A high school and community college articulation agreement targeting disaffected students

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ABSTRACT

This study examined a linkage program between a secondary school and a community college in Ontario, Canada. The study sought to identify (a) appropriate success criteria to evaluate a high school–community college program and (b) the attributes that promote or ensure a program's sustainability. Though initially successful, the investigated program was not sustained; reasons for its demise provide important information for the structure of high school–community college initiatives. This study has several implications for practice. First, the power of grassroots initiatives to respond to identified local issues is critical. Second, the mere existence of an articulation agreement is insufficient to ensure success. Third, the onus is on the sending institution in any transfer program to ensure that students are prepared, confident, and motivated to take the next step in their educational journeys. Finally, it is important to have a larger focus beyond the transfer program, with alignment of curricula, student learning goals, and institutional strategic goals (Hope, 2016) as well as identification of best practices for transfer programs (Montague, 2012).

Keywords: articulation agreements, high school–college linkages, dual credits

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INTRODUCTION

Advanced placement courses and international baccalaureate (IB) programs facilitate high-performing students' transition between secondary and tertiary education (Regional Educational Laboratory Southeast, 2012). Few such transfer programs, however, cater to unmotivated or disaffected high school students; existing programs primarily involve technical education courses (King & West, 2009) or are designed to combat "senioritis" (Peterson, Anjewierden, & Corser, 2001, p. 23), a colloquial term describing students' low motivation, engagement, and enthusiasm in their final year of high school studies despite their impending graduation and progression into the next phase of their lives. Although 46 U.S. states had legislated articulation agreements by 2012 (Regier, 2016), the majority of such transfer programs involved students' transitions between community college and university, with relatively few dealing with high school to college programs. This study sought to address the gap in the latter programming by describing a high school to community college transfer program specifically designed for disaffected high school students who lacked focus in their studies and who may have been at risk of not graduating without interventions.

ARTICULATION AGREEMENTS

Articulation agreements are "an important tool to help students transfer successfully" (Hope, 2016, p. 8) between educational institutions; they set out the roles and specific responsibilities of the two corresponding institutions, as well as any ancillary benefits for students such as library privileges or gymnasium access (State Council of Higher Education for Virginia [SCHEV], 2010). Such agreements may be somewhat informal (Montague, 2012) but typically they are formal and sometimes mandated by a state (Regier, 2016) or a province (Acai & Newton, 2015). Articulation agreements may be either very broad or very specific; they often include a list of courses that are deemed equivalent (Ingwerson, 2012), set out procedures for curriculum coordination (King & West, 2009), and may identify faculty members' roles and responsibilities at each institution (SCHEV, 2010). An articulation agreement's primary role is to prevent or reduce course duplication (Jaeger, Dunstan, & Dixon, 2015), and some agreements also contain criteria for evaluating the success or effectiveness of a program.

Montague (2012) has identified a list of best practices relating to articulation agreements (and other transfer programs) that include: cooperative collaboration among knowledgeable representatives from both institutions; equal partnership between institutions; active engagement among faculty and administration from both institutions; and routine assessment of agreements based on data. Most importantly, articulation agreements must adopt a student-centred approach (Montague, 2012), and students' success is a major criterion. Specific benefits to students include reduced course duplication, shorter time to complete program requirements, and expanded accessibility and affordability (King & West, 2009; Montague, 2012; SCHEV, 2010), while benefits to community colleges include increased collaboration with their high school feeder institutions, increased enrolment, higher visibility, easier student recruitment, and increased funding (Illinois Community College Board [ICCB], 1992; King & West, 2009; Montague, 2012).

Despite such benefits, articulation agreements pose some challenges. Stern (2016) claims that there is a shortage of research on articulation agreements and that some research is based on limited data. Development of articulation agreements is not easy (King & West, 2009), and mandated agreements by states or provinces are frequently cumbersome and inefficient

(Montague, 2012). Other issues involve community college faculty's reluctance to participate in such transfer programs (Regier, 2016); divergent pedagogical approaches between institutions (Montague, 2012); curriculum conflicts in which one institution's program subordinates the other's (Montague, 2012); and a tendency by states to impose articulation agreements that are not responsive to local conditions (Montague, 2012). Issues specific to articulation agreements between community colleges and universities include: differences among public and private institutions; early transfers of students to universities from community colleges; and *swirling* transfers, whereby students transfer both from community colleges to universities and from universities to community colleges (Townsend & Ignash, 2000).

EXAMPLES OF HIGH SCHOOL–COMMUNITY COLLEGE ARTICULATION AGREEMENTS

High school students in California can acquire community college credits, usually in technical areas, by taking specific approved courses and writing an examination set by college faculty, all under the auspices of the state's master articulation agreement. Participating colleges identify high school courses that are rated equivalent to a similar college course, and outlines for the two courses are integrated to ensure coherence. The high school course is taught by high school faculty but the examination is evaluated by community college faculty (The Academic Senate for California Community Colleges, 2013).

The ICCB (1992) identified the critical role of articulation agreements between Illinois high schools and community colleges in motivating senior high school students and obtaining cooperation between high school and college faculties. While such articulation agreements had no standard form, the state identified their particular value as a block of common core subjects (ICCB, 1992).

A North Carolina-based study focused on equity issues by examining the role of articulation agreements in high school-to-college and college-to-university transfer programs for rural students:

> The decision to apply, enroll, and graduate from college is overwhelming for even the most well-prepared and well-resourced students. In comparison to their counterparts, high school graduates from rural areas/small towns and poor students from these areas, in particular, are at the greatest disadvantage in terms of opportunity to learn, and consistently evidence the lowest rates of college going. (Jaeger et al., 2015, p. 615)

Jaeger et al. (2015) also point out that community colleges have very diverse student populations—encompassing single parents, full-time workers, underrepresented minorities, and economically and educationally disadvantaged students—and that rural students share many of these characteristics. An articulation agreement between the University of North Carolina and community colleges in the state provides many of the benefits cited earlier, including affordability and reduced credit duplication, college completion times, and total tuition (Jaeger et al., 2015).

A statewide articulation agreement in Mississippi specifically targeting high school students seeking to pursue community-college technical or vocational programs was developed cooperatively by high school and community college faculty, state department of education personnel, and college deans (King & West, 2009). A typical articulation agreement specifies

that high school students must successfully complete the articulated high school courses, obtain at least 80% on the Mississippi Career Planning and Assessment System, complete an application form to the college, and enroll in the college within 18 months of high school graduation; college credit hours for these courses will then be noted on the student's transcript without cost (King & West, 2009).

Two high school programs in Ontario, Canada are specifically structured to help at-risk students focus on their studies and successfully enter community colleges. The first of these is the *dual credits* program in which students earn both high school and community college course credits for taking the same course. Course curriculum is jointly developed by high school faculty and community college instructors (Ontario Ministry of Education [OME], 2013a, 2013b). As of 2014, more than 19,000 students participated in dual credit programs, of whom 66% were identified as disengaged and underachieving in high school, and 13% had previously dropped out of school (OME, 2014). The majority (72%) of dual credit courses were delivered by college instructors on college campuses, while the remainder were delivered in high schools either individually by high school teachers or team-taught by high school teachers and college faculty. In addition, a small number of courses were delivered through a *school within a college* structure whereby high school faculty deliver the courses on a college campus (OME, 2014). The OME's (2014) *Dual Credit Programs: 2013-14 School Year Report* indicated an 88% success rate; that is, 88% of students successfully achieved credit for the course in which they were enrolled.

The second program in Ontario designed to support high school students identified as being disengaged or lacking focus is the *Specialist High Skills Major* (SHSM) program. In this program, high school students select a bundle of (i.e., eight to 10) Grade 11 and Grade 12 courses from one of 19 targeted content areas, such as business, mining, sports, or arts and culture (OME, 2012a). Upon successful completion of the program, students receive an annotation on their high school transcripts indicating the specialized nature of their studies (OME, 2012a). SHSM courses may also be part of the dual credit program if co-designed by high school and college faculty and approved as a dual credit (OME, 2012b).

CASE STUDY: A HIGH SCHOOL–COMMUNITY COLLEGE LINKAGE PROGRAM

This case study occurred in a city in Ontario, Canada with a population of 500,000. The high school involved in this program had approximately 1,800 students and was ethnically diverse. The community college had a number of campuses in this and other cities; the campus involved in this program was located a few blocks from the high school.

The impetus to create this program came from two grassroots sources. At the high school level, teachers expressed concern about a group of unmotivated, disengaged students wandering through their senior high school year with little focus or direction—a syndrome that Peterson et al. (2001) had coined as senioritis. Such students were apt to select a smorgasbord of courses often based on what their friends chose, what lunch period they wanted, or the time of day that courses were offered. Some of these disaffected students might have social issues, low self-esteem, or lack confidence, and some were at risk of failing courses or of not graduating from high school. Teachers wanted to create a program that would motivate this group of students and help them focus on their studies.

Simultaneously, the high school received feedback from the local community college concerning the success rate of the high school's graduates who had gone on to programs at the community college. The feedback was highly negative; first-year failure or withdrawal rates

were as high as 80% or more for students in some programs, and in others none of the high school's graduates successfully reached second year at the community college. College instructors indicated that students lacked adequate subject matter knowledge in some cases, while in others students had difficulty adjusting to the college lifestyle.

RESEARCH QUESTIONS

This case study sought to answer the following primary research questions:

1. What are appropriate success criteria to evaluate a high school–community college linkage program?
2. What attributes of such a program promote or ensure sustainability?

METHODOLOGY

This study principally employed a case study approach. The data were mainly qualitative, although a limited amount of quantitative data also was available. Inductive content analysis (Krippendorff, 2013) was used to identify themes based on semi-structured interviews with (a) a high school faculty member who was chair of the program, (b) a high school teacher heavily involved with the program, and (c) a high school administrator who supported the program. Because this was an ex post facto study, it was not possible to interview students from the program. A description of the program and its components was summarized from the interviews, sample student application forms, the articulation agreement between the high school and the community college, and a 3-year summary of success rates.

PROGRAM DESCRIPTION

Based on the two factors identified in the introduction to this section, namely, concern for at-risk secondary students and lack of success at the community college level, a group of high school teachers developed a program specifically for students who either were entering or considering a business course at the community college. The program was intended as a pilot for similar high school–college transfer programs (e.g., in technology and computer science) that would be launched depending on the pilot program's success. The program was developed at the high school level and subsequently input from the college was requested, followed by the development of an articulation agreement between the high school and the college. Potential student applicants initially were identified by the high school's guidance department, and word-of-mouth referrals later became a significant source of applicants.

DIMENSIONS OF THE HIGH SCHOOL PORTION OF THE PROGRAM

The program's high school component required students to complete a written application form and an interview with two high school faculty members. During the interview, students were questioned about their plans for postsecondary studies, commitment to their current and future high school studies, and their reasons for applying to the program. The program encompassed Grade 11 and Grade 12 high school courses, plus the first year of the community college (Figure 1).

There were four categories of course selection. The first category comprised four mandatory courses required for high school graduation: Grade 11 and Grade 12 English, and Grade 11 and Grade 12 Mathematics (either advanced or consumer mathematics). The second category comprised seven core business courses: Accounting, Business Leadership, Economics, Entrepreneurship, Information Processing, International Business, and Marketing. The intent here was to expose students to various areas of business, hence students were required to take at least one course in each of the seven areas, with an option to take a second course in an area of interest if they so wished. The third category was related skills; students chose at least one course from Presentation and Speaking Skills, Business English, or Media Studies. The final category was optional courses; student could choose up to four courses in Grade 11 or Grade 12 for which they had completed prerequisite courses. Students thus completed a total of 16 courses during the program's 2-year high school component. (The course requirements are summarized in Table 1.)

Students who chose this program were cohorted, in that all students in the program took courses as a group. Because the number of students in the program was initially small, the cohort shared classes with other students who were not part of the program. Students who were accepted into the program received materials (e.g., binders, pens, and mugs embossed with the program logo designed by the school's art department) that helped foster a sense of belonging and ultimately increased their self-esteem; these items also served as advertising for the program. Another dimension of the program consisted of workshops involving metacognitive concepts such as study skills, homework strategies, essay and exam writing skills, and the use of software and technology such as word processing and spreadsheets. In addition, each month the cohort had at least one guest speaker (who spoke about a specific business or career) and went on one field trip—either to tour the facilities of a local, innovative business or the community college, where the cohort also sat in on first-year college classes.

Academic monitoring was a major feature of the program. Students were required to submit an attendance report as well as biweekly progress reports from each of their teachers. Students also attended a monthly progress interview with a faculty member to discuss academic progress, any concerns regarding attendance, and any other issues that the student chose to raise. Although students were not assigned a teacher mentor, they could approach any faculty member involved in the program to discuss any problems.

PROGRAM'S ARTICULATION AGREEMENT

The high school's articulation agreement with the community college provided significant incentives for students. First, any student successfully completing the program requirements in Grade 11 and Grade 12 received guaranteed admission to the community college business program of their choice. Students who achieved a mark of 80% or more in their Grade 12 Mathematics course were exempted from the college mathematics admission test. Students achieving 80% or above in a Grade 12 business course were entitled to write a challenge examination at the college; successful completion of the latter would exempt them from the first-year college business course in that area, which in turn resulted in significant monetary advantages to students because they could reduce the tuition and other costs involved at the community college. Due to this feature of the program, the high school teachers and college instructors engaged in a number of collaborative activities and curriculum matching to ensure that the high school course curriculum had sufficient overlap with the college curriculum. A high

degree of trust was created between the high school and college faculty members, and the latter frequently were guest speakers in the high school program.

RESULTS

Success criteria for this program consisted of several factors: high school graduation; students' successful transition to year two of their college program; and students' report of increased self-esteem, self-confidence, and/or increased focus in their educational careers. High school exit interviews with the students indicated they all reported increased focus and motivation to complete high school, and most reported increases in self-esteem and self-confidence. Table 2 shows the program's success rates over 3 years, where success rate was calculated as the percentage of students who successfully completed the first year of college and entered the second year of their college program. Success rates increased from 57% in the first year of the program to 72% in the second year, decreasing to 65% in the third year. While the college reported the number of students who withdrew from or failed first year, it did not provide additional information explaining why some students were unsuccessful in the program.

DEMISE OF THE PROGRAM

This program was intended to be a pilot program with the expectation that additional focused programs would be developed once the initial program was evaluated. This did not happen for a number of reasons:

- The articulation agreement did not include any success criteria; thus there were no objective criteria to enable evaluation of the program.
- Newly assigned administrators both at the high school and the college showed significantly reduced enthusiasm to continue or expand the program.
- The high school faculty member who had championed the program developed fatigue due to the considerable time commitment and there was limited uptake of the program by additional teachers.
- Some high school faculty members felt somewhat subservient to college faculty (c.f., Montague, 2012). There also was a lack of will among college instructors to continue the collaborative activities with the high school and some college instructors refused to engage in curriculum matching with their high school counterparts (c.f., Regier, 2016).

In addition to the above, there also were changes made recently to the provincially mandated high school curriculum that limited high school teachers' ability to modify their course curricula to meet the college's requirements. The provincial government moved to serve at-risk students with other programs, such as the dual credit (OME, 2013a, 2013b) and SHSM (OME, 2012a) programs described earlier in this paper.

DISCUSSION

Objective data were available regarding the number of student participants in the sample program who entered the second year of their community college programs. By this measure, the program was a success, especially when compared to prior data indicating first-year failure rates of 80% or higher. The sample program's articulation agreement was very simple, outlining only the responsibilities of the community college towards the program's high school graduates. The

articulation agreement did not include any success criteria or specific faculty participation requirements or responsibilities.

VALIDITY

Internal consistency in this case study was supported by data triangulation among interviews, sample student application forms, and the articulation agreement. External validity was supported through the use of a case study protocol (Yin, 2009). The sample program predated other initiatives such as dual credits and SHSM; external validity was supported by elements of the program that are reflected in both of the latter OME initiatives. A very similar program is in place in Utah, where concerns regarding senior high school students' engagement and transition to higher education or the workforce resulted in a state-legislated dual-credit structure to provide a smooth transition from high school to community colleges and on to universities (Peterson et al., 2001). Courses in the Utah program were taught by high school faculty with course curriculum approved by community college instructors. The Utah program provided for full-time high school and part-time college faculty liaisons whose role was to coordinate curriculum and to monitor and maintain the quality of instruction, which was viewed as a cornerstone of the program. As part of the focus on quality instruction, high school teachers were provided with in-service training, and teachers involved in course delivery were evaluated using a community college evaluation instrument (Instructional Assessment System). A student survey indicated that 56% of respondents reported that the program encouraged them to attend college, while 12% said it had no effect and less than 1% said it discouraged them from attending (Peterson et al., 2001).

RESEARCH QUESTIONS

With respect to research question 1—What are appropriate success criteria to evaluate a high school–community college linkage program?—we must first identify the attributes of success criteria. First, the criteria must be actionable, in that they provide clear standards by which to judge the success or failure of the program. Second, the criteria must be grounded in data, and while not necessarily numerical, that data must be as objective as possible. Next, the criteria must also address affective dimensions, such as motivation, focus, and a sense of belonging. This condition opens the criteria to some level of subjectivity or bias, since affective variables are often self-reported and may be influenced by social desirability bias, whereby students report more positive results based on the desire for acceptance by peers or teachers (e.g., Holtgraves, 2004; Miller, 2012). Finally, the success criteria must be specified in the articulation agreement, to ensure clarity for all stakeholders at both institutions. The success criteria used in the program described in this paper—namely, percentage of students who proceed to their second year in community college, and anecdotal reports of increased self esteem, self confidence, motivation, and greater focus in their studies—include several of these attributes. However, it is clear that the faculty and administrators involved in the program must value such success criteria, and that the latter should be explicitly included in the articulation agreement to enable objective evaluation of the program.

Research question 2—What attributes of such a program promote or ensure sustainability?—is more problematic. The program described in this paper ultimately failed due to deficiencies in areas that could have enabled or supported sustainability, including: regular

evaluation of the program using success criteria contained in the articulation agreement; a focus on data (including data beyond the first year of community college) and information that could be used to modify the program, such as reasons for student failure or withdrawal; active involvement of school administration at both institutions, and support by senior administrative personnel (e.g., superintendents of education, college vice presidents or deans); faculty liaisons or *transfer champions* (Stern, 2016) to provide support to both faculty and students; ongoing curriculum alignment, pedagogical coordination, and interfaculty collaboration; and a critical mass of faculty at both institutions committed to the program. This last condition was a major reason for the demise of the program described in this paper. At the high school level, a small group of teachers were responsible for much of the program's time-consuming workload, which added to their full-time teaching duties. At the community college, a limited number of faculty participated in curriculum alignment activities, and other college faculty showed little interest in the program. Finally, sustainability also requires a broader lens on the transfer process between institutions, including institutional alignment of strategic goals, curricula, student advisory services, data analysis, and student learning outcomes (Hope, 2016).

CONCLUSIONS

The benefits of transfer programs among high schools, community colleges, and universities are clear. Reduction of course duplication and redundancy, lower overall costs to students, timely program completion, and greater access to higher education are all beneficial to students. In addition, students can be supported in increasing their focus on their educational futures and can acquire important skills such as motivation and engagement, and gain greater self-esteem and self-confidence. Grassroots initiatives are very powerful and apparently more effective than top-down imposition of programs (Gross & Goldhaber, 2009). A key factor is to obtain buy-in from faculty involved in the program, as well as building a critical mass of faculty to support program sustainability. The program described in this paper ultimately was not sustained; however, it provided a strong support mechanism for disaffected students for several years and potentially could have improved the success of subsequent students in similar circumstances had the program continued.

IMPLICATIONS FOR PRACTICE

This study has several implications for practice. First, the power of grassroots initiatives to respond to identified local issues is critical. This program—with its two initiators of high school faculty identifying an internal issue plus community college data showing attrition rates for high school graduates in college studies—produced a powerful response among both institutions. This can be contrasted with top-down initiatives that may be unresponsive to local needs and often unwieldy (Montague, 2012).

Second, the mere existence of an articulation agreement is insufficient to ensure success. The articulation agreement must be a formal written document that clearly identifies all parties' roles and responsibilities and outlines the explicit success criteria against which the program is to be evaluated. In the program studied, the articulation agreement contained none of these criteria and instead listed only the college's commitments to students.

Third, the onus is on the sending institution in any transfer program to ensure that students are prepared, confident, and motivated to take the next step in their educational

journeys. While this happened to some degree at the sample program's high school, there was limited follow-up or monitoring of students after they graduated and moved on to the college. Unfortunately, the high school program involved a small number of dedicated teachers who ultimately experienced burnout due to the time commitment that conflicted with their other full-time teaching duties. At the college level, commitment to the program was mixed at best, and frequently faculty chose either to decline involvement or to opt out after relatively brief involvement with the program. There thus needs to be buy-in by faculty at both institutions, and a critical mass of faculty who commit to the program in order to avoid such burnout or attrition. Further, there needs to be a mechanism in place to ensure the sustainment of that critical mass.

Finally, it is important to have a larger focus beyond the transfer program, with alignment of curricula, student learning goals, and institutional strategic goals (Hope, 2016) as well as identification of best practices for transfer programs (Montague, 2012). None of these things occurred, and a program that was clearly successful for students could not be sustained.

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APPENDICES

Table 1
Program Courses

Area	Courses	Credits
Compulsory	– Grade 11 English – Grade 12 English – Grade 11 Mathematics – Grade 12 Mathematics	4
Business courses (choose at least one from each area)	– Accounting – Business leadership – Economics – Entrepreneurship – Information processing – International business – Marketing	At least 7
Related skills (choose at least one)	– Presentation and speaking skills – Business English – Media studies	At least 1
Optional courses	– Any other Grade 11 or Grade 12 credit courses	Up to 4

Table 2
Successful Students by Year

Program year	No. of students	No. of students successfully moving to year 2 at community college	Percentage success rate
1	14	8	57%
2	22	16	72%
3	20	13	65%

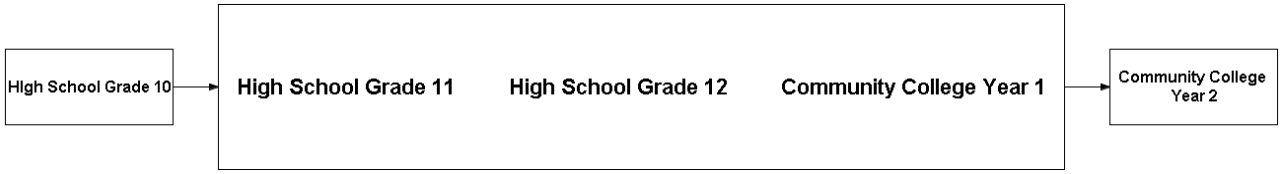

Figure 1. Conceptualization of the program.

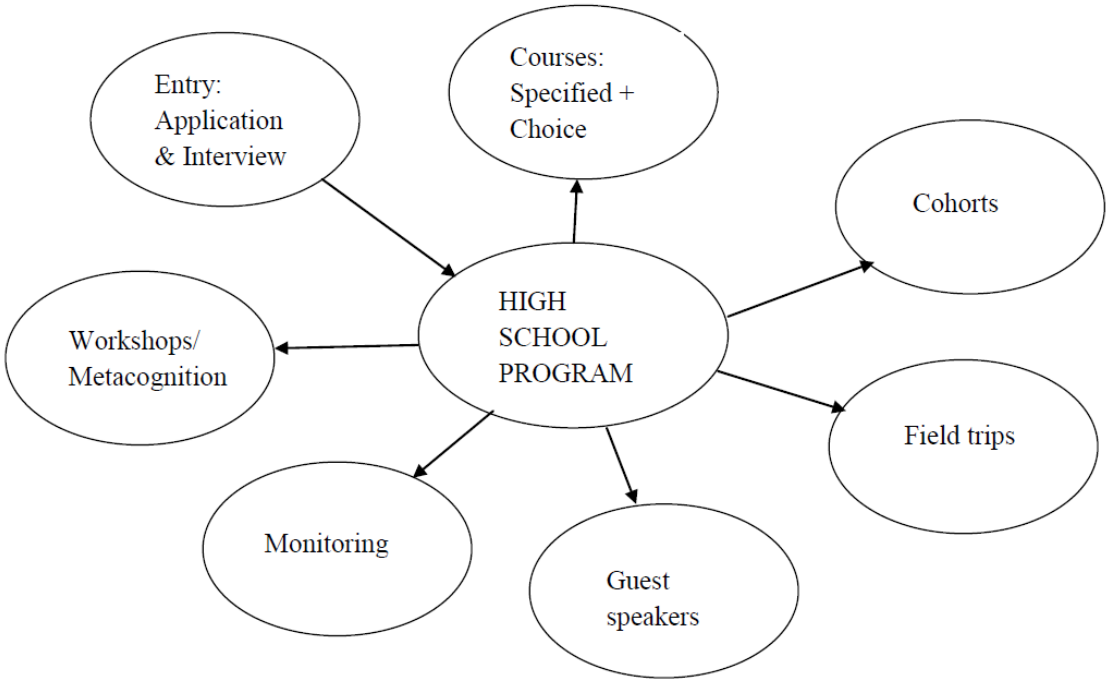

Figure 2. Aspects of the high school portion of the program.