

The Ohio Postsecondary Enrollment Opportunities (PSEO) Program: Understanding Its Under-utilization

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Abstract

The Ohio PSEO Program is a legislated dual enrollment curricular offering. The program provides higher educational courses that are also credited at the high school and funded at state expense for qualified students. Although individual and institutional benefits of the program abound (i.e., accelerated postsecondary completion, decreased expenses, articulation agreements, seamless education, and reduction in developmental college courses), the utilization rate has not appreciably increased, with competition from other programs being a major reason. A designed instrument and focus group interviews were utilized to determine Advance Placement (AP) students' rationale for their lack of participation in the program. Included in the study were AP and PSEO students and five guidance counselors from five large high schools. Quantitative results and qualitative responses concluded (a) AP students are satisfied with their courses and believe the curricula are comparable to college classes; (b) counselors and teachers are not program proponents; (c) AP students desire to remain with their peers; (d) AP students trust their qualifying courses will transfer to postsecondary institutions; (e) AP students' parents are not program proponents; (f) AP students are not

concerned about course duplication or expediting their collegiate experiences; and (g) AP students are more concerned about educational quality than cost.

Introduction

In 1989, Governor Celeste and the Ohio Legislature passed the Omnibus Education Reform Act legislating, among other educational reforms, the Postsecondary Enrollment Opportunities (PSEO) Program. During this time, the ethos of “school choice” was part of the national impetus for such reform and Ohio’s dual enrollment-type program was mirrored from Minnesota’s 1985 enactment (Howard, personal communication, July 10, 1999). Boswell (2001) credits the Minnesota program as the country’s first legislated dual enrollment offering. The program’s main goal was to alleviate commonplace curricular redundancy that resulted in unchallenged and bored students – merely “marking time” until graduation (Gerber, 1987; Pearson, 1993).

Nationally, dual enrollment programs – where students take high school and college courses simultaneously (Dougan, 2005; Hoffman & Robins, 2005; Hunt & Carroll, 2006; Swanson, 2007; Wright & Bogotch, 2006) – have steadily witnessed participation increases (Christian Citizen U.S.A., 2000; Dougan; Finn & Manno, 1996; Klein, 2007a). Attesting to the program’s popularity, Kronholz (1999) determined 80% of the University of Michigan’s incoming freshmen have some previously-earned college credits. During the 2000 academic year, Arizona’s dual enrollment program (instituted 6 years after Ohio’s) recorded an 11% participation rate among senior high school students (Campbell, 2001). In 1991, Virginia’s dual enrollment program commenced with 2,800 participants and by 1997, 6,700 students – a 140% increase (Andrews, 2001b; Reisberg, 1998) – were enrolled principally in college transfer courses (Catron, 1998). In 1999, 12,000 Minnesota high school seniors (approximately 20%) took advantage of the PSEO Program (Hoffman, 2003). At the end of 1993, 19,375 Florida high school students had taken dual enrollment courses and by the end of 1997, the number had increased 28% to 26,672 (Windham, 1997); by 2003, 34,732 Florida high school students participated (Florida Department of Education, 2004). In 2006, 11,437 Washington state students continued their “Running Start” studies at 2-year colleges (Washington State Board for Community and Technical Colleges,

2006). Although Missouri does not pay the dual enrollee's full tuition (unlike most other states' programs), the 1999 academic year still recorded 20,373 participants (Coordinating Board for Higher Education, 2001; Education Commission of the States, 2001).

The Ohio PSEO Program funds qualified ninth through twelfth grade students' higher educational courses that are concurrently credited against their graduation requirements (Ohio Department of Education [ODOE], 1998). According to *Christian Citizen U.S.A.* (2000), the program's inaugural year saw 630 participants. By the 1997 academic year, 6,361 participants of 250,322 public high school juniors and seniors utilized the program – a 2.5% participation rate (Degen, personal communication, February 26, 2004). Although the original participation rate increased nearly 12-fold, the current (and approximate) 1.5% participation rate (Bruns, 2000) is not the increase that was initially anticipated.

Despite the increasing participation, the rationale for nonparticipation has remained under-investigated and undocumented. Therefore, the question may be asked: "Why do so few Ohio students use such a munificent public offering?" To investigate this question, a series of statements from a designed survey instrument were administered to program-eligible students. These were Advance Placement (AP) math and English students, who by virtue of their grade point averages (GPA) are eligible to participate in the PSEO Program, but choose not to participate. The quantitative results and the students' qualitative responses (e.g., as a focus group) were compared to the analogous numbers of PSEO Program participants (who were given the equivalent survey instrument and also comprised another focus group) attending metropolitan Sinclair Community College in Dayton, Ohio. The two groups of students came from the same area high schools. Additionally, one guidance counselor from each of the five schools was qualitatively interviewed and their responses recorded on cassette tapes. Each counselor's open-ended response was subsequently transcribed into a "hard copy" (e.g., Word document) so themes could be concretely identified and qualitatively documented for correlation, clarification, and inclusion in the study.

Definition and Benefits

The innovative educational undertaking is based on the simultaneous acquisition of postsecondary education credits that also satisfies secondary

requirements. Every state has dual enrollment programs in some form or another (Crooks, 1998; Weiss, 2005). However, since no strict program definition is settled, assorted titles exist (Andrews, 2004): “The terms concurrent enrollment, dual credit, dual enrollment, postsecondary enrollment, joint enrollment, and co-enrollment are used interchangeably” (Robertson, Chapman, & Gaskin, 2001, p. 1). Only a few states have provided consistent program data and supporting analysis (Hoffman, 2003; Orr, 2002). One major reason is due to the common usage of incompatible data systems across higher and secondary education (Boswell, 2000; Hoffman, 2005; Hughes & Karp, 2006).

With more earlier dual college credits earned comes potentially significant the overall cost reduction (Orr, 2002; Reisberg, 1998) and the shorter the timeframe required (Hunt & Carroll, 2006; Mabry, 1988; Plucker, Chien, & Zaman, 2006) to complete secondary and higher education requirements (Boswell, 2001; Catron, 2001). Marshall and Andrews (2002) found participants shave an average of 1.2 semesters off their baccalaureate program—important because only 43% of students finish their baccalaureate degree within four years (Carey, 2005; Finn & Manno, 1996). Marshall and Andrews also determined that between \$5,000 and \$24,000 can be saved against future collegiate expenditures for each full year of program utilization.

Following the initial acquisition of postsecondary credits, the participants’ propensity to continue their educational endeavors significantly increase (Education Trust, 1999; Peterson, Anjewierden, & Corser, 2001; Schwalm, 1991; Silverberg, 1993). Successful program participation assures student admission at the respective postsecondary institution (Just & Adams, 1997) and is also an excellent way for disadvantaged students (Hoffman & Robins, 2005; Hunt & Carroll, 2006) and those who have not done well to “augment their academic portfolio...for college admission” (Hugo, 2001, p. 68).

Over 60% of students entering 2- and 4-year postsecondary institutions exit before their formal completion (Koker & Hendel, 2003; Tinto, 1993). The more challenging and difficult the high school student’s curricular undertakings, the more likely the undergraduate’s success and continuance (Adelman, 1999; Bailey, Hughes, & Karp, 2003; Plucker, Chien, & Zaman, 2006). Early on, Silverberg (1993) correlated increased higher educational retention results with dual enrollment program participation, although Bailey, Hughes, and Karp (2002) purported that outcome may be reflective of the participant’s characteristics rather than program effects. Wolcott (2001) determined that

the program participation affords students early opportunities to adopt critical time management and behavioral modifications, while Tinto (1987) found educational persistence to be contingent in part on constructive encounters with faculty and support personnel – both strategies enhance postsecondary integration and are resultant dual enrollment program participation products because an early and clear expectation of college level academic work is introduced (Plucker et al., 2006). Robertson (2005) found numerous small-scale studies that determined program participants earn higher grades, require less remediation, and have higher rates of persistence while in college.

Kiger and Johnson (1997) concluded that marketing Ohio's PSEO Program is an important, yet incomplete strategy that is needed to increase awareness and participation. Although more than half of all colleges and universities have high school students enrolled in their college course offerings (Kleiner & Lewis, 2005), program publicity is particularly advantageous to community colleges, as top-caliber students (who would not historically attend) often remain to complete their degrees (American Association of State Colleges and Universities [AASCU], 2002; Fisher, 1997; Sullivan, 1999).

The Ohio PSEO Program

Since 1990, Ohio's postsecondary appropriations have received the lowest priority (Governor's Commission on Higher Education & the Economy [GCHEE], 2004). This effectively created deficit funding for higher education. Resultant tuition and ancillary cost increases are a major concern to the general public and in particular, impending high school graduates and their parents (Boswell, 2001).

Since 1999, all public high schools, as well as chartered, unchartered, private secondary (ODOE, 1998), and community school students have legislated participation privileges (Jordan, 2001). In addition, Ohio's budget reductions have made collaboration a high-priority educational objective (GCHEE, 2004; Ohio S.B. 6, 2005). Although higher educational institutions are free to establish additional admissions criteria, they are required to accept qualified, eligible students with the understanding that the program "will not pay for developmental coursework" (Jordan, p. 77).

The program funds participants' undergraduate coursework (as well as associated fees, books, and other requisite materials), resulting in the concurrent earning of collegiate and high school Carnegie education credits

(Jordan, 2001; ODOE, 1998). The Ohio funding formula results in “a reduction in daily funds to the high school for the dually enrolled student” (Boswell, 2001, p. 10), wherein payment that “may not cover all [associated] costs” (ODOE, p. 11) is transferred to the postsecondary institution. School districts are understandably reluctant to forfeit applicable foundation funds (AASCU, 2002; Fisher, 1997). For the 1999 academic school year, the cost per student was \$4,269 (Elliott & Gulliver, 2000) and \$5,283 per pupil in fiscal year 2005 (“Happy (?) Fiscal New Year,” 2005).

Although students are free to attend any Ohio institution of higher learning where admitted, “no graduation requirements will be eliminated or reduced” (Jordan, 2001, p. 75) or Competency-Based Education and Proficiency Testing requirements altered (ODOE, 1998). Participants are not prohibited from taking eligible college courses, even if the same course is offered at the local high school (ODOE). They are also permitted to enroll in evening, correspondence, and distance-learning courses (ODOE), resulting in flexible scheduling. Participants who voluntarily withdraw, or fail because of nonattendance or incomplete assignments “may be required to reimburse the district board all fees associated with the course” (Jordan, p. 75), in addition to jeopardizing their graduation and postsecondary opportunities.

Transportation to the higher educational institution is not a program provision (ODOE, 1998). Although program participation can begin in the ninth grade, the lack of school-provided transportation, coupled with the participant’s age, effectively limits participation – particularly if participants’ parents do not (or cannot) provide their children’s transportation or when public transportation is not available. “Transportation is the main reason the majority of PSEO Program participants are seniors and juniors,” according to one high school guidance counselor (personal communication, April 22, 2005).

Although the lack of transportation could particularly exclude low-income students from program participation (Nathan & Jennings, 1990), families with “incomes below the federal poverty line [are given] a transportation stipend... to cover the cost of commuting to a post secondary institution” (Wells, 1993, p. 100). Ohio’s PSEO Program guidelines do include reimbursement provisions (ODOE, 1998).

Opposition

Many high school teachers and administrators resent “the loss of their strongest students” (Wolcott, 2001, p. 60) to dual enrollment participation. Early on, Rentschler (1991) examined the Ohio PSEO Program and found that high school teachers and administrators generally objected to the program and frequently discouraged participation. Catron (2001) found these individuals believe secondary students to be psychologically, socially, and academically unprepared for collegiate participation (Dougan, 2005), with their age being of paramount concern.

Advanced Placement (AP) Program

Dual enrollment programs and AP courses are the fastest growing components of high schools during the past few years (Pennington, 2002). Not aligned with secondary education standards (Boswell, 2000), AP courses rigorously “challenge students to analyze subjects at the kind of depth found in a college classroom” (Feller, 2004, p. A8). Although AP classes parallel higher educational curricula and come closest to establishing national standards for postsecondary administrators to use when determining the equivalency and transferability of secondary education courses (Boswell, 2000; Dutkowsky, Evensky, & Edmonds, 2007), participation is restricted.

There is no guarantee the student will attain the minimum score necessary for college credit consideration (Andrews, 2001a). The cost for each end-of-course examination ranges from \$75 to \$100 (Hebert, 2001; Reisberg, 1998). Although admissions officers place a premium on AP courses and their weighted GPAs because of the correlation between high AP exam results and future college performance (Hunt & Carroll, 2006; U.S. Department of Education, n.d.), not all secondary schools can afford AP course offerings (Boswell, 2001). Further, only 67% of public high school districts offer AP courses (Feller, 2004). Chamberlain (2005) determined that a slightly larger number (71%) of public high schools offer dual enrollment program participation with higher educational institutions. Smaller districts, with their constrained budgets, increasingly use dual enrollment programs (Catron, 1998; Hunt & Carroll, 2006), resulting in rural areas having the largest dual enrollment participation (Boughton, 1987; Catron, 2001). Conversely, metropolitan college administrators cite lower participation because of AP

program competition among the larger, more-endowed school districts (Catron, 2001).

Although AP courses are one way students can earn college credit while in high school (Klein, 2007b), Andrews and Marshall (1991) and Schwalm (1991) earlier and independently revealed that many colleges and universities do not accept AP scores for credit, regardless of the end-of-course score. One reason is that AP high school teachers are thought to stress testing skills over critical thinking and writing skills; subsequently, the integrity of AP courses' collegiate equivalency has come under professorial suspicion (Dougan, 2005; Juillerat, Dubowsky, Ridenour, McIntosh, & Caprio, 1997; Reisberg, 1998).

Methods

Instrument

A pilot instrument was composed, preliminarily tested, and administered to AP English and math students, and PSEO Program participants during April and May 2005. Beginning with positive connotation, the attitudinal instrument utilized a 5-point Likert-type scale [5 = *Strongly Agree*; 4 = *Agree*; 3 = *Neutral*; 2 = *Disagree*; and 1 = *Strongly Disagree*] (Sudman & Bradburn, 1982). To increase content validity, it was checked by five PSEO Program students (excluded from the overall study) and three professors. The refined instrument contained 21 specific (see Table 5) and seven demographic items (see Appendix A).

Approximately one month before the instrument was administered, the AP students and their parents were given a letter outlining the purpose of the survey and its importance, which also explained to the parents their option of not having their sons or daughters participate in the project on the date the survey was given. The instrument was administered to students in ten AP math and English classes ($n = 192$) by their respective teachers. The PSEO Program students were mailed their survey item, along with the explanation letter; likewise, their parents were told their children did not have to participate and the non-return of the instrument would imply nonparticipation; however, return of the instrument and its signature implied voluntary consent.

Originating from the same high schools, 147 PSEO Program participants attending the community college (42% of its participants) were sampled for comparison. Surveys were mailed to their home of record with instructions

and a stamped, pre-addressed return envelope. A follow-up request was sent to the nonrespondents to increase the response rate. Overall, 60 participants responded out of 147 (40.8%). The responses of the groups were statistically analyzed using the two-tailed *t*-test, as the two groups represent similar, mutually-exclusive samples of the PSEO Program-eligible population (Krathwohl, 1993).

In addition to the five high school guidance counselors, one AP focus group ($n = 6$) and one PSEO Program focus group ($n = 9$) provided qualitative data. The focus group members received \$3.00 (i.e., \$2.00 for gas and \$1.00 for parking fees) for their efforts.

Participants

Due, in-part, to prerequisites, both groups demonstrated that respective program participation chiefly occurs during the senior year. The results are indicated in Table 1. The PSEO Program participants ($n = 60$) reflected zero (0.0%) freshmen; five (8.3%) sophomores; 12 (20%) juniors; and 43 (71.7%) seniors. Similarly, the AP group ($n = 192$) reflected no freshmen (0.0%) or sophomore (0.0%) participation, with 28 (14.6%) juniors, and 164 (85.4%) seniors taking (at least) AP math or English courses.

Table 1
High School Class Rank and Percentage of Participation

Class rank	PSEOP	AP
Freshman	0.0%	0.0%
Sophomore	8.3%	0.0%
Junior	20.0%	14.6%
Senior	71.7%	84.5%

In order to attend the postsecondary institution, all (100%) of the PSEO Program participants had reliable transportation. Among the AP students, 157 (84.0%) reported they had reliable transportation, whereas only 30 (16.0%) reported they did not. The age distribution of the PSEO Program participants were four (6.7%) 16-year-olds; 19 (31.6%) 17-year-olds; 36 (60.0%) 18-year-olds; zero (0.0%) 19-year-olds; and one (1.7%) 20-year-old. The AP group

identified themselves as 11 (5.7%) 16-year-olds; 69 (36.0%) 17-year-olds; 111 (57.8%) 18-year-olds; and one (0.5%) 19-year-old, and is consistent with the findings of the Collegeboard (2005). Table 2 presents the age of the respondents.

Table 2
Age of Respondents

Years of age	PSEOP	AP
16 years	6.7%	5.7%
17 years	31.6%	36.0%
18 years	60.0%	57.8%
19 years	0.0%	0.5%
20 years	1.7%	0.0%

The cumulative GPA above 3.0 for the PSEO group was 81.4% and the AP group 96.4%, with all respondents from both groups reporting their cumulative GPA to be greater than 2.5. Table 3 presents the results of GPA for PSEO and AP groups. The gender of the PSEO Program participants was 40 (66.7%) males and 20 (33.3%) females; for the AP respondents 102 (53.1%) were males and 90 (46.9%) were females, and is consistent with the Collegeboard (2005) findings.

Table 3
GPA of Respondents

	PSEOP	AP
3.5 or above	54.2%	86.5%
3.0 – 3.4	27.2%	9.9%
2.5 - 2.9	18.6%	3.6%
2.4 or below	0.0%	0.0%

Among the PSEO Program participants, nine (15%) will be “first generation” college students, while 51 (85%) would not; for the AP group, 25 (13%) will be, while 167 (87%) would not be first generation college students (see Table 4).

Table 4
First Generation College Student

	PSEOP	AP
Yes	15.0%	13.0%
No	85.0%	87.0%

Procedures

Because only one question cluster (containing four items) was found to be internally consistent (see Appendix B), the Bonferroni Correction of Multiple-Comparison was utilized to address individual items rather than to use unacceptably low measures of internal consistency. The Bonferroni correction value was determined by subtracting the acceptable cluster items from the total instrument tests (i.e., $21 - 4 = 17$). The alpha value ($p < .05$) was then divided by 17 ($.05/17$), resulting in an adjusted critical value of $p < .0029$ that was used to test the individually obtained p -values for the 17 remaining items in order to avoid Type I errors (Shaffer, 1995).

As a result, 11 instrument items resulted in significant differences ($p \leq .001$), while six items failed to reach significance. Additionally, one item that was initially not significant was reversed when the seven nonsignificant items were considered and that item examined by taking $p < .05$ and dividing by those seven nonsignificant items ($.05/7$), subsequently yielding an adjusted alpha value of $p < .0071$. That item's $p = .006$ was less than the recalculated Bonferroni value and resulted in a significant finding.

Results

The results of the independent-samples t -tests for the PSEO Program and AP participants' responses are presented in Table 5. Four items were designed to address one of the research questions, “How aware are students that PSEO Program participation can save them and their parents against future

college expenses?" (see Appendix B). Those four items yielded acceptable alpha-Cronbach values. The independent samples *t*-test found significant differences, $t(253) = 6.24, p < .001$, that indicated PSEO participants ($M = 3.88; SD = .60$) have greater awareness that program participation can save them and their parents against future college expenses as compared to the AP students ($M = 3.33; SD = .61$).

The independent-samples *t*-test found no significant difference between PSEO Program participants ($M = 2.71; SD = .81$) and the AP participants' scores ($M = 2.87; SD = 1.11$), $t(250) = 1.194$, concerning their awareness that admitting colleges or universities may not accept AP courses for transfer credit (see item 3). Nonetheless, the AP group affirmed that even if transfer credits are not awarded, their rigorous undertakings are still worth their efforts.

When the mean scores of the PSEO ($M = 4.48; SD = .89$) and the AP mean scores ($M = 3.06; SD = .90$) were compared the independent-samples *t*-test found significant differences, $t(250) = 10.72, p < .001$, that indicated PSEO participants have greater control over their schedules, including its flexibility, than AP students and that awareness is significantly more important to the PSEO Program group than the AP group (see item 6). The opportunity to select times and courses is a key aspect of PSEO Program satisfaction and participation (Kiger & Johnson, 1997). One focus group "night owl" appreciates her capacity to schedule afternoon and/or evening classes; while another stated her flexible schedule provides "more time to devote to academic studies and homework."

The results of the independent-samples *t*-test for item 21 found a significant difference between the beliefs of the PSEO participants ($M = 3.83; SD = 1.08$) and the AP ($M = 3.40; SD = .83$) participants that their participation in the PSEO program would not exclude them from athletics and extracurricular activities, $t(250) = 3.310, p < .001$. Although the AP group was aware that extracurricular participation is permitted, the PSEO Program participants were more certain of this rule.

Was the PSEO Program application process discouraging (see item 20)? The independent-samples *t*-test found significant differences, $t(250) = 4.413, p < .001$, between the PSEO ($M = 3.98; SD = .98$) and AP ($M = 3.40; SD = .83$) groups. Because this item was negatively worded, it was reverse-coded. The rationale was that if it is "true" the application process was "not discouraging" the students would have been expected to affirmatively answer this statement; wherein, such answers would actually be a "negative"

response (e.g., the application process was discouraging) in total opposition to the response direction pattern applicable to the rest of the instrument. Because the participants underwent the admissions process and did agree it was discouraging, their responses suggested application modifications may be in order.

Did the two groups expect to repeat high school level coursework during their first two years of college? The independent-samples *t*-test found no significant difference of, $t(250) = .345$, between the PSEO ($M = 3.58$; $SD = 1.03$) and AP ($M = 3.53$; $SD = 1.10$) groups' responses to item 7. Both groups generally *agreed* they will probably (re)take the comparable high school curricula in higher education. It was expected that the participants would have offered a stronger negative response, since they are simultaneously taking classes that should preclude their repeat.

How aware are the students that successfully passed PSEO Program courses will simultaneously fulfill graduation requirements (see item 13)? The independent-samples *t*-test found a significant difference of, $t(250) = 6.705$, $p < .001$, between the PSEO ($M = 4.53$; $SD = .77$) and AP ($M = 3.70$; $SD = 1.00$) groups' responses. The results suggested that the participants are more positive about the substitution value of postsecondary courses that fulfill graduation requirements and ultimately eliminate course redundancy.

What is the degree of awareness that PSEO Program participation reduces the time to complete the higher education degree (see item 16)? The independent-samples *t*-test found a significant difference, $t(250) = 7.618$, $p < .001$, between the PSEO ($M = 4.25$; $SD = .99$) and AP ($M = 3.22$; $SD = .89$) participants' responses. Although both groups are aware of the advantages of obtaining collegiate credits early on, the results indicated that the participants responded with more conviction about the program's time reduction benefits.

How aware were they that only 43% of students finish their baccalaureate degree within four years (see item 17)? The independent-samples *t*-test found no significant difference between the mean scores of the PSEO ($M = 2.71$; $SD = .74$) and AP ($M = 2.76$; $SD = .79$) participants' responses. The lack of significant difference most likely reflects that neither group was knowledgeable that approximately 60% of college students do not complete their bachelor's degree in four years.

The independent-samples *t*-test found no significant difference, $t(250) = 0.943$, among the PSEO ($M = 3.55$; $SD = 1.21$) and AP ($M = 3.39$; $SD =$

1.11) participants concerning program information availability. Both groups *agreed* that program information was provided to their parents/guardians (see item 8).

The students were asked if their parents were primarily responsible for their program (non-)/participation (see item 10). The independent-samples *t*-test found no significant difference between the PSEO ($M = 2.22$; $SD = 1.08$) and AP ($M = 2.33$; $SD = .90$) participants' responses for this statement, suggesting that both groups' parents allowed the students to determine their respective academic tract.

Was it the students' decision to investigate the PSEO Program and its benefits (see item 9)? The independent-samples *t*-test found significant differences between the PSEO ($M = 4.55$; $SD = .72$) and AP ($M = 4.15$; $SD = .81$) participants' responses for this item, $t(250) = 3.393$, $p < .001$. Although participants generally *agreed* that they were responsible for their program participation, both groups affirmed parental empowerment to make important educational decisions despite their adolescence. During the focus group sessions, both groups evidenced overt pride in their respective choices. Considering McConnaha's (1996) finding that students who participate because of external (i.e., parental) influences negatively view dual enrollment programs and their outcomes, such empowerment is particularly important to program satisfaction (Noble & Drummond, 1992). According to the guidance counselors, however, the majority of parents do not favor the program, particularly after attending the PSEO Program information session that, among other things, reveals the consequences of course failure. They are also apprehensive about the older individuals whom their children would encounter in college.

Do high school teachers inform students about the PSEO Program (see item 12)? The independent-samples *t*-test yielded significant differences between the PSEO ($M = 3.10$; $SD = 1.10$) and AP ($M = 2.32$; $SD = 1.10$) participants' responses for this question, $t(250) = 4.833$, $p < .001$. The participants' responses suggest their teachers do not inform them about the PSEO Program; however, the AP focus group definitively stated their teachers did inform them.

The groups were asked if their high school counselors informed them about the PSEO Program (see item 11). The independent-samples *t*-test initially yielded no significant difference between the PSEO group ($M = 3.00$;

$SD = 1.26$) and the AP ($M = 3.48$; $SD = 1.14$) groups' responses, $t(250) = 2.797$, $p = .006$. However, utilizing Bonferroni's adjustment, the new critical $p = .0071$ was determined to be greater than the obtained value and resulted in a significant difference. The AP students affirmed that the counselors present PSEO Program information to them more so than did the participants. The PSEO Program focus group, however, reported the guidance counselors did not present the information "in the most positive way" – maybe because they are employed by the school district? Indeed, their program presentation's objectivity is dubious, as evidenced by one counselor's general program objections, stating "the ability to gain admission into the PSEO Program is no substitute for cognitive and behavioral development" (personal communication, April 26, 2005) while another counselor strongly implied students profit more under secondary school authorities.

The respondents were asked if high school is boring. The independent-samples t -test yielded significant differences between the PSEO ($M = 2.12$; $SD = 1.12$) and AP ($M = 3.01$; $SD = 1.10$) participants' responses for item 4, $t(250) = 5.475$, $p < .001$. The AP group was *neutral* about the "boredom" they related concerning their high school experiences; however, in a surprise finding the participants generally *disagreed* that high school is boring. Such may be due to the participants' involvement in an additional academic institution that increases and diversifies their activities and experiences. During the PSEO Program focus group, however, an incongruent consensus emerged that affirmed high school *is* boring, as the members relayed their ardent appreciation for the overall "college atmosphere" and its pedagogy (further examined in the "*PSEO Program Focus Group*" section).

Do students believe AP courses are as challenging as equivalent college courses (see item 1)? The independent-samples t -test yielded significant differences between the PSEO ($M = 3.34$; $SD = .88$) and AP ($M = 3.85$; $SD = .84$) participants' responses for this item, $t(250) = 4.015$, $p < .001$. The AP group believes their academic coursework is as challenging as what they understand to be similar college courses. When students were asked if they are satisfied with the AP course offerings, the independent-samples t -test yielded significant differences between the PSEO ($M = 3.47$; $SD = 1.01$) and AP ($M = 4.16$; $SD = .96$) participants' responses, $t(250) = 4.752$, $p < .001$. The AP group was more satisfied with the offering of AP courses than were the PSEO Program participants with the AP courses that were offered at their high schools (see item 2).

Do the students believe a loss of classmate “closeness” results from PSEO Program participation (see item 5)? The independent-samples *t*-test failed to reveal significant differences between the PSEO ($M = 3.13$; $SD = 1.38$) and AP ($M = 2.71$; $SD = 1.02$) participants’ responses for this item, $t(250) = 2.181$, $p < .05$. Neither group was convinced that participation causes diminished intimacy among their high school peers.

Table 5
Instrument Items Means and Standard Deviations

Question/statement	Group	<i>M</i> (<i>SD</i>)	<i>t</i>
1. I believe AP courses are as challenging as the equivalent college courses.	AP	3.85 (.84)	4.02**
	PSEOP	3.34 (.88)	
2. I am satisfied with my high school’s current offering of AP courses.	AP	4.16 (.96)	4.75**
	PSEOP	3.47 (1.01)	
3. Admitting colleges or universities may not accept AP courses for transfer credit.	AP	2.87 (1.11)	1.19
	PSEOP	2.71 (.81)	
4. High school is boring.	AP	3.01 (1.10)	5.48**
	PSEOP	2.12 (1.12)	
5. A loss of closeness with high school classmates results because of PSEOP participation.	AP	2.71 (1.02)	2.18
	PSEOP	3.13 (1.38)	
6. PSEOP participants have greater control (and flexibility) over their academic schedules.	AP	3.06 (.90)	10.72**
	PSEOP	4.48 (.89)	
7. I expect to repeat high school level coursework during my 2 years of college.	AP	3.53 (1.10)	0.35
	PSEOP	3.58 (1.03)	

Note. * $p < 0.01$; ** $p < 0.001$.

(table continues)

Table 5 (*continued*)

Question/statement	Group	<i>M</i> (<i>SD</i>)	<i>t</i>
8. PSEOP information was provided to my parents/guardians.	AP	3.39 (1.11)	0.94
	PSEOP	3.55 (1.21)	
9. The decision to investigate or not to investigate the PSEOP was my choice.	AP	4.15 (.81)	3.39**
	PSEOP	4.55 (.72)	
10. My participation in the PSEOP was primarily at my parents' suggestion.	AP	2.33 (.90)	0.79
	PSEOP	2.22 (1.08)	
11. My high school guidance counselors informed me about the PSEOP.	AP	3.48 (1.14)	2.80*
	PSEOP	3.00 (1.26)	
12. My high school teachers informed me about the PSEOP.	AP	3.10 (1.10)	4.83**
	PSEOP	2.32 (1.10)	
13. I am aware that the PSEOP Option B courses successfully passed will substitute for my high school courses and fulfill my graduation requirements.	AP	3.70 (1.00)	6.71**
	PSEOP	4.53 (.77)	
16. PSEOP Option B participation will reduce the time necessary to complete my higher education degree.	AP	3.22 (.89)	7.62**
	PSEOP	4.25 (.99)	
17. Only 43% of all students finish their baccalaureate (bachelor's) degree within 4 years.	AP	2.76 (.79)	0.39
	PSEOP	2.71 (.74)	
20. The PSEOP program application process discouraged me from program participation.	AP	3.39 (.89)	4.41**
	PSEOP	3.98 (.98)	

Note. * $p < 0.01$; ** $p < 0.001$.

(table continues)

Table 5 (continued)

Question/statement	Group	<i>M (SD)</i>	<i>t</i>
21. As a PSEOP Program Option B participant, I can still participate in my high school athletic and/or extracurricular programs.	AP	3.40 (.83)	3.31**
	PSEOP	3.83 (1.08)	

Note. * $p < 0.01$; ** $p < 0.001$.

PSEO Program Focus Group

During the PSEO Program focus group interview, two overarching themes emerged: Objections about the “high school atmosphere” and the program’s advantages. Strong and consensus opinions centering on “lack of teacher respect” emerged; one individual candidly reported “the teachers know they *own* you from 8 [a.m.] to 3 [p.m.]...and can do anything they want to you!” They collectively stated the teachers “do not respect the students,” often treating them like “little kids.” Capriciously doled out punishments were another “control issue” they strongly objected to, particularly when class tardiness was beyond their control and stoutly resented the consequential four hours of “Saturday school” and were unappreciative of “the power the teachers exercise over [them].” In contrast, all of them agreed that their college professors make “no [perceptible] treatment differences between [them] and other [postsecondary] class members.”

One focus group member stated “most of the students don’t even want to be there; they are there to socialize – not to learn!” The lockstep “8 [a.m.] to 3 [p.m.]” inflexibility associated with “school times” was also resented, but program participation afforded them the ability to “set their own class schedules,” allowing them to attend classes and study “when they want to, at the best times” – day or night. The group generally agreed “high school is ‘boring’ because of the immaturity of [their] classmates; the slow pace of the classes; and the [teachers’] instructional style.” In contrast, one participant said college classes are “more exciting, making you want to do the work, because...your classmates and your professors are excited to be there!” although “the pace takes some getting used to” and this statement is consistent with a point made by Born (2006) that dual enrollees’ experience time scarcity to complete their higher educational assignments.

Multiculturalism is not a high school priority (Woolcott, 2001), but participants expressed appreciation for the college's diversity, one member stating "role models are easy to find because there are so many." Such is an unexpected finding, since the investigator was not cognizant of the importance teenage students place on diversity.

Because participation is voluntary, program satisfaction was anticipated to be high and was so reported, but primarily from the standpoint of what they perceived as *wrong* with their high school. Four focus group participants were particularly upset about the "ridiculous amounts of 'busywork'" required, contending most homework is excessive – sometimes not graded and "not very beneficial." They did affirm that the college academic assignments definitely correspond to their grade.

Many college courses are 3 or 4 quarter hours (qh) and coupled with the fact that one Carnegie credit is equivalent to 7½ qh (Jordan, 2001), more postsecondary coursework is necessary to complete the high school equivalents and was reported by one guidance counselor to be another source of program dissuasion. The focus group, however, revealed dissatisfaction with "the limited number of postsecondary courses [they] are permitted to take," as guidelines restrict the number of PSEO Program classes. For this reason, the participants are overwhelmingly part-time and generally engaged in elective equivalents, with the required core courses most commonly undertaken at the high school.

Nonalignment of the academic calendars is another reason offered for part-time program participation. Because the college schedules often run beyond the high school graduation dates, spring quarter courses are not completed in time to receive guidance counselor certification and, if required, prohibit the student's commencement; wherein, seniors do not generally utilize the program during their final quarter. Although possible, one guidance counselor reported these are significant reasons "the overwhelming majority of participants do not complete a postsecondary degree [concomitant] with their high school graduation" (personal communication, April 13, 2005).

AP Focus Group

Aware of the current \$82 end-of-course test cost, the AP focus group members are very cognizant of the importance of the resultant scores – a minimum "3" (out of 5) is required for credit consideration, but acceptance

policies vary across institutions (Indiana University, 2005). Dutkowsky, Evensky, and Edmonds (2006) determined many colleges and universities have already raised the minimum AP test score to “4” for college credit considerations. Ironically, two focus group members believed higher educational institutions would be “more [inclined to] accept PSEO Program courses over AP courses.” Another member supported this contention, stating “admitting colleges and universities are becoming increasingly ‘stingier’ [in accepting] AP credits,” no matter the end-of-course score. They appeared undaunted, however, realizing many of their AP courses may have to be repeated, particularly if transfer credits are not awarded.

Although the PSEO Program affords scheduling flexibility, that advantage (was)/is not persuasive, as one guidance counselor recognized “the overwhelming majority of students feel remaining with their peers during their high school years is the most important factor, [and precludes] their decision to participate” in the program (personal communication, May 10, 2005). Four of the AP focus group members adamantly stated they do not feel comfortable going to school with older students (although cultural and/or ethnic differences may also be an undisclosed factor). Three group members reported their parents were unabashedly opposed to the program.

Although the group reported they were informed about the PSEO Program, one student stated he “loved [his] AP classes” because “everyone in those classes [is] there because they really want to be there!” Another student said “AP participants work harder,” and more “closely associate with each other, because [they] are in most of the same classes.” Because AP courses are targeted to and attended by top-tier students (Gehring, 2001; Hunt & Carroll, 2006), the investigator asked “do such associations lead to ‘elitism’ among AP students?” One member laughingly admitted, “yes, it does” but continued by saying such associations are acceptable because these “students are among the hardest working students in the school... [and] are more focused on preparing themselves for [postsecondary] success and opportunities than the majority of students.” Additionally, “the reputation of the teachers who teach the AP classes” was another important reason they trust the “strenuous assignments and [associated] homework [to be] beneficial for [college] preparation,” and is supported by “success testimonials” of former AP students.

Funding postsecondary education. All but one student reported their parents had previously saved for their higher education. Acknowledging that

amount to be more than likely insufficient, they overtly displayed confidence they will (somehow) secure the funds to complete the process, all stating they plan to work to augment the costs. That is why AP participation is so important; one student expecting to save her family \$19,000 (equivalent to one academic year) because she had “taken and scored 4’s and 5’s on so many AP end-of-course tests,” while another expected to save \$15,000 at her admitting university. Although they believe their efforts will reduce their higher education course requirements, they unexpectedly stated they would then “be able to take classes [they are] more interested in, particularly in [their] major.” Such disciplined commitment to rigorous academic undertakings demonstrates the group’s educational appreciation, valuing its quality over the expedited time to complete the process.

Guidance Counselors

Guidance counselors assume PSEO Program responsibilities and oversight and are generally perceived as its “experts.” They “determine the courses that will substitute for elective and/or core courses requirements...and determine the high school Carnegie credit equivalency for each collegiate class” (personal communication, May 19, 2005), ultimately endorsing (or not) the applicants’ eligibility.

Guidance counselors recognize student employment has become increasingly popular and is a major factor in program participation, as they “[can] escape the long[er], seven-hour days of high school and arrange their collegiate schedules around their jobs” (Pearson, 1993, p. 28). Seven out of nine PSEO Program focus group members stated participation allows them to effectively manage their part-time employment. Two guidance counselors reluctantly acknowledged “scheduling flexibility permits students increased [part-time] employment opportunities,” but not one counselor appeared sympathetic with that rationale. Rather, they collectively hold negative views of students who “work too much, causing decreased emphasis on their academic responsibilities.” One guidance counselor also stated that participants “do not want to remain in high school during the prescribed hours of operation,” and thereby take advantage of the flexible scheduling “as a way to leave school early, in order to bypass state attendance requirements” (personal communication, April 22, 2005).

Three guidance counselors reported that the AP courses’ weighted grades are very important and is consistent with Solorzano and Ornelas’ (2004)

findings concerning standard California higher education admissions criteria. One guidance counselor stated, “postsecondary admissions officers favor the completion of upper-level high school coursework over PSEO Program equivalents,” and offer “increased scholarship opportunities commensurate with higher GPA’s” (personal communication, April 26, 2005). AP students “may view PSEO Program coursework as counterproductive to their overall GPA determination,” because “the grade earned at the collegiate level is [what is] recorded on the high school transcript,” (personal communication, May 10, 2005) which may undermine the nonparticipants’ weighted GPA. Perplexingly, three guidance counselors perceived PSEO Program (i.e., college-level) coursework to be “less difficult than AP classes,” which is consistent with higher education officials’ attitudes in Florida’s university system (Hunt & Carroll, 2006).

One guidance counselor stated that “because postsecondary institutions are free to supplement program participation rules, universities set higher overall high school GPA requirements than the community college” (personal communication, April 28, 2005). Locally, the largest public university requires an overall 3.0 cumulative and course specific GPA, while the largest private university requires a 3.25 for program consideration and participation – more stringent admissions requirements than required of regularly admitted students – and given the program’s benefits, restrictive practices are contrary to the mission of public education (Greenberg, 1988). The community college adheres to the state’s 2.5 cumulative GPA requirement for program participation, prompting one counselor to note “the community college has the bulk of the PSEO Program participants,” while “the universities appear to restrict program participation” (personal communication, May 19, 2005) if not dissuade it.

Acknowledged biases. One guidance counselor adamantly stated “if the equivalent [AP] courses are offered at the high school, the students should not be allowed to pursue the same courses at the college” (personal communication, April 26, 2005) – a sentiment echoed by two other colleagues. He remarked the program is “a duplication of spending taxpayers’ money” since the course is already funded at the high school resulting in “the high school district [having] to pay the higher educational institution for the cost of the class, [thereby] reducing [its] state education funds.”

In the event of student failure, the parents are, in most cases, responsible for remuneration, but when collection efforts are undertaken they “often

prove unsuccessful, leaving the district[s] to ‘foot the bill.’” Four guidance counselors, however, agreed with one who stated that “if the class was not offered at the high school, no objections [would be] raised, particularly if all the core high school class requirements have been met” (personal communication, April 22, 2005). Although four of the five guidance counselors oppose the program, one counselor (who had previously worked in a rural school district) defended it, remaining convinced that it is an excellent way to bolster other high school students’ curricular experiences.

Conclusions

The investigator initially expected the PSEO Program’s ability to save participants against future costs to be the crucial participatory determinant; however, that benefit appeared comparatively inconsequential. The AP group was aware of the PSEO Program’s ability to reduce future educational outlays; nonetheless, they are satisfied with the quality of their courses and believe the rigorous curricula are transferable as collegiate coursework.

AP students believe they are already accumulating postsecondary transfer credits, and therefore do not consider themselves or behave as “traditional” students. AP courses serve an elite and limited, special-interest constituency, particularly because of program space limitations and GPA requirements. AP courses can therefore expect competition (Catron, 2001) as the utility of dual enrollment programs increases (*Christian Citizen U.S.A.*, 2000, Finn & Manno, 1996).

The nonparticipants’ overwhelming desire is to remain associated with their peers. They are not overly-concerned about course duplication, tuition costs, or expediting their collegiate experiences; they rather are more concerned about their overall educational quality, which does not make them PSEO Program proponents, either.

Because peer associations enhance academic perseverance (Tinto, 1987) and program satisfaction (Astin, 1993), both groups are very comfortable in their chosen programs. As a result of the employment of many PSEO Program participants, their scheduling flexibility and time away from high school are paramount. AP students are, however, indifferent to the PSEO Program and its “advantages” and are more focused on their academic rigors.

In spite of the advantages, the majority of guidance counselors, high school teachers, and AP students' parents do not favor the PSEO Program. Specifically, the results of the survey item that sought to determine the degree of the students' educational choice autonomy that their parents permitted (see item 10) may be a contrary finding among the AP respondents. Counselor indifference to the PSEO Program is apparent. In the students' and parents' best interest, counselors (as "gatekeepers") must objectively promote "alternative" thematic programs, despite their biases.

Program Shortcomings

As a result of dual enrollment participants' high academic aptitudes (Koker & Hendel, 2003), the program has morphed into primarily serving its better-educated (often higher-income) clientele, while those the program could most help are least able to access it (Pennington, 2002; Weiss, 2005). Nathan and Jennings (1990) earlier concluded that low-income, low-achieving students are methodically excluded from the program, which is important since lower-SES students are more apt to prohibitively view higher education (Beattie, 2002; Robertson et al., 2001), further decreasing their likelihood to participate (Sewell & Shah, 1967) in the very process that could improve their economic status (Weiss, 2005).

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Appendix A

Demographic Survey Questions

22. Are you presently participating in the PSEO Program? (a disqualifying question only)
23. Please indicate your present high school class.
24. Will you be a “first generation” college student (the first person in your family to attend a college or university)?
25. How old are you?
26. Do you have reliable transportation (i.e., your own, parents’, or someone else) to take you to a college or university (instead of your high school) on a daily basis?
27. What is your current high school grade point average (g.p.a.)?
28. What is your gender?

Note. The 21 specific non-demographic items can be found in Table 5 and Appendix B.

Appendix B

Instrument Items that measured “How aware are students that PSEO Program participation can save them and their parents against future college expenses?”

Question/Statement	Group	<i>M</i>	<i>t</i>
14. The cost of college tuition, fees, and text-books are free for me (and my parents) under PSEOP Option B.	AP	3.45	11.80**
	PSEOP	4.75	
15. If I meet federal guidelines, it is possible to be reimbursed for transportation costs to the institution of higher learning as a PSEOP Option B participant.	AP	3.16	1.22
	PSEOP	3.02	
18. PSEOP Option B participation will reduce the necessary cost to complete my higher education.	AP	3.29	6.83**
	PSEOP	4.25	
19. The college credits earned as a result of PSEOP participation will transfer into most higher education programs.	AP	3.31	4.41**
	PSEOP	4.22	
<i>Note.</i> * $p < 0.01$; ** $p < 0.001$.			
<u>Total:</u> Cluster no. 3 (Items 14 + 15 + 18 + 19) = 4	AP	3.33	<i>SD</i> = .605
	PSEOP	3.88	<i>SD</i> = .599