as a *single educational system*, rather than as a discontinuous and poorly aligned one, and they focused on the bond between high schools, community colleges, and career outcomes. *College access and equity* are also an issue of convergence. Evidencing the sharp increase of underrepresented groups in college access and opportunity, the studies described the convergence system through the prevalence of college-based bridging programs and mutually beneficial relationships between colleges, schools, community-based organizations, and nonprofit organizations that serve K–12 students. The curriculum standards-based initiatives that focused on the convergence between K-12 and HE through uniform common core curriculum standards play major roles in building CR. Also, the *role of technology* is high in convergence. The technical and social factors combine in human action. This human action also results in the adoption of technology that also has consequences for new technology in organizations. Primary and postsecondary institutions influence one another, and various factors converge through the interaction, and the role of technology influence in education systems' change and evolution is very high. Also, convergence agenda must be viewed in the *global context* and policymakers should reanalyze their educational responses to the volatile, continuously changing global situation, and ought to consider the importance of continuous adjustment of the education system (k-16) to the changing global contexts (Loss & McGuinn, 2018; Pak & Desimone, 2018; Rippner, 2015; Selwyn, 2013; Wang, 2006).

Admission Policies

College admission systems and models of countries are also other significant issues that have been discussed in HS to HE transition research. The HE admission policies around the

world have already emphasized college completion and quality in graduates' outcomes than college access. Historically, the access and equity in HS to HE transition has been approached in multiple ways in different regions of the world. Firstly, the transformation of an internal academic decision to a gradual external and politically driven decision-making on college-access and equity issues in college admission was initiated by a drive to develop mass systems of HE. Secondly, universities have cultural differences in their admission process and ways of addressing equity issues. Thirdly, the contrasting organization of HE in parts of the world has different organizational influences on admission policies. Also, there are significantly different sources of power and authority that influence the policy on access and equity to HE. However, even with these differences, there are patterns of convergence in policy goals. Generally, the expansion of access to HE is forced by the intention to create a more equitable society in the era of massification of HE for the public good and to bolster economic growth (Douglass, 2005; St. John & et al, 2018).

This expansion of access has undergone through 1) restructuring formerly elite institutions to a broader purpose; 2) establishment of new universities and colleges; 3) expansion of scholarship grants and government financial aids. These three ways of expanding access are more passive (i.e., lowering costs and expanding universities to expand access). However, the 4th approach takes the most interventionist approach while it focuses on the development of college-preparatory skills of the target students; and raising the expectations of students guiding them on their admission process. The 5th is the development of diversified systems approaches to HE management of enrollment. The 6th is the creation of

admission practices, such as Affirmative Action and Deliberate Action targeted at increasing the enrolment of underserved and disadvantaged groups. The 7th mechanism that was applied to make the admission process equitable is the gradual politicization of the admission process; e.g. the influence of Court decisions in the USA, and government regulatory funding that is tied to quality controlling in the UK (Douglass, 2005; St. John & et al, 2018).

Also, the reliance on the performance of students in the context of their educational opportunities is recommended rather than the sole dependence on the national college entrance exam. The reliance on standardized national college entrance exam grades in college admission has created equity problems for the reason that such test tends to bias for socioeconomic status, race, and gender (Santelices & et al, 2017).

The mismatch between the culture and languages of the students and the school curriculum, and the language of instruction at schools the students attended also contributes to problems in CR. If the influence of socioeconomic status (SES) and educational environment on the college entry exam score rises over that of innate talents, labor productivity of overall society appears to decline (Kim & et al, 2014), and this remains a threat to meritocracy in college admission. Economic and other incentives that underlie college academic area choices have related to the promotion of CR. The influence of social capital (the social bonds and interactions and their advantages) of the college applicants and the cultural capital (e.g., the dominance of groups' cultures and values in education that creates biases for groups) have been discussed as long-standing and dominant factors that underlie the success in HS to HE transition.

Also, assessment programs have been used as tools to guide the successful journey to the college by giving chances for early warning,

monitoring student learning, early information, and choice. The enhancement of information and choice and cultural integrity for disadvantaged groups is promoted through the implementation of an early assessment program. The mechanisms schools and HEIs store and use data for decision-making research help them to make rational and effective decision-making in the selection, admission, and placement (Kolluri & Tierney, 2020).

Partnerships and Interventions in Building College Readiness

Different partnerships have been created to build students' college readiness. These partnerships have been formed between different organizations including schools and universities.

For instance, the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) program is a popular program in promoting CR of students. Also, Australia's KickStart program is aimed at helping students' engagement with their courses and supporting their preparation at a critical stage of their studies. This program emphasized student engagement, preparation, and motivation in supporting student transition HE (Breyer & et.al, 2017). STEM Intervention Programs (SIPs) are created to develop the CR of talented students of color in the USA. The SIP delivers its service to this group of students through academic advising, and course work that is designed to introduce students to college-level rigor, structured-mentoring programs, networking opportunities, and professional development. Undergraduate research and STEM-based student organizations provide supports to STEM students in high schools. Mentoring Program is also another program that is created to facilitate a successful transition to HE. For instance, Australia's Macquarie University Learning, Education,

Aspiration, Participation (LEAP) mentoring program is one of such partnerships that recognize the need for the ongoing support of the targeted high school, refugee, and humanitarian background students to support and enable their successful transition to HE (Lane & et al, 2020).

The programs named, 'Foundation High School Program', and 'College and Career Readiness Program' are opted to support the college and career readiness development of students from their early secondary school years. Also, the implementation of the college access program named Advancement Via Individual Determination, AVID, increased the likelihood of college access and matriculation. The Coaching Program for social-emotional learning, community, and cultural wealth curriculum was implemented by university residential life community directors to enhance the protective and thriving skills of growth mindset, sense of belonging, self-management, self-advocacy, and community and cultural wealth. The program significantly supported underserved first-year university students (Knotek & et.a., 2019).

Teacher education-specific, grant-based HS-HE partnership, particularly focused on improving educators' understanding and utilization of research-based practices, capturing the practitioners' professional wisdom, and supporting practice through instructional coaching are effective in supporting special education learners' college readiness (Maheady & et al, 2016).

On the other hand, the effect of parent-school, home-school, and community-school partnerships in different aspects of student supports has been proved to be effective in supporting students' successful transition to college. In addition to the horizontal partnerships, the vertical two-way partnerships between universities and different types of high schools were created to support

students' college preparedness and success. The Outdoor Orientation Program (OOP), which is run by *accelerated social group formation for transitioning young adults to college*, is found to be effective. Effective Summer Bridge Programs make very strong relationships with their partner schools in districts; deliver professional development to all summer bridge program staff; conduct preprogram orientation sessions and closing ceremonies; provide bus transportation services; involve parents in the summer bridge program; expose and provide students with labs to support classroom instruction; provide academic counseling services and other support services, and apply both formative and summative evaluation methods (Pickard & et.al, 2020).

The colleges send pre-service teachers to take a practicum in high schools. This type of partnership is also happening between high schools and universities in the teaching profession in Ethiopia. This type of partnership is mostly one-way in Ethiopia and it is not aimed at bridging HS to HE transition of students; it is aimed at teachers' training and development. The HS-HE partnerships should be supported by staff and the community in order to be successful. The collaboration between HEIs and employers on curriculum development to create a more relevant teaching-learning environment for student success is also very important. A year-long partnership between high school teachers and college first-year students on three content areas, in which they co-planned and implemented maths lessons, was successful for the development of content knowledge to high school teachers, and for the development of maths achievement to college students (Swanson & Coddington, 2016).

The post-admission interventions are also conducted to remedy low college and career readiness in various ways. These supports are

delivered in the form of coaching activities that are designed and applied in universities to support the career and CR of students. The curricular intervention approach, i.e., developmental education or remedial education that is implemented in the post-admission college campus is aimed at remediation of CR problems.

Ethiopian College Readiness in the Lens of the Theories and Practices

The Ethiopian PP Curriculum

Ethiopian PP curriculum shares similarities with DE and AP programs. Like DE courses, the PP courses are believed to be those former socialist regime college introductory courses that moved down to high school; while AP courses are high school courses prepared in the standards of college introductory courses. The problems related to PP courses are that 1) lack of adequate theoretical and practical policy explanations behind moving these courses to high school; 2) The complete detachment of the PP courses from college experiences when they are college preparatory courses. For example, DE courses are taught by college instructors in college context or they are taught by college instructors in high schools; 3) like college courses' grading system, DE courses are assessed in course grading system while PP course assessment is accomplished through continuous and summative classroom assessments and through marking out of 100% like high school courses. The Ethiopian Higher Education Entrance Examination (EHEEE) assessment format is all objective unlike the others that include essays and laboratory exam items; 4) The AP, DE, and IB curriculum development processes invite college instructors while the Ethiopian PP's curriculum revision is accomplished by a team of curriculum experts at Ministry of Education; 5)

There is no standardized career readiness curriculum, counseling services, early interventions and early warning systems on college and career readiness in lower grades and PP schools; and the movement of the PP courses to high school caused curriculum overload in grades 9 -12.

A curricular approach for CR building was attempted through the PP program at grades 11 and 12 believing that the preparatory school curriculum promotes CR. However, this preparatory program faced criticism. Even the objective of moving the former university freshman courses down to grades 11 and 12 was not clear to society. A World Bank study reported that the move-down of the curriculum resulted in curriculum overload (Joshi & Verspoor, 2013).

Historically, the Ethiopian education in the Education and Training Policy (1994) made significant reforms in Ethiopian Education history compared to former educational systems. The former teacher-centered teaching-learning process changed to student-centered. The formerly content-based curriculum changed to an outcomes-based curriculum. Although the curriculum has undergone significant changes to deepen students' readiness for college and work, many local studies reported the gaps between the theories stated in the written curriculum and the practical teaching-learning process at schools. The problems lied in the gaps between policy and practice. The extent to which timely curriculum revisions and teaching-learning methods brought about changes in student-level learning mattered. The extent to which the curriculum and teaching-learning reforms enabled the achievement of 21st-century competencies determined the achievement quality in CR.

On the other hand, compared to the international trends, the Ethiopian CR activity is highly academic. Multiple supportive and early warning systems are rare. The schools, the students, and

the families share responsibilities in preparing students for college. Although the admission policy takes into account some international trends in addressing equity and quality, the practices are less research-oriented and are a bit traditional.

Conclusion and Recommendation

Conclusion

Generally, ecological systems theory, developmental theory, social capital theory, need satisfaction theories, self-determination theory, career decision making and self-efficacy theory, information and choice theory, expectance-value motivational theory, and social-cognitive career theory are strongly related to building CR. Maintaining convergence between K-12 and HE has been discussed as a part of building CR. Also, the theory of reasoned action and instructional facilitation is related to monitoring student readiness through assessment and teaching, early warning, and awareness. Theories of racial contract and sense-making are related to the

teachers' college expectations of students and the application of the equitability principle through the teaching-learning process in monitoring student progress towards college. The contemporary CR theories guide the practice of CR through curriculum design, teaching-learning process, research-based partnerships, interventions and counseling services, and formulation and practices of empirically grounded admission policies.

In the lens of these, the Ethiopian CR seems more academic compared to the international theories and practices. CR is generally mal-defined in the Ethiopian education policy. Contexts are mal-organized and less-promoters of students' CR. These gaps are partially caused by shortages of resources in the schooling system. The maintenance of the three transition issues (i.e., meritocracy, equity, and quality) is not well empirically based.

Recommendation

Generally, the re-formulation of the CR policy is highly warranted from the ground.

The international theoretical and practical CR and transition issues need to be seriously reconsidered by Ethiopian education policymakers, curriculum designers, and HEIs. CR issue has to be given attention throughout k-12 education. The curriculum needs to emphasize narrowing gaps between theory and practice in order to promote CR. The HS-HE partnerships have to be formed in terms of curriculum development and teaching-learning. The HS curriculum needs to have a strong linkage with the college curriculum. Particularly, the grade 11 and 12 curricula should be designed in the college introductory curriculum standard or any means has to be created to prepare the students for college expectations and academic rigor. Generally, the early warning and support systems should be strongly built at the national level, regional level, school level, and student level. CR development of the affirmative groups should be accompanied by continuous supports and interventions from the early grades.

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