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**The Dual Credit Teaching Experience on High School and College
Campuses from the Perspective of Community College Faculty**

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**The Dual Credit Teaching Experience on High School and College
Campuses from the Perspective of Community College Faculty**

by

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Dissertation

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

May 2012

For my family ...

Dad was with me every step of the way.

Mom set the example.

Nathan was always proud of me.

Arlis challenged my thinking.

Kari and Ellen were very, very patient with me.

Kim supported me in every way possible.

I could not have accomplished this without you. I love you.

Without my family this accomplishment has little meaning.

I love each of you beyond expression.

ACKNOWLEDGEMENTS

Many people believed in me through this process. I owe a debt of gratitude to everyone who helped me during my time at the University of Texas at Austin. I would like to especially acknowledge my committee. They have all been supportive in my efforts to grow into a better researcher, leader, and person.

Dr. John Roueche: for believing in me and teaching me through his example. Dr. Roueche mentored me for three years and helped me discover a new part of myself.

Dr. Norvell Northcutt: for challenging my thinking every step of the way.

Dr. Richard Reddick: for *always* being there when I needed help.

Dr. Martha Ellis: for giving her time and sharing her experience.

Dr. Jennifer Holme: for reminding me why I chose this career.

Dr. Matthew Eastin: for holding the academic bar high and helping me over it.

The Dual Credit Teaching Experience on High School and College Campuses from the Perspective of Community College Faculty

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The University of Texas at Austin, 2012

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Hundreds of thousands of students earn credit toward both high school and college each year through dual credit programs. This research project used qualitative methods to elicit the story, the shared reality, of faculty who spend their time with these students. It is an important story to tell as legislators, community college and public school administrators, parents, and students are motivated to see these programs not only continue, but grow.

System influence diagrams (SIDs) depicting the dual credit teaching experience on high school and college campuses were developed for two separate groups of community college faculty. The models were used for comparing the high school and college dual credit teaching environments.

The results of this study support other research, suggesting there are important differences between the high school and college environments when teaching dual credit students. From an overall perspective, faculty found the community college campus environment superior to teaching on the high school campus for reasons related to

facilities and technology, a sense of belonging in the larger organization, and the integration of dual credit students into a more traditional college environment.

Table of Contents

List of Figures	xi
List of Tables	xiv
Chapter I – Introduction	1
Background	1
Purpose and Research Questions	7
Significance of the Study	8
Method Used	8
Limitations	8
Organization of the Study	10
Chapter II – Literature Review	12
Accelerated Learning Options in Texas.....	12
Evidence on Student Success and Dual Credit	18
In support of dual credit	18
Studies in question.	22
Questions of Quality	26
Location.	27
Instructor.	30
Transferability.....	31
The Mixed-Age Classroom.....	33
Faculty Perceptions.....	34
Framework	36
Summary	40
Chapter III – Methodology	41
Consideration of Qualitative Research	41
Introduction to IQA.....	42
Telling the Group Story through System Influence Diagrams (SIDs).....	43
Individual Interviews	49
Research Logistics	52

Where was the research conducted?	52
Who participated in the study?	52
How were participants recruited?	52
When did data collection take place?.....	53
How did the researcher obtain consent?	53
What did participants actually do?.....	53
How was the privacy of individuals ensured?	55
What were the potential risks?	56
What were the potential benefits?.....	57
Summary	57
Chapter IV – Results	58
The High School Dual Credit Teaching Experience at SSCC	59
Identifying affinities.....	59
Describing affinities.....	61
Identifying relationships.	99
Describing relationships.....	108
The College Dual Credit Teaching Experience at SSCC.....	124
Identifying affinities.....	124
Describing affinities.....	126
Identifying relationships.	145
Describing relationships.....	153
The High School Dual Credit Teaching Experience at LSCC	166
Identifying affinities.....	166
Describing affinities.....	167
Identifying relationships.	190
Describing relationships.....	195
The College Dual Credit Teaching Experience at LSCC	209
Identifying affinities.....	209
Describing affinities.....	210
Identifying relationships.	226

Describing relationships.....	231
Glasser’s Seven Deadly and Seven Caring Habits	243
High school dual credit teaching environment.	243
College dual credit teaching environment.	247
Chapter V – Interpretation	249
Systems Revealed	249
The high school dual credit teaching environment at SSCC.	252
The college dual credit teaching environment at SSCC.	260
The high school dual credit teaching environment at LSCC.	266
The college dual credit teaching environment at LSCC.	270
Comparing Systems	275
High school dual credit versus college dual credit at SSCC.....	276
High school dual credit versus college dual credit at LSCC.	278
High school dual credit at SSCC versus high school dual credit at LSCC.	280
College dual credit at SSCC versus college dual credit at LSCC.....	282
Inferences	283
A Note on Glasser.....	285
Suggestions for Further Research	285
Conclusion	287
Appendices	288
Appendix A:.....	289
Appendix B:	291
Appendix C:.....	293
Appendix D:.....	295
Appendix E:	296
References	297

List of Figures

<i>Figure 1. Accelerated learning in the United States: 2002-2003.....</i>	4
<i>Figure 2. Where students took dual credit courses: 2002-2003</i>	5
<i>Figure 3. Instructors of academic dual credit courses: 2002-2003.....</i>	5
<i>Figure 4. Instructors of academic dual credit courses: 2002-2003.....</i>	6
<i>Figure 5. Dual enrollment trend in Texas: number of enrollments</i>	14
<i>Figure 6. Dual enrollment as a percentage of undergraduate enrollments in Texas</i>	14
<i>Figure 7. Texas' 11th and 12th grade population: 2007-2008</i>	15
<i>Figure 8. Texas' dual enrollment by ethnicity: 1999-2000</i>	16
<i>Figure 9. Texas' dual enrollment by ethnicity 2009-2010</i>	16
<i>Figure 10. Texas' AP exams taken: 1997-1998</i>	17
<i>Figure 11. Texas' AP exams taken: 2007-2008</i>	17
<i>Figure 12: Glasser's communication satisfaction model.</i>	39
<i>Figure 13: Cluttered SID.....</i>	47
<i>Figure 14. Cluttered SID.</i>	49
<i>Figure 15. Uncluttered SID.</i>	49
<i>Figure 16. Power analysis for the high school dual credit teaching experience SID at SSCC.</i>	105
<i>Figure 17. The Cluttered SID for high school dual credit at SSCC.</i>	107
<i>Figure 18. External Influence for high school dual credit at SSCC.</i>	108
<i>Figure 19. Homogeneity for high school dual credit at SSCC.</i>	111
<i>Figure 20. Facilities & Technology for high school dual credit at SSCC.....</i>	114
<i>Figure 21. Disruptions & Distractions for high school dual credit at SSCC.</i>	116
<i>Figure 22. Student Expectations for high school dual credit at SSCC.</i>	118
<i>Figure 23. Student Preparation for high school dual credit at SSCC.</i>	120
<i>Figure 24. Student Behavior for high school dual credit at SSCC.</i>	122
<i>Figure 25. Student Scholarship for high school dual credit at SSCC.....</i>	123
<i>Figure 26. Power analysis chart for college dual credit at SSCC.....</i>	150
<i>Figure 27. Cluttered SID for college dual credit at SSCC.</i>	152

<i>Figure 28. Home Turf</i> for college dual credit at SSCC.	153
<i>Figure 29. External Influence</i> for college dual credit at SSCC.	155
<i>Figure 30. Student Mix</i> for college dual credit at SSCC.	157
<i>Figure 31. Student Expectations</i> for college dual credit at SSCC.	159
<i>Figure 32. Facilities & Technology</i> for college dual credit at SSCC.	161
<i>Figure 33. Student Preparation</i> for college dual credit at SSCC.	163
<i>Figure 34. Student Scholarship</i> for college dual credit at SSCC.	164
<i>Figure 35. Student Behavior</i> for college dual credit at SSCC.	165
<i>Figure 36. Power analysis</i> for high school dual credit at LSCC.	193
<i>Figure 37. Cluttered SID</i> for high school dual credit at LSCC.	194
<i>Figure 38. Facilities & Support</i> for high school dual credit at LSCC.	195
<i>Figure 39. Faculty Fit</i> for high school dual credit at LSCC.	199
<i>Figure 40. Disruptions & Distractions</i> for high school dual credit at LSCC.	202
<i>Figure 41. Student Personality</i> for high school dual credit at LSCC.	205
<i>Figure 42. Student Expectations</i> for high school dual credit at LSCC.	207
<i>Figure 43. Power analysis</i> for college dual credit at LSCC.	229
<i>Figure 44. Cluttered SID</i> for college dual credit at LSCC.	230
<i>Figure 45. Faculty Fit</i> for college dual credit at LSCC.	231
<i>Figure 46. Facilities & Support</i> for college dual credit at LSCC.	234
<i>Figure 47. Readiness & Performance</i> for college dual credit at LSCC.	236
<i>Figure 48. Classroom Environment</i> for college dual credit at LSCC.	239
<i>Figure 49. Student Personality</i> for college dual credit at LSCC.	241
<i>Figure 50. Cluttered SID</i> for High school dual credit at SSCC.	252
<i>Figure 51. Uncluttered SID</i> for high school dual credit at SSCC (with conflicts).	253
<i>Figure 52. Uncluttered SID</i> for high school dual credit at SSCC (conflicts reconciled).	255
<i>Figure 53. Clean SID</i> for high school dual credit at SSCC.	256
<i>Figure 54. Clean SID</i> with timbre for high school dual credit at SSCC.	259
<i>Figure 55. Cluttered SID</i> for college dual credit at SSCC.	260
<i>Figure 56. Uncluttered SID</i> for college dual credit at SSCC.	261

<i>Figure 57. Clean SID for college dual credit at SSCC.</i>	262
<i>Figure 58. Clean SID with timbre for college dual credit at SSCC.</i>	265
<i>Figure 59. Cluttered SID for high school dual credit at LSCC.</i>	266
<i>Figure 60. Uncluttered SID for high school dual credit at LSCC.</i>	267
<i>Figure 61. Clean SID for high school dual credit at LSCC.</i>	268
<i>Figure 62. Clean SID with timbre for high school dual credit at LSCC.</i>	269
<i>Figure 63. Cluttered SID for college dual credit at LSCC.</i>	270
<i>Figure 64. Uncluttered SID for college dual credit at LSCC.</i>	271
<i>Figure 65. Clean SID for college dual credit at LSCC.</i>	272
<i>Figure 66. Clean SID with Timbre for college dual credit at LSCC.</i>	274
<i>Figure 67. High school dual credit versus college dual credit at SSCC.</i>	276
<i>Figure 68. High school dual credit versus college dual credit at LSCC.</i>	278
<i>Figure 69. High school dual credit at SSCC versus high school dual credit at LSCC.</i>	280
<i>Figure 70. College dual credit at SSCC versus college dual credit at LSCC.</i>	282

List of Tables

Table 1: <i>Examples of Means Based Research on Dual Credit Student Success</i>	25
Table 2: <i>Location Where Dual Credit Was Taken</i>	28
Table 3: <i>Students Perception of Dual Credit Rigor in Comparison to AP and IB Programs</i>	32
Table 4: <i>Variations of SID Diagrams</i>	45
Table 5: <i>ART Examples</i>	46
Table 6: <i>Cumulative Affinity-pair relationships</i>	46
Table 7: <i>Cumulative Affinity-pair relationships with Delta</i>	48
Table 8: <i>High School Environment Affinities and Related Card Comments at SSCC</i>	59
Table 9: <i>Affinity Relationship Table for High School Dual Credit at SSCC</i>	100
Table 10: <i>Theoretical Code Frequency Table for High School Dual Credit at SSCC</i>	101
Table 11: <i>Combined Theoretical Interview Table for High School Dual Credit at SSCC (Truncated)</i>	104
Table 12: <i>Driver/Outcome Frequency for High School Dual Credit at SSCC</i>	105
Table 13: <i>Affinity Delta Order for High School Dual Credit at SSCC</i>	106
Table 14: <i>College Environment Affinities and Related Card Comments at SSCC</i>	124
Table 15: <i>Affinity Relationship Table for College Dual Credit at SSCC</i>	146
Table 16: <i>Theoretical Code Frequency Table for College Dual Credit at SSCC</i>	147
Table 17: <i>Combined Theoretical Interview Table for College Dual Credit at SSCC</i>	149
Table 18: <i>Driver/Outcome Frequency for College Dual Credit at SSCC</i>	150
Table 19: <i>Affinity Delta Order for College Dual Credit at SSCC</i>	151
Table 20: <i>High School Environment Affinities and Related Card Comments at LSCC</i> .	166
Table 21: <i>Affinity Relationship Table for High School Dual Credit at LSCC</i>	190
Table 22: <i>Combined Theoretical Interview Table for High School Dual Credit at LSCC</i>	191
Table 23: <i>Theoretical Code Frequency Table for High School Dual Credit Teaching Experience at LSCC</i>	192

Table 24: <i>Driver/Outcome Frequency for High School Dual Credit at LSCC</i>	193
Table 25: <i>Affinity Delta Order for High School Dual Credit at LSCC</i>	194
Table 26: <i>College Environment Affinities and Related Card Comments at LSCC</i>	209
Table 27: <i>Affinity Relationship Table for College Dual Credit at LSCC</i>	226
Table 28: <i>Theoretical Code Frequency Table for College Dual Credit Teaching Experience at LSCC</i>	227
Table 29: <i>Combined Theoretical Interview for College Dual Credit at LSCC</i>	228
Table 30: <i>Driver/Outcome Frequency Table for College Dual Credit at LSSCC</i>	229
Table 31: <i>Affinity Delta Order for College Dual Credit at LSCC</i>	230
Table 32: <i>Individual Participant Affinity Timbre for High School Dual Credit at SSCC</i>	257
Table 33: <i>Cumulative Group Affinity Timbre for High School Dual Credit at SSCC</i>	258
Table 34: <i>Individual Participant Affinity Timbre for College Dual Credit at SSCC</i>	263
Table 35: <i>Cumulative Group Affinity Timbre for College Dual Credit at SSCC</i>	264
Table 36: <i>Individual Participant Affinity Timbre for High School Dual Credit at LSCC</i>	268
Table 37: <i>Cumulative Group Affinity Timbre for High School Dual Credit at LSCC</i>	269
Table 38: <i>Individual Participant Affinity Timbre for College Credit at LSCC</i>	273
Table 39: <i>Cumulative Group Affinity Timbre for College Dual Credit at LSCC</i>	273
Table 40: <i>Combined Theoretical Interview Table for High School Dual Credit at SSCC (Complete)</i>	291
Table: 41: <i>Combined Theoretical Interview Table for College Dual Credit at SSCC (Complete)</i>	293
Table 42: <i>Combined Theoretical Interview Table for High School Dual Credit at LSCC (Complete)</i>	295
Table 43: <i>Combined Theoretical Interview Table for College Dual Credit at LSCC (Complete)</i>	296

Chapter I – Introduction

Dual credit implies a student is enrolled in a college course for the purpose of satisfying college credit hours and high school requirements simultaneously; for example, a student enrolls at his or her community college for the first semester of college English and since the school district and the community college have an agreement in place, the college English course will also satisfy some part of the student's high school English requirement. *Concurrent enrollment* is a broader term than *dual credit* and implies a student is enrolled in college prior to graduating from high school, whether obtaining high school credit or not. *Dual enrollment* carries the same meaning as *concurrent enrollment*. Although the terms *dual credit*, *concurrent enrollment*, and *dual enrollment* are not identical from a technical standpoint, they have largely become synonymous in everyday usage. This study is specifically concerned with *dual credit*.

Dual credit students take their courses on high school campuses, on college campuses or centers, or online. Dual credit classes are taught by high school teachers, or they are taught by college full-time or part-time faculty. Classes may have high school students only in them, or dual credit courses might be a mix of high school students and the general college population.

Background

Student participation in dual credit and dual enrollment is an emerging phenomenon across the United States. In 2003, three of four public high schools offered dual credit options to their students. In that year 813,000 students took 1.2 million dual enrollment courses nationally. Approximately 85% of these students were taking courses

for dual credit, leaving 15% taking college courses outside of dual credit agreements. More than half, 57%, of all colleges and universities and almost all, 97%, of community colleges enrolled high school students in courses for college credit (Kleiner & Lewis, 2005).

Dual credit programs appeared in the early 1970s and experienced rapid growth into late 1980s. Early programs were typically initiated by a community college on a local level. The local high school and community college would come to terms on program logistics. In the case of dual credit, college and high school requirements were met by taking college courses. Minnesota was the first state to pass dual credit legislation on behalf of all high school students. This legislation, known as The Post-Secondary Enrollment Options Act of 1985, stated that any 11th or 12th grade student who met the admissions requirements of a public two- or four-year institution could attend that institution at the state's expense (Kim, Kirby, & Bragg, 2006). By 2001, an additional 37 states had followed suit with legislation to promote dual credit and dual enrollment (Andrews, 2004). Finally, according to a survey conducted by the Education Commission on the States (ECS) in 2011, all but five states had state-wide policies in place governing dual enrollment programs.

One fundamental characteristic of policy that provides greater incentive for institutions to participate in dual credit is the dual funding approach. This financial model guarantees that the high school is not punished financially for providing the opportunity for students to enroll in dual credit courses. Variations exist among states in terms of responsibility for college tuition and book expenses; some states place the burden of costs on the student; others actually pay for the tuition directly. In any case,

the dual funding model is likely to encourage high schools, colleges, and students to participate in dual credit programs. By 2005, the dual funding model had been adopted by ten states (Karp et al., 2005). By 2011, a total of 31 states had similar protections in place for public schools participating in concurrent enrollment partnerships with institutions of higher education (ECS).

The common alternatives, and often competitors, to dual enrollment are Advanced Placement (AP) courses and exams, and the International Baccalaureate (IB) Programme which are taught on high school campuses by high school teachers. AP exams were born out of a Ford Foundation study funded in the early 1950's. The purpose of the study was to develop opportunity for high school students to be exposed to rigorous materials thought to, not only prepare students for the rigors of university work, but to be sufficient to prepare a student for examinations that would place them out of certain university courses. The College Board, a not-for-profit organization widely known for the administration of the SAT (Scholastic Aptitude Test), took ownership of AP exam administration in 1955 (College Board, 2003). AP exams are typically taken after the completion of an AP course taken in high school. A score of one through five is given through a combination of machine scoring and grader scoring. In 2011, according to the College Board, nearly one-third of all U.S. high school students had taken at least one AP exam during their high school years. The IB Diploma Programme was developed in the late 1960's in Geneva Switzerland. As the name indicates, the IB was developed as an international curriculum (International Baccalaureate Organization, 2011). The IB Programme has never approached the scale of acceptance and use that the AP curriculum

has. Students are often granted college credit for acceptable performance on either AP or IB end-of-course exams. A 2005 survey conducted by the National Center for Education Statistics (NCES) is the most recent and complete longitudinal dataset available, giving the best national snapshot of high school students earning college credit in all three of the aforementioned formats.

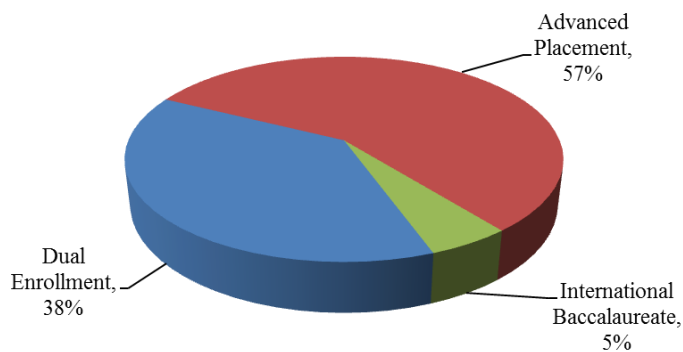


Figure 1. Accelerated learning in the United States: 2002-2003 (Waits et al., 2005).

The survey was for the 2002-2003 school year. Waits, Setzer, and Lewis' (2005) analysis of the survey indicated 1.2 million enrollments in dual credit courses, 1.8 million in AP courses, and 165,000 in IB programs. The term *enrollments* is used here to indicate these numbers represent duplicated headcount; for example, a student enrolled in three courses was counted three times. "Overall, 71 percent of public high schools offered courses for dual credit, 67 percent offered AP courses, and 2 percent offered IB courses" (p. 4).

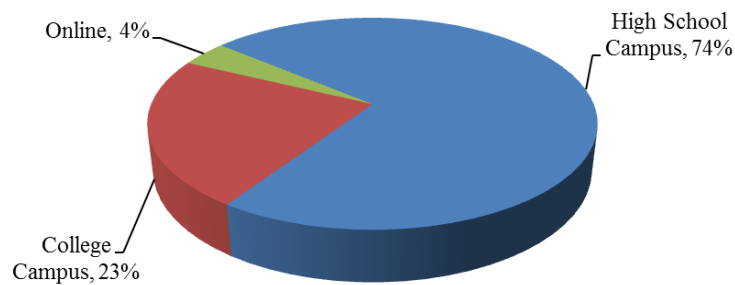


Figure 2. Where students took dual credit courses: 2002-2003
(Waits et al., 2005).

The NCES report revealed much more about the nature and makeup of dual credit in the United States. Nearly two-thirds of enrollment was in academic courses and the remaining one-third was in career and technical courses. Approximately three-fourths, of the students taking courses for dual credit were doing so on high school campuses, 23% were on college campuses, and 4% were taking their course(s) online.

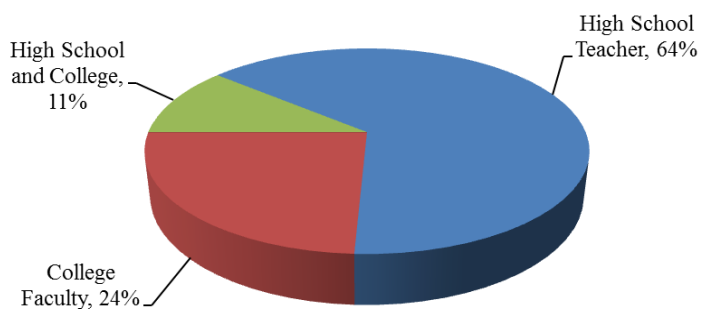


Figure 3. Instructors of academic dual credit courses: 2002-2003
(Waits et al., 2005).

The study also revealed details about the instructors teaching dual credit courses. For academic courses, 64% of schools reported instruction being delivered solely by high school teachers, 24% had both high school and postsecondary instructors teaching the courses, and 11% of courses were taught by postsecondary faculty only.

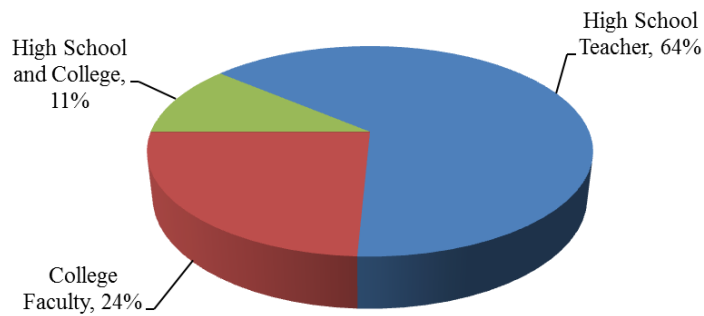


Figure 4. Instructors of academic dual credit courses: 2002-2003
(Waits et al., 2005).

Similarly, for technical courses, 76% indicated these courses were taught by high school instructors only, 12% of schools reported courses being taught by both high school and postsecondary instructors, and 12% reported courses being taught by postsecondary instructors only. Even when academic and technical courses were taught on college campuses, they were sometimes offered to high school students only, 18% and 22% respectively, as opposed to having a mix of dual credit students and the general college population (Waits et al., 2005).

Purpose and Research Questions

This study examined the experiences of community college faculty as related to teaching dual credit students on community college and high school campuses.

Research questions:

- What are the elements (affinities) that define the dual credit teaching experience on a high school campus from the viewpoint of community college faculty?
 - What are the relationships between the identified affinities?
- What are the elements (affinities) that define the dual credit teaching experience on a college campus from the viewpoint of community college faculty?
 - What are the relationships between the identified affinities?
- How are the models as defined by faculty groups different (if at all)?
- What could this study reveal about the dual credit teaching experience from a system perspective?
- How do Glasser's seven *deadly habits* and seven *caring habits* relate to these models?

Significance of the Study

This study's importance lies in the growth of dual credit programs in the United States. Little is known about the faculty experience from an environment perspective. Practitioners and policy makers may benefit from its findings. Researchers may use the results from this study to further understand dual credit programs.

Method Used

This study used the Interactive Qualitative Analysis (IQA) method developed by Northcutt and McCoy (2004) at the University of Texas at Austin. In the IQA method a focus group and a set of individual interviews are used to create a system that describes an experience. IQA presents two fundamental questions about a system: "*What are the elements of the system?*" and "*How do these elements relate to each other?*" (p. 103). Two related systems are in question for this study: 1) teaching dual credit students on a high school campus, and 2) teaching dual credit students on a community college campus.

Limitations

This study, in its limited scope, cannot account for faculty differences in age, gender, race/ethnicity, tenure, or subject taught; nor can it account for differences among student populations in the classes taught by these faculty members other than the fact that classes taught on the high school campus are made up of juniors and seniors in high school and classes taught on the college campus are typically quite mixed in age. Having stated these limitations, the study did attempt to capture interesting, or "fat," data in interviews that might provide insight into areas of further research related to its shortcomings.

Students taking a college class on a high school campus are dual credit students, earning both college and high school credits simultaneously. High school students taking a class on the college campus could be taking the course as either dual credit, or concurrent enrollment, taking a college course for credit while in high school but not receiving high school credit. The distinction between dual credit and concurrent enrollment, in and of itself, is not a concern for this study. However, a possibility exists that a faculty member may not know if a student is in high school. Assumptions may be made on the part of faculty based on age, dress, and behavior. Faculty can easily identify dual credit students in Texas because they report numeric grades back to the public school. No equivalent reporting mechanism exists for identifying concurrent enrollment students.

Interest in this study stems from the researcher's own experience teaching dual credit students; this experience was the basis for the final concern, researcher bias. The researcher has taught in a community college environment for over 20 years. Having taught traditional 11th and 12th grade high school classes; traditional community college courses; dual credit courses on the high school campus, and dual credit students on the community college campus, based on experiences, the researcher concluded differences exist in the two environments. The college campus provides a more rigorous academic environment in which the student may focus more clearly and think more critically. For example, the researcher found discipline issues and disruptions to be more likely to occur on a high school campus as opposed to a college environment. Students on a college campus, regardless of age, are more likely to engage in meaningful discussion about the topic. High school students are more likely to ask questions before, during, and after class

when the class is on the college campus. Students on a high school campus are more apt to ask questions like, “Is this going to be on the test?” or, “Do we have to do this?” or, “Can I get extra credit?” If adolescence is the psychological bridge between childhood and early adulthood, it stands to reason that students move from one set of behaviors to another depending on their surroundings. In the researcher’s experience adolescent students display more adult-like behavior when placed in an environment with adults. Researcher bias was largely mitigated by the IQA method through its rigorous protocol. Still, the researcher remained cognizant that his remarks and body language could condition the groups’ or interviewees’ responses. On the other hand, in the opinion of the researcher, reflexivity also served as an advantage in this study, lending credibility to the researcher in the eyes of the participants and therefore, engendering trust and promoting candor in group sessions and interviews.

Organization of the Study

Chapter I covers a basic introduction and background to the study, purpose of the research, research questions, methodology used, significance of the study, and assumptions. Chapter II is a literature review relevant to the study. This review includes accelerated learning options in Texas; a critique of general dual credit literature related to student success; specific studies on quality relating to location, instructor, and transferability; the mixed-age classroom; faculty perceptions; and a framework for the study. Chapter III includes rationale for qualitative research in this instance and a detailed review of the methodology and protocols used in the study. Chapter IV catalogs the

results of the data collection phase of the study. Chapter V presents interpretation of results, inferences, and suggestions for further research.

Chapter II – Literature Review

Data from Texas were used in this review for two specific reasons: 1) recent data were available from the Texas Higher Education Coordinating Board (THECB, 2010) at the time of the study, which was not the case for national data; and 2) the group sessions in this study were conducted at two Texas community colleges. The context of this study is not intentionally limited to Texas alone. Commonality of dual credit programs would deem this study useful in many situations.

Accelerated Learning Options in Texas

As in many states, the legislature in Texas has been instrumental in creating incentives for participation in both AP and dual credit courses. In the case of dual credit, public schools can articulate agreements with local colleges without the reprisal of lost funding; at the same time colleges receive the normal state funding formula for students enrolled in dual credit courses.

State law allows both school districts and colleges to obtain state funding for dual credit courses. The state funds school districts based on students' average daily attendance and districts can count time spent on dual credit towards student attendance. Colleges and universities receive state formula funding for contact or semester credit hours of instruction, respectively. (THECB, 2010, p. 2)

Additionally, if a school district requests, local higher education institutions must help the district “in developing and implementing a program designed to provide students with the

opportunity to earn the equivalent of 12 hours of college credit while in high school” (Texas Education Code Sec. 28.009 as quoted in THECB, 2010).

The State Legislature has facilitated growth in AP. In 2005, the legislation was passed requiring any Texas public university or college offering freshman level courses to “develop and implement policy granting college credit to entering students who have successfully completed the International Baccalaureate (IB) Diploma Programme or have achieved qualifying scores on one or more Advanced Placement (AP) examinations” (Texas Education Code Sec. 51.968, 2005 as quoted in TEA, 2009). The following year, 2006, saw the passage of legislation requiring “all school districts to implement a program by the fall of 2008, in which students may earn the equivalent of 12 hours of college credit while in high school” (Texas Education Code Sec. 28.009, 2006 as quoted in THECB, 2010). This legislation greatly benefited all high school acceleration programs. Specifically, students’ participation in taking AP exams increased three-fold from 1994 to 2008.

In the 2007-08 school year, 103,555 Texas public school students in 11th and 12th grade took 215,013 AP examinations. From 1994-95 to 2007-08, the percentage of 11th and 12th graders taking AP examinations rose from 6.8 percent to 20.7 percent. (TEA, 2009, p. 4)

Furthermore, “In 1992-93, there were only 158 Texas public schools (9.6%) with any of grades 9 through 12 that offered AP courses to students. In 2007-08, 1,124 schools (50.2%) offered at least one AP course” (TEA, 2009, p. 4). Dual credit in Texas increased even more dramatically over a ten-year period. According to THECB (2010) 11,921 students enrolled in dual credit in the fall of 1999. A decade later 91,303 enrolled which represented a 765% increase.

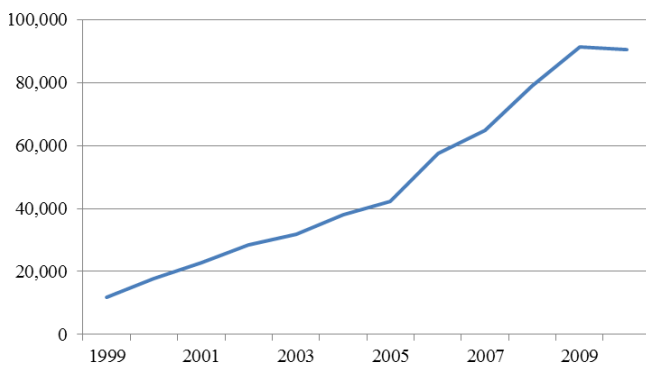


Figure 5. Dual enrollment trend in Texas: number of enrollments (THECB, 2010).

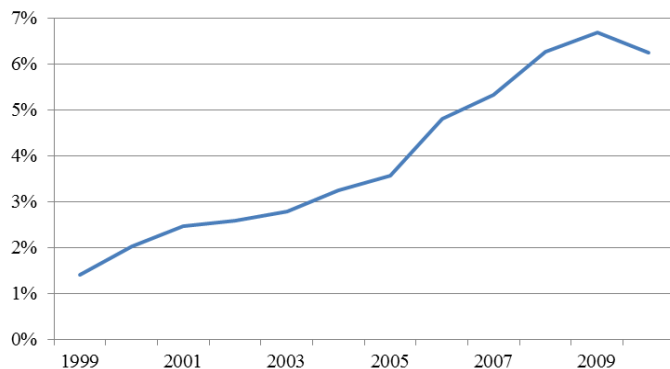


Figure 6. Dual enrollment as a percentage of undergraduate enrollments in Texas (THECB, 2010).

Participation in dual credit courses and AP examinations by minorities in the State of Texas has been consistently increasing over the past decade. Dual credit and AP courses can provide the needed bridge to higher education for underrepresented populations. While minority participation is not on par with the general population, the gap between the two in dual credit and AP participation is closing in Texas.

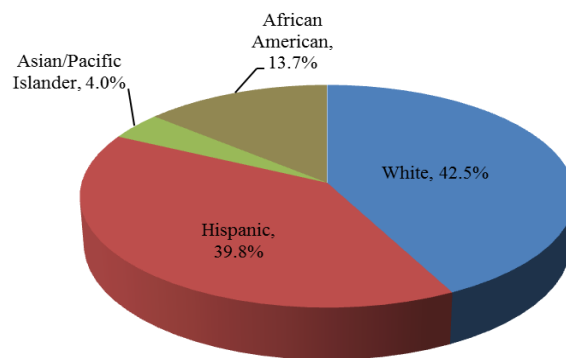


Figure 7. Texas' 11th and 12th grade population: 2007-2008 (TEA, 2009).

The gap for economically disadvantaged students remains a concern as well. In 2009-2010 one-half of high school students in Texas were considered economically disadvantaged; however, this population made up only one-third of dual credit students (TEA, 2011). Underrepresentation of economically disadvantaged students is further compounded by the dropouts that are unaccounted for. Many economically disadvantaged youth drop out before data are collected.

Another concern in dual credit trends is the propensity for minorities and economically disadvantaged to be tracked toward career and technical courses while still underrepresented in academic courses. African Americans were three times more likely and Hispanics were twice as likely to take career and technical classes as whites in 2009-

2010. Similarly, economically disadvantaged students were twice as likely to take career and technical classes as non-economically disadvantaged students (TEA, 2011).

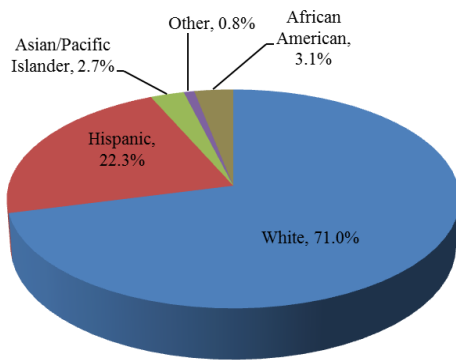


Figure 8. Texas' dual enrollment by ethnicity: 1999-2000 (THECB, 2010).

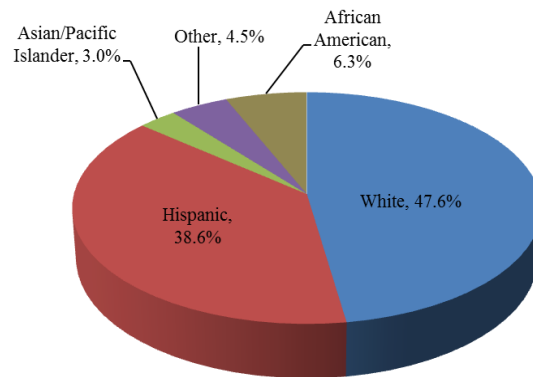


Figure 9. Texas' dual enrollment by ethnicity 2009-2010 (THECB, 2010).

Much like dual credit, AP examination results showed improvement in terms of distribution of minorities, but concerns remain.

Although 11th- and 12th-grade AP participation rates for Hispanics and African Americans in Texas public schools climbed steadily between 1994-95 and 2007-08, only 16.6 percent of Hispanics and 12.0 percent of African Americans took AP examinations in 2007-08. By comparison, 24.7 percent of Whites and 47.7 percent of Asian/Pacific Islanders took AP examinations that year. (TEA, 2009, p. 4)

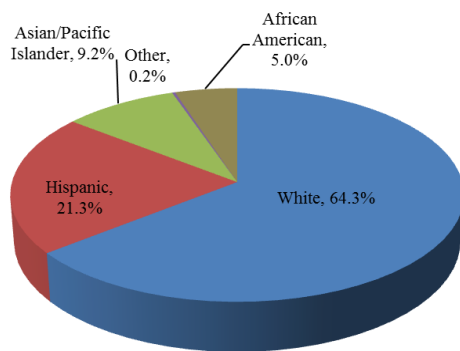


Figure 10. Texas' AP exams taken: 1997-1998 (TEA, 2009).

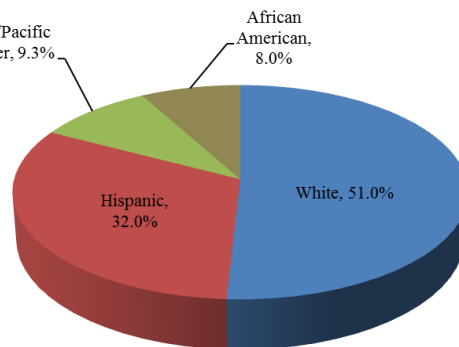


Figure 11. Texas' AP exams taken: 2007-2008 (TEA, 2009).

According to The College Board (2010) 58% of students who took an AP exam passed with a score of three or higher. A score of three is typically the cutoff for granting college credit, although it is not guaranteed. National numbers on success in dual credit courses were not available at the time of this study, nor were grade distributions for Texas' dual credit students. It is largely accepted, however, that dual credit students succeed at a much higher rate; for example, over 90% of Florida's dual credit students earn a "C" or better in both freshman math and English while only 75% of the *regular* student fared as well (Florida Department of Education, 2010). States could be reducing quality by offering an avenue less rigorous than AP exams by forcing universities to accept the core credits from community colleges; such a guarantee exists in Texas.

A program similar to AP is the IB program. However, students do not participate in IB programs nearly at the rate they take dual credit or AP courses. While IB programs did experience an increase in participation in Texas during the same period in which dual credit and AP were on the rise, only 2,202 students took IB examinations in 2007-2008 (TEA, 2009).

Evidence on Student Success and Dual Credit

In support of dual credit.

A large body of research advocates for institutions to expand dual credit programs. Allen (2010) delineates common justifications most predominately found in the literature:

- Facilitating the transition between high school and college;
- Allowing students to complete a degree faster;
- Reducing costs for a college education;
- Reducing high school dropout rates;
- Preparing students for college reducing the need for remedial coursework;
- Enhancing the high school curriculum;
- Making more effective use of the senior year in high school;
- Developing the connection between high school and college curricula;
- Raising the student's motivation and goal to attend college;
- Acclimatizing students to the college environment;
- Freeing space on college campuses;
- Improving relationships between colleges and their communities;
- Easing recruitment of students to college; and
- Enhancing opportunities for underserved student populations (p. 10).

Many high school seniors are academically disengaged in their last year of school. Too often seniors have completed the requirements to graduate from high school and have already attained the GPA needed for admission to college. Dual credit programs

help fill this gap for many seniors, challenging them academically and allowing them to get a head start on college (Andrews, 2004). By offering students more challenging work, dual credit programs may also keep students engaged and prevent students from dropping out (American Association of State Colleges and Universities [AASCU], 2002).

“Postsecondary success is predicated on a clear understanding of the expectations in college as well as rigorous academic course work in high school” (Karp, Bailey, Hughs, & Fermin, 2005, p. 9). Dual credit and dual enrollment programs create this understanding and rigor for high school students, building a conduit through which students can more smoothly make the transition from high school to college. Students who participate in dual credit or dual enrollment are more likely to complete a post-secondary degree and are more likely to complete that degree at the institution through which they took the original dual coursework (AASCU, 2002).

Peterson, Anjewierden, and Corser (2001) found that students were positively affected by their participation in dual credit programs in terms of their intentions to attend college after high school. A study conducted by Smith (2007) affirmed positive effects on aspirations with three significant findings:

- A significant relationship between participation in dual credit enrollment and increased educational aspirations exists;
- Students participating in dual credit enrollment on the college campus had higher educational aspirations than participants of dual credit enrollment at the high school; and

- Participation in dual credit enrollment was a greater predictor of higher educational aspirations than grades or parents' highest level of education (p. 383).

In one of the more rigorous studies on the effects of dual credit, Michalowski (2007) examined records of students in the City University of New York's College Now program. Michalowski attempted to control for factors traditionally associated with academic success, "demographic characteristics (i.e. race/ethnicity, gender, age, family income), as well as prior educational experiences and outcomes (i.e. high school attended, college attended, standardized test scores)" (p. 3). Research showed significant differences in two variables under consideration. Dual credit participants earned .77 more credits in their first year of college after high school than did non-dual students. In addition,

Those in associate degree programs with College Now experience were found to have a 5.3% increase in the probability of persisting to a third semester. Those in baccalaureate degree programs who participated in the College Now program had a 3.0% increased probability of persisting to a third semester than their counterparts. (p. 5)

Swanson (2008) had similar findings to that of Michalowski. Swanson examined the National Educational Longitudinal Study (NELS 88/2000) data. This survey began in 1988 with a representative group of students in eighth grade and was designed "to provide trend data about critical transitions experienced by students as they leave middle or junior high school, and progress through high school and into postsecondary institutions or the work force" (NCES, n.d.). Follow-up surveys were conducted in

1990, 1992, 1994, and 2000. The study was conducted by the NCES. Researchers had students report on a range of topics including:

school, work, and home experiences; educational resources and support; the role in education of their parents and peers; neighborhood characteristics; educational and occupational aspirations; and other student perceptions.... Additional topics included self-reports on smoking, alcohol and drug use, and extracurricular activities. (NCES, n.d.)

Achievement tests were also administered to students in each follow-up year to supplement the NELS data. Using regression and controlling for much the same factors as Michalowski, Swanson found, on a statistically significant level, dual enrollment students were different from non-participating students in several ways. Dual enrollment students were:

- 11% more likely to persist through the second year of college;
- 10% more likely to earn a certificate or associate's degree;
- 12% more likely to enter college within seven months of high school graduation;
- 10% *less* likely to earn a bachelor's degree;
- More likely to receive a bachelor's degree by as much as 20% if they entered college within seven months of graduating from high school; and
- More likely to receive a bachelor's degree by 12% if they had not originally intended to do so. (Swanson, 2008)

Spurling and Gabriner (2002) compared dual enrollment students at City College of San Francisco (CCSF) who later enrolled at the college after high school graduation. Students returning to CCSF to continue after having participated in dual credit had an

overall GPA of 2.3 compared to non-participants who had a GPA of 2.1. The study used number of remedial courses required by college placement exams as a control for differences in the groups, but did not account for socioeconomic factors, high school academic performance, or SAT or ACT scores.

Eimers and Mullen (2003) conducted a study at the University of Missouri System. Initial results showed higher persistence rates from the first to second year of college and higher GPAs among dual credit students compared to non-dual students, 89% and 2.93 versus 76% and 2.70 respectively. However, when held to a higher standard, controlling for high school rank and ACT scores, differences in GPA between the groups was no longer statistically significant.

Studies in question.

Karp, Calcagno, Hughes, Jeong, and Bailey (2007) found dual enrollment students were more likely to:

- Graduate from high school;
- Enroll in a four-year institution;
- Enroll full-time;
- Return for a second semester;
- Have a higher GPAs; and
- Earn more college credits than their non-participating peers.

In this study career and technical students, whether enrolled in dual credit or not, were assumed to be “similar to one another in terms of motivation, career and academic aspirations, and high school experiences” (p. 3). The rationale given for this assumption was “students—both in the control and dual enrollment groups—had technically-oriented

goals while in high school, as both groups of students elected to participate in CTE-focused curricula” (p. 19). Karp et al. go on to admit “this restriction will not necessarily eliminate all preexisting differences. Without a randomized design, we were unable to control for all possibly important preexisting characteristics” (p. 19).

Admitting shortcomings in their own study, Karp et al. point out two fundamental problems which plague most studies. The first problem is that of the data itself. Most studies do not use large and longitudinal data sets; as a result, they either “focus on high school completion and other short-term outcomes or examine long-term outcomes but cannot control for differences between [groups]” (p. 14). This limitation in data availability also thwarts the potential for generalizing findings. The second problem found in most dual credit studies, even when data are available, is a “lack of rigorous statistical methods to control for preexisting characteristics” (p. 14). As Karp et al. warned, several studies have been conducted that are purely comparisons of means, not attempting to control for any generally accepted factors in educational attainment. All of these types of studies show generally the same results; higher GPAs, shorter time to degree, and higher persistence.

In a study of dual credit students in Florida, Windham and Perkins (2001) attempted to determine if dual credit students were better prepared for subsequent work than their non-participating counterparts. Data collected from 1994 to 1999 were examined and researchers found dual credit students did indeed outperform non-participants when courses taken later, at Florida’s State University System, were related to previous courses taken under the dual program. Allen (2010) criticized the study:

There were no rigorous statistical techniques used and no controls for preexisting student characteristics included in the study's design. These results are consistent with what one would expect from a group of students who sought college academic experiences prior to graduating from high school. (p. 18)

In a similar study of the 2001-2002 senior class of the College Academy at Broward Community College, Heath (2008) found 97.3% of early college high school students received an associate degree as compared with traditional students at community colleges who completed at a much lower rate of 38.8%. The study also showed College Academy students having an average GPA of 3.2 compared to the lower 2.8 GPA of the comparison group. The analysis by Heath, similar to that of Windham and Perkins, was a simple comparison and did not attempt to control for student characteristics.

Several other studies suffered from the two fundamental flaws, lack of data and rigorous statistical methods. The table below summarizes further studies of this type.

Table 1: *Examples of Means Based Research on Dual Credit Student Success*

<i>Study</i>	<i>Summary</i>			
Peng (2003), Texas	Dual credit students who went on to a four-year public university had higher GPAs and retention rates than non-participants.			
Florida Department of Education (2004)	State University System students with prior dual credit courses and a 3.0 GPA graduated from community colleges at a rate between 12% and 16% higher than non-participants.			
Florida Department of Education (2006)	State University System students' GPAs after one year were 2.83 for prior dual credit students compared to 2.71 for non-participants.			
Blanco, Prescott and Taylor (2007), Ohio		<i>Enrolled in Ohio Public College</i>	<i>Median Time to Associate Degree</i>	<i>Median Time to Bachelor Degree</i>
	<i>Dual</i>	71 %	2.7 years	3.8 years
	<i>Non-Dual</i>	59%	3.8 years	4.3 years
Washington State Board for Community and Technical Colleges (2008)		<i>Rate of Course Completion</i>	<i>Grades of "C" or Better</i>	
	<i>Dual</i>	94%	90%	
	<i>Non-Dual</i>	84%	83%	
Oregon University System (2010)		<i>Continued to Postsecondary Institution</i>	<i>GPA in Postsecondary Coursework</i>	<i>Credit Hours Earned in 1st Two Years</i>
	<i>Dual</i>	81.4%	3.13	61.3
	<i>Non-Dual</i>	72.6%	2.97	49.8

One study actually indicated the possibility that dual credit was *not* working as intended. The Kentucky Council on Postsecondary Education (2006), after factoring out

ACT scores as a predictor for success in postsecondary education, found participation in dual credit only mildly affected GPA, had no effect on overall retention, and was negatively correlated to matriculation for career and technical students. This study was limited in that only one year of data were examined. The Kentucky study stood out among the multitude of studies supporting the continuation of dual credit programs. Many other questions about the quality of studies and the true nature of dual credit surfaced during this literature review.

Questions of Quality

With all of the success of dual credit programs being lauded by colleges and public schools that provide them, the question of quality still often arises. Critics wonder if dual credit students are truly being exposed to *college-level* courses from the perspective of rigor and environment.

Allen (2010) found concerns on the part of some researchers when examining dual credit programs; these concerns included:

- Little solid quantitative data to support claims;
- Low or uncertain academic quality;
- Limited oversight of academic rigor;
- Inability to duplicate the college experience;
- Capability of high school teachers to teach college-level courses;
- Transferability of credits; and
- Costs involved in the programs (p. 11).

In addition to Allen's listed concerns, Museus, Lutovsky, and Colbeck (2007) raise a particularly worrisome issue; that dual credit programs may reduce the motivation on the part of teachers and administrators to improve the general curriculum in the high

school. If dual credit programs, along with AP become the core of a *de facto* college bound curriculum, why would mainstream curriculum need to be improved? After all, those other students are not likely to be college bound.

Location.

A general concern about lack of accountability in dual credit programs exists. With local control of decisions in high schools and community colleges and a lack of state- or nation-wide longitudinal data, it is difficult to evaluate or even catalogue what is happening in dual credit classrooms. According to Karp et al. (2005), only two states (Missouri and Arizona) require standardized curriculum in all dual credit course offered state wide.

Policymakers must find ways to ensure that dual enrollment courses offer students a true postsecondary experience. This is important not only for the students themselves, but because it maintains the integrity of postsecondary education. Dilution of quality may reflect poorly on postsecondary credit (p. 4). [Only 14 states] impose regulations that, for example, require dual enrollment programs to limit course offerings; to seek college approval for courses and their content; or to use standardized college curricula, books, or exams. (p. 2)

Table 2: *Location Where Dual Credit Was Taken*

<i>Location</i>	<i>Percent</i>
On High School Campus	76%
Through Distance Education	5%
On Postsecondary Campus	18%

(Kleiner & Lewis, 2005)

In 2005, less than one in five dual enrollment students are taking college courses on a college campus. The college campus is a major factor in creating the college culture. Without removing the student from the high school environment, it is difficult to set the tone for college expectations (Kleiner & Lewis). As a direct result of location, most courses taught in the dual credit format had only high school students in them (Kleiner & Lewis, 2005). This lack of student mix raises additional questions about classroom environment and culture. It is difficult to expose a high school student to the college experience when the environment does not accurately reflect that of a college course. The diversity of students' ages and backgrounds found in a traditional college classroom add to the quality of discussion and atmosphere.

Increased educational aspirations and better understanding the role of being a college student were attributed to being enrolled in dual credit courses (Karp, 2007). Karp found, however, the authenticity of the course was directly related to whether or not a student would change the perception of his or her role as a college student. "Merely renaming a high school course 'college' is not enough to create role-related learning. Instead, dual enrollment must replicate the academic demands placed on college students in order for high school students to learn about the role" (p. 32). Burns and Lewis (2000) found students who took dual credit courses located at their existing high school

did not perceive the courses differed significantly from their other high school courses. Conversely, students who went to a college campus reported feeling responsible and independent. “Participants perceive dual-enrollment courses taken on a college campus to be of greater value than those taken on a high school campus” (Burns & Lewis). This qualitative study followed only six students but supports the findings from Karp’s 2007 study. In a related finding, Smith (2007) found that location was significant in predicting educational aspirations. Students who actually went to a college campus for their dual credit course had higher aspirations than their counterparts who took their classes on a high school campus. Smith controlled for educational level of parents and other student factors.

Swanson (2003) examined the success rates of dual credit students at Collin County Community College, Texas, in subsequent courses based on three variables: student mix (high school only or high school/college mix); instructor (high school, part-time college, or full-time college); and location (high school or college/college center). This study is important because it looks at success in subsequent courses. Swanson found significant differences for two of these variables.

It was found that students who took the concurrent enrollment classes in one of the college centers (3.20 mean) or on one of the colleges campuses (3.15 mean) performed better in subsequent classes than those who took their concurrent enrollment classes in a regular high school classroom (2.8 mean).

When examining subsequent course performance based on the mix of students in the concurrent enrollment classes, it was found that students

from classes with a mixture of college-level students and high school students (3.20 mean), performed significantly better in subsequent courses than students from classes comprised of only students from a single high school (2.77 mean). (Swanson, p. 130)

While Swanson's study was limited to a single community college, it supports critics' concerns about the environment in which dual credit students take their courses.

Instructor.

Kleiner & Lewis (2005) found for every one college faculty member teaching dual credit, five high school teachers were doing the same. A quality concern exists here as well. "Many question whether the grading standards, particularly in high school-based dual enrollment programs, are rigorous enough, or whether high school teachers, however pedagogically talented, know what is genuinely 'college-level' in assessing the learning of their students" (Johnstone and Del Genio, 2001, p. 26). Some limited studies have been done to assess the differences between success rates when comparing subsequent coursework of dual credit students taught by high school teachers in contrast to students who had college faculty deliver the dual credit course (Andrews, 2004; Windham & Perkins, 2001 as cited in Allen, 2010; Swanson 2003). In all of these cases neither group of students significantly outperformed the other. Although doubts persist as to the quality of experience in dual credit courses, especially those taught on high school campuses, no study has convincingly linked quality to instructor type.

Transferability.

Questions of rigor, primarily stemming from the locations and instructors used in the delivering the majority of dual credit programs, have had their impact on course transferability. Johnstone and Del Genio's (2001) survey of postsecondary institutions revealed lack of external evaluations, as used in AP, and grading standards that are apparently lower than AP examinations create doubt as to whether school based dual credit programs are of *college-level*. One-third of institutions surveyed reported being suspicious of dual credit programs.

Most four-year college deans and faculty with whom the authors have discussed [dual credit]... have expressed both surprise and a measure of hostility to it. ... ignorance and opposition to [dual credit] ... is not likely to be alleviated without more transparency. (p. 28)

John A. Blackburn, University of Virginia's Dean of Admissions was clear when he said, "We encourage students to take AP exams in as many areas as they can. ... You can take a community-college class and get a C. That doesn't make you much of a student" (as quoted in Reisberg, 1998). When referring to dual credit courses Gary Ripple, Director of Admissions at Lafayette University in Pennsylvania said, "We believe a college-level course should be offered on a college campus, taught by a college professor, with college students in the room; that's the fundamental reason we do not recognize some of these gypsy courses" (as quoted in Reisberg, 1998).

University admissions officers were not alone in holding AP in higher regard than dual credit. "Students often find the dual-enrollment courses easier because they vary in difficulty and quality, while the A.P. program follows rigorous national guidelines"

(Reisberg, n.p.). The American Institutes for Research (2011) report to the Texas Education Agency (TEA) showed students, in addition to administrators, indicated both AP and IB courses were more rigorous than dual credit.

Table 3: *Students Perception of Dual Credit Rigor in Comparison to AP and IB Programs*

<i>Compared to Dual Credit:</i>	<i>AP Courses</i>	<i>IB Courses</i>
More Rigorous	45%	38%
Equally as Rigorous	42%	50%
Less Rigorous	13%	13%

(American Institutes for Research, 2011)

Interviews in a study by Kim, Barnett, and Bragg (2003) revealed a struggle between access and quality. While this struggle was not new to community colleges, school-based programs are once removed from the direct control of the institution awarding credit. The question of the right balance between giving students an opportunity to make the transition to college while requiring them to do “college level” work remains a difficult one.

The American Association of State Colleges and Universities (AASCU) (2002) reported drastic measures taken by the South Dakota Board of Regents. In response to concerns over quality, the Board banned dual enrollment courses from being counted toward college degrees. By 2010, dual enrollment was no longer prohibited from being used toward college credit in South Dakota, although participation numbers were extremely low as the result of restrictive guidelines (South Dakota Board of Regents, 2010). In a similar reaction to concerns over academic quality, New York University

(NYU) announced it would no longer accept college credits taken when they simultaneously served for high school credit; this change took effect in the fall of 2009 (Heggen, 2008). John Beckman, NYU Public Affairs, wrote:

“Dual Enrollment,” to our minds, means courses taught at a *college*....

However, another phenomenon is “college-level” courses that are taught in high schools to high schoolers, not infrequently by high school teachers who are certified to teach college-level courses. ... [students] received credit—appropriately—on their high school transcript during the application process. That, however, is separate and distinct from giving COLLEGE CREDIT for the course, which we will not be doing. (as quoted in Allen, 2010, p 34)

The Mixed-Age Classroom

As demographics shifted and the traditional-age college student became less dominant on college campuses, the mixed-age college classroom became the focus of multiple studies. Starting in the early 1980s, studies were conducted in both four-year and two-year institutions in an attempt to shed light on how faculty perceived differences between traditional-aged and adult students. Typically, these studies found faculty to have favorable impressions of adult learners. Mishler and Davenport (1984) found faculty perceived adult students as more mature and having better written communication skills than did their traditional-aged counterparts. It was also revealed that faculty did not typically change their teaching styles to accommodate these adult learners. Knorr (1993) found with an increase in age came the perception that students would perform better,

communicate better, and be more likely to serve as a resource to other students. In general, faculty had more positive attitudes toward adult students. Other studies supported the idea that faculty prefer a mixed-age classroom environment over a student population made up of entirely traditional-aged students (Bishop-Clark, 1995; Preis, 2000).

Kim (1999) found that faculty perceived important differences in the way adult students best learn; the study did not determine if faculty acted on these perceived differences. Adult students actually outperformed their traditional-aged counterparts at lower levels of instruction in science and engineering. In a study by Rees (1991) faculty did report treating adult and traditional-aged students differently, though the author did not elaborate on this point.

Faculty Perceptions

The perceptions of college-level teachers are virtually unexplored. This is surprising, since teacher perceptions would be expected to affect teacher satisfaction and motivation levels, the quality and type of instruction provided to students, evaluations of student achievement, and a variety of other educational variables. (Diekhoff & Wigginton, 1992, p. 22)

As noted by Deikhoff & Wigginton, very little has been published on the perceptions of faculty, and even less in regard to the differences between teaching dual credit students on high school and college campuses. Martell, Navin, and Sullivan's (2006) study at Southern Illinois University at Edwardsville was a rare find in the literature review. Data collection for this study was done in the academic years of 1996-1997 and 1997-1998, a

time when dual credit programs were small and typically reserved for high achieving students. One of the authors taught college economics classes on the Edwardsville High School (EHS) campus, giving a unique perspective on the high school environment as a setting for college classes. The high school setting was found to be different in four important areas; course taking motivation, academic ability, diversity, and social ties.

When responding to a survey where students checked all items that applied, at least 65% of high school students indicated the following as reasons they took the dual credit economics course:

- To find out what a college course was like;
- Because good things had been said about the course;
- To improve GPA, as a weighted course;
- Because of an interest in Economics;
- Friends were taking the course;
- To have fun;
- To get a head start on college; and
- To get inexpensive college credit.

On the other hand, 80% of college students took the course to fulfill a requirement in their degree. No other item received a response above 25% among the college group. The authors surmised, “High school students’ expectations are multi-dimensional, and probably higher than that of the college students” (Martell, Navin, & Sullivan, p. 13). Only students with a high school GPA of 3.5 or higher were allowed to take the course. Once registration had taken place, it was revealed that the average ACT composite scores of the group was in the 96th percentile of national scores. Ultimately, and not surprisingly, the students at EHS outperformed their college counterparts with nearly all

of them passing the course with a “B” or better as compared to the college group in which only 60% did as well.

The uniformly-high intellectual ability of the high school creates some real opportunities for the instructor. The class could move at a faster pace, and could cover some advanced concepts. ... It was a luxury to not have to teach to multiple “audiences” at the same time. (Martell, Navin, & Sullivan, p. 16)

The high school class was homogeneous not only from an academic ability perspective, but by age and race as well. All students were Caucasian, 90% had aspirations of professional careers, and all were born in 1980. The college courses used in comparison on the other hand were much more mixed in age and race.

Discipline was the issue that plagued the high school classes and caused the most concern for the authors. It was perceived that many of the discipline issues that arose in class were born out of the students’ familiarity with one another and immaturity. College faculty were unaccustomed to dealing with problems such as these. High school students also took less personal responsibility for getting work done. One positive result of the close social structure shared by the students was the ease at which they engaged in discussion in the class which led to class enrichment.

Framework

William Glasser’s work is predicated on control theory and continuous improvement. Control theory was developed by William Powers and has its roots in engineering science and continuous negative feedback loops. Continuous improvement

is synonymous with the Plan-Do-Check-Act model proposed by Walter Shewhart (often referred to as the father of statistical quality control) and popularized by W. Edwards Deming when he helped transform the Japanese economy after World War II (Arveson, 1998). William Glasser's (1997) notion of choice theory could be used as a framework for analysis. Glasser proposes two fundamental types of learning environments, stimulus-response and choice. The difference between these two is that stimulus-response supports the idea that control of the learner lies outside of the learner, i.e. a student will respond to rewards and punishments related to learning. Rewards could be such things as good grades or being given certain privileges. Punishments include bad grades, public humiliation, being withdrawn from the course, or the withholding of privilege.

Coercion in either of its two forms, reward or punishment, is the core of [stimulus-response] theory. Punishments are by far the more common, but both are destructive to relationships. The difference is that rewards are more subtly destructive and generally less offensive. (p. 1)

Choice theory supports the idea that control is retained within the student and that the instructor's job is to help the student understand and tap into that control. According to Glasser, when students understand that faculty care about them, faculty become part of the student's *quality world*. The teacher becoming part of the student's quality world is related to the types of communication in which a student will choose to engage.

Coker and White (1993) describe three primary learning theories, two of which correlate to Glasser's. Mental discipline theory, not addressed by Glasser, relates to what is commonly known as rote memory supported by drill. Stimulus-response theory relates

to the use of rewards and punishments as means to encourage the correct educational response. Finally, cognitive-interactionist theory “views the learner as an active participant in the teaching-learning process” (Coker & White, p. 79). This theory is closely related to Glasser’s choice theory. Mental discipline theory and stimulus-response theory dominate the American classroom today. This environment is most likely the result of teachers in the system being taught that way themselves. This incestuous cycle is hard to break. Coker and White make this fundamental argument about how students best learn:

When we honestly examine our own learning, the information that we crammed into our heads for Friday’s spelling test or Wednesday’s history quiz is long gone. What remains with us typically is (1) learning we personally wanted or (2) learning that actively involved us in the process. (p. 80)

According to Brown (2008), Glasser proposes a communication model associated with choice and stimulus-response. Glasser identifies seven *caring habits*; supporting, encouraging, listening, accepting, trusting, respecting, and negotiating differences, associated with choice. This reasoning over emotion leads to greater relationship satisfaction according to Glasser. The model also delineates the opposite behaviors related to stimulus-response; these *deadly habits* include criticizing, blaming, complaining, nagging threatening, punishing and rewarding for control. Allowing emotion to control reason leads to greater dissatisfaction in the relationship.

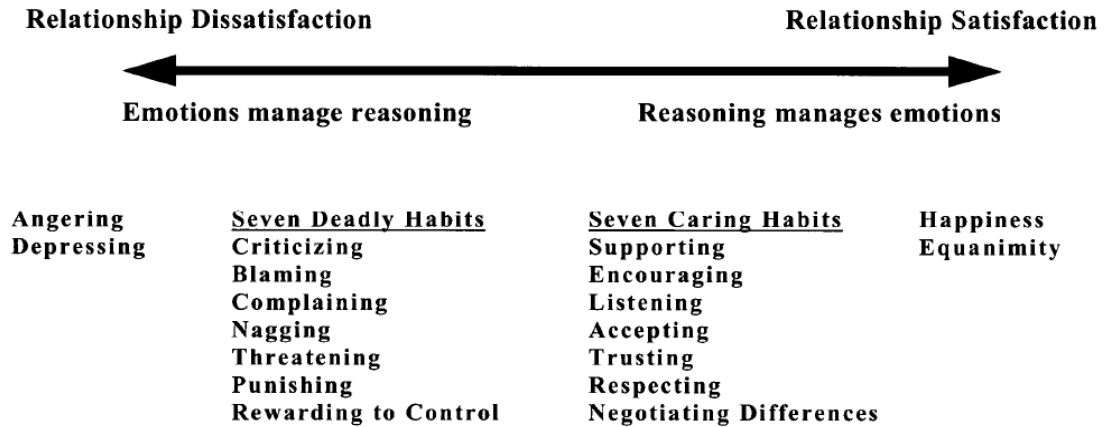


Figure 12: Glasser's communication satisfaction model (Brown, p. 30).

Glasser advocates the notion that learning is fueled by four needs, “the need to belong, the need for power, the need for freedom, and the need for fun” (p. 1). An internal locus of control fostered by Glasser’s seven *caring habits* lies at the heart of real learning and can be used to construct a lens by which the learning environment can be viewed. It is Glasser’s premise that a teacher of his/her subject then must become part of the quality world of the student in order for real learning to occur.

The researcher would argue Glasser’s definition of stimulus response would be more typically observed in a high school classroom. Conversely, the *caring habits* described by choice theory would more likely be observed in a college classroom. This stimulus-response environment may spill over into dual credit classes when the environment, largely determined by location and student mix, looks more like a high school than one students would expect in college.

Summary

Initial signs in many studies are good and point to a need for more rigorous research. Some studies have examined the differences in student success as it relates to location, student mix, and instructor. Very few studies address the question of faculty perception and none specifically address community college faculty perceptions of teaching dual credit on the high school campus in comparison to teaching dual credit on the college campus. The literature review encouraged the researcher to move forward with the proposed study.

Chapter III – Methodology

Consideration of Qualitative Research

The decision to conduct a qualitative study developed over time. The researcher came to The University of Texas at Austin with the intention to conduct quantitative research in his dissertation work. With a Master's and Bachelor's in Business, and an undergraduate minor in Computer Science, the researcher had spent the majority of his career looking at things from a quantitative, logical perspective. The more he discovered at the University, the more the researcher began to realize behaviors and beliefs might be better understood through conversation, asking the subject to tell his or her story. Still, qualitative methods left him uneasy; they seemed unstructured and even had the potential to be self-indulgent. Conversely, the researcher began to wonder if positivism left enough room for the human experience, emotion, and perception. The scientific method had lost its attraction as a way of knowing. The researcher thought, "There must be a balance between the reality that is *out there* and the reality *perceived*." This dualism is created by the interplay of world and self, in constant struggle with one another to find equilibrium. The world shapes perception, and that perception shapes the world and the way in which humans choose to interact with it. So how does one see the world for what it really is, or at least clearly enough to share it with others?

Post-positivists reject the idea that any individual can see the world perfectly as it really is. We are all biased and all of our observations are affected (theory-laden). Our best hope for achieving objectivity is to triangulate across multiple fallible perspectives! Thus, objectivity is not

the characteristic of an individual; it is inherently a social phenomenon.

(Trochim, n.d.)

Humans never get it right, they never have reality totally understood for two reasons; 1) research is flawed as a function of human fallibility and 2) the world changes.

Researchers strive to define the world within the social construct in which they live; to describe the world in such a way that they can live with each other, and with each other's points of view. It is through the examination and consideration of multiple points of view that humans come to a definition of the world that is *good enough for now*. The *good enough for now* position is important in post-positivism because it requires humility and the admission of not fully knowing. The search for truth, fairness, and reality is the task. One may get closer to it, but never *arrives*; if one thinks he has, then he is truly lost and on the path of self-righteousness. To ask those experiencing the phenomenon in question while maintaining structure and discipline in the method seems a responsible approach to meaningful research.

Introduction to IQA

The method used in this study was the Interactive Qualitative Analysis (IQA) process developed by Northcutt and McCoy (2004) at The University of Texas at Austin. An IQA study consists of four stages; defining a phenomenon, conducting focus groups, conducting interviews, and reporting. The phenomenon in question was the dual credit teaching experience on both high school and college campuses from the viewpoints of community college faculty (the constituency). The researcher guided participants through a specific protocol, which resulted in the definitions of themes (affinities) related

to the dual credit teaching experience. Once affinities of the system were known, interviews were intended to clarify the model by illuminating 1) the deeper definition and meaning of each affinity, and 2) how the affinities have influence on one another in the model. With affinities and relationships codified, a *system influence diagram* (SID), or *mindmap*, was then drawn. This SID is a graphical representation of the group's work (Northcutt & McCoy).

Telling the Group Story through System Influence Diagrams (SIDs)

The SID began to take shape when the groups were together and were asked to think about their experience or the phenomenon in question. The researcher asked them to close their eyes and think about what it meant to be a dual credit teacher in a high school environment. In the second group session the same process occurred for the dual credit teaching experience on the college campus. An example of the focus group warm-up exercise can be found in Appendix A. The purpose of the warm-up was to put the group members in that place in their minds. Following the warm-up the researcher asked group members to write down as many discreet thoughts as they could about the experience on index cards. Group members took up to ten minutes to write down these thought or expressions. These came in the form of single words, phrases, pictures, or symbols.

Once the cards were completed the researcher took them and spread them all on a flat surface. It was explained to the group the cards no longer belonged to the individual and were now part of the shared experience of teaching dual credit on the (high school or college) campus. The researcher asked the group members to all come forward and take

any card, place a piece of tape on it and put it up on the wall. Group members were asked to continue this process and group cards into clusters that made sense to them intuitively. Group members were allowed to move any card at any time, but were asked to do this in silence. All group members worked on this together. At the researcher's discretion, when activity had subsided a bit, group members were asked to stop and take their seats again.

The researcher began a group discussion asking members to clarify the meanings on cards and to name the clusters of cards. The group members worked toward consensus in this step of the process. It was important for the researcher to keep the conversation moving and to get input from all members, not allowing any one member or small group to take control of the conversation. This group discussion ultimately revealed the affinities of the system.

In the second part of the individual interview group members were asked to indicate how each affinity influenced the others, if at all. The researcher was at this point trying to capture the experience of each individual. As an example, a system with three affinities (A, B, and C) could be defined in various ways by different individuals. To begin with, the group member would decide the relationship between A and B; there are three possibilities:

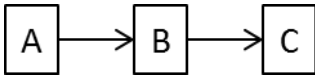
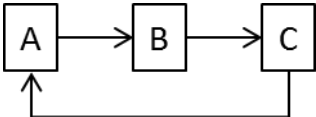
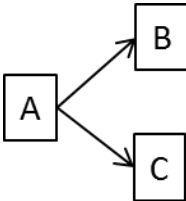
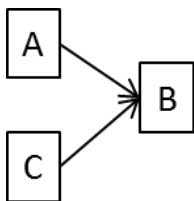
- A influences B ... A is the driver and B is the outcome ... ($A \rightarrow B$);
- B influences A ... B is the driver and A is the outcome ... ($A \leftarrow B$); or
- Neither, direct influence does not exist between the two affinities.

There are two rules that any system must abide by:

- Two affinities cannot affect each other directly ($A \leftarrow \rightarrow B$). If this is the case then there must be an intervening affinity ($A \leftarrow C \rightarrow B$) is acceptable; here C is the driver and both A and B are outcomes.
- All affinities in the system must be connected through influence on or by others. If this does not hold true for an affinity, then it is not connected to the system and therefore is not part of the system in question.

With these rules in mind, a system with three affinities could take multiple SID forms:

Table 4: *Variations of SID Diagrams*

<i>Driver, pivot, and outcome:</i>	<i>Driver, pivot, and outcome with feedback:</i>	<i>Single driver with two outcomes:</i>	<i>Two drivers with single outcome:</i>
			

Even within these four basic forms, affinities could be rearranged depending on how the relationships are defined by group members. Ultimately, a system with only three affinities could yield as many as 26 possible SIDs. So how does the IQA method settle on a single SID?

After each group member defined relationships between the affinities, those relationships were compiled by the researcher and reconciled. Suppose there were four members in the group that define the affinities A, B, and C. Each group member was asked to identify the relationships. For example each member filled out an affinity relationship table (ART), where blank indicated no relationship.

Table 5: ART Examples

<i>Member 1</i>	<i>Member 2</i>	<i>Member 3</i>	<i>Member 4</i>
A > B	A > B	A > B	A > B
B > C	B > C	B > C	B < C
C < A	C < A	C < A	C < A

These individual affinity-pair relationships were then compiled for the group in descending order of frequency with a cumulative frequency calculated for each row.

Table 6: Cumulative Affinity-pair relationships

<i>Affinity-pair relationship</i>	<i>Frequency</i>	<i>Cumulative Frequency</i>	<i>Cumulative Frequency (%)</i>
A > B	3	3	33%
B > C	3	6	66%
A > C	2	8	89%
C > B	1	9	100%
B > A	0	9	100%
C > A	0	9	100%

Through four relationships the researcher could represent 100% of the model defined by the affinities and relationships. However, in doing so the researcher would have broken the rule that two affinities cannot directly affect one another. How does the research resolve the apparent conflict that three of the group members said B was the driver to C, but member four indicated the opposite?

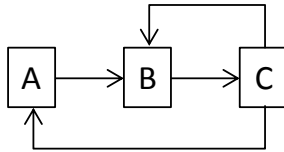


Figure 13: Cluttered SID.

Essentially the model would indicate four relationships. However, B and C point to one another, which violates one of the rules of an IQA SID. While this relationship may be accurate when considering the entire group's input, it does not help create a usable system. The system in this state is referred to as *cluttered*. Removing redundant links, or uncluttering the SID, is an important part of the IQA process. Eliminating links through a logical process does two things simultaneously: 1) it simplifies the model into something comprehensible, and 2) it keeps all relationships intact, albeit through other affinities indirectly. This is a fundamental tenet of the IQA method.

By eliminating links that skip over mediating affinities, we achieve a simpler, more interpretable mental model – one that has optimum explanatory power. We rely most heavily on the *uncluttered* version [of the SID] for interpretation, analysis, and forecasting. (Northcutt & McCoy, p. 177)

Intuitively this may make sense, but which relationships, arrows, should be removed from the sample system? The answer to the questions lies in the *cumulative affinity-pair relationships table*. Essentially, stronger relationships win out in the IQA method.

Table 7: Cumulative Affinity-pair relationships with Delta

Affinity-pair relationship			Frequency	Cumulative Frequency	Cumulative Frequency (%)	Driver Points	Outcome Points
A	>	B	3	3	33%	A + 3	B - 3
B	>	C	3	6	66%	B + 3	C - 3
A	>	C	2	8	89%	A + 2	C - 2
C	>	B	1	9	100%	C + 1	B - 1
B	>	A	0	9	100%	-	-
C	>	A	0	9	100%	-	-

By adding two columns to the table and recording the number of times an affinity was indicated as a driver or outcome the researcher can ascertain the relative position of each affinity in the SID. A delta for each affinity is reached by adding and subtracting driver and outcome points. In this example the delta is +5 for A, -1 for B, and -4 for C. The delta determines the physical position, left to right, or top to bottom of each affinity. Affinities are placed in the model by the delta order. Now the researcher can determine which links to remove.

The researcher at this point places the affinities in delta order and begins to move through the model in that order to remove any redundant forward links. Affinity A points to B, but there is no other way to get there from A, so the link stays. Now the researcher examines B. Affinity B points to C, but again, there is no other way to make the connection so the link stays. Having moved forward through the model, now the researcher moves backward to see which links can be removed. The logic for the example would be: Starting with C, examine arrows in reverse order of delta and ask the question, “Is it possible to get to the same place through another relationship?”

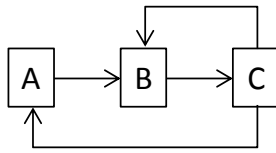


Figure 14. Cluttered SID.

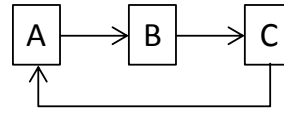


Figure 15. Uncluttered SID.

Affinity C points to B, but there is a path to B through A; therefore, the link can be removed. The model is simplified by deleting the redundant relationship. However, the relationship is kept intact, albeit through another affinity. The researcher continues the examination of affinity C and finds he cannot remove the remaining link from C to A as the connection would be completely lost. Moving to the next weakest affinity in terms of delta, the researcher examines any relationship pointing back to the driver, left, side of the model. In this case, there are no more links to examine. Through this logic of moving forward and backward through the SID removing the weaker or redundant relationships, the researcher has refined the model in a way that is balance between being descriptive and simplistic.

Individual Interviews

Interviews in the IQA method are focused on developing axial and theoretical code tables. In short, the axial code table is the interviewee's story about the affinities in the SID. The theoretical code table is the interviewee's story about the relationships between the affinities in the model.

The axial interview took place first; this elicited needed information about the nature of the affinities and served as a natural precursor to the theoretical portion of the interview. The researcher started by thanking the interviewee for participating, reviewed

confidentiality information, collected pertinent demographic data, and requested to record the interview. As the interview began the researcher began with comments like:

As you know your group came up with some categories to describe the dual credit teaching experience on the (high school or college) campus. I would like for you to share with me your thoughts, feelings, and definitions of and about those categories based on your own experiences.

The model defined by the group determined the questions in both the axial and theoretical portions of the interview. The interviewee was prompted to talk about each affinity. The researcher gave the interviewee the name and a brief description of the affinity as the group had defined it and then asked the interviewee for his/her interpretations and examples of it.

Once all affinities had been covered, the researcher moved on to the theoretical portion of the interview. The interviewee was handed a sheet showing all the affinity pairs. The researcher began this part of the interview with comments like:

Now that we have talked about each category, I would like to talk with you about the connections between them, if you see any. For example, you mentioned earlier that you thought [A was causing B]. I would like to go through each of these pairs with you and get your input on these types of relationships. Let's start with [A and B]. Do you see a connection here? If so, can you give me an example of how that connection works?

At this point the researcher clarified what was said about the relationship, verifying the direction of influence, if any existed, and moved on to the next affinity-pair relationship. Once the interview was completed, the researcher asked the interviewee if he or she had any final thoughts or if there were any clarifications to be made. The researcher then thanked the interviewee and concluded the interview.

Northcutt and McCoy had specific advice for interviewing during an IQA study. The researcher listened for what might have caused or might have resulted from an affinity. While the researcher had a plan for the interview, the interviewee was allowed to change that plan. The researcher kept track during the interview of what had and had not been covered. This tracking was made simpler by having a table of affinities and relationships to code in and check off as the interview progressed.

Data from interviews that related to the same affinity or relationship were brought together in a tapestry of sorts. This tapestry of thoughts and expressions tell the story that is the socially constructed meaning of each affinity and how it fits, or has influence, in the broader system.

Research Logistics

Where was the research conducted?

Two community college campuses in Texas, one small suburban community college (SSCC) and one large suburban community college (LSCC) served as the sites for the research.

Who participated in the study?

Two study groups were assembled, one at each of two community colleges in Texas. There were 14 participants at SSCC and 11 participants at LSCC. Participants were a mix of males and females from multiple ethnic backgrounds between the ages of 30 and 65. All participants were in good physical and mental health. Participants had taught dual credit students for a community college in both high school and traditional college environments. No specific demographic data were collected on the participants to avoid any possibility of participants being identified.

The researcher knew the faculty group from SSCC as colleagues and did not know the participants from LSCC before the study began.

How were participants recruited?

Potential participants were identified with the assistance of each college's institutional research office. Electronic mail invitations were sent to all potential participants. Some faculty members who showed interest were not able to participate as a result of scheduling conflicts. All communications with participants in regard to the research were conducted between the researcher and the participants only.

When did data collection take place?

Data collection occurred between September 2011 and January 2012.

How did the researcher obtain consent?

Prior to visiting college campuses the researcher completed the appropriate Internal Review Board (IRB) process with administration. The researcher had direct contact with group participants and supplied them with a consent form before the group session and before the interview process.

What did participants actually do?

During the group session participants were put into a relaxed state and asked to think about their experiences teaching dual credit courses (see Appendix A: *Dual Credit Teaching Focus Group Warm-Up Exercise*). Once the participants had opportunity to write their thoughts on index cards, they proceeded to sort the cards into groups by taping the cards onto a wall. Once participants sorted the cards, a discussion with the researcher ensued in order to clarify the meaning of cards and groups. Participants assisted the researcher in giving the groups, or affinities, names appropriate to the card grouping. Each affinity was numbered as it appeared on the wall. It is important to note that an affinity's number has no meaning whatsoever, other than to identify it during other phases of data collection and reporting. Affinity numbers are italicized throughout this text to set them apart from numeric values.

The researcher later renamed some affinities to clarify their meaning. This revision was done to ensure a higher level of understanding in the interviews conducted later in the data collection process.

Within a week's time of the group brainstorming sessions, the researcher contacted each of the faculty members by telephone to conduct an individual interview. Rapport had already been established in the group session and several electronic mail communications leading up to the interview. The researcher recorded the telephone conversations for later transcription. Also, the researcher reminded the participants of the IRB information they received in the earlier group session, letting the participants know the session was being recorded, and making sure the participants understood the interview could be stopped at any point. In the first part of the interview, the researcher asked the faculty members to describe each affinity. A reference document which delineated the group-defined affinities and comments was available to interviewees for the purpose of clarification and served as a reminder of the group discussions. After making the interviewee comfortable, the researcher led into the interview by saying something like:

In the group session we sorted cards into like categories; I call those categories affinities. If you will look at the high school affinity table, you will see the affinity *Student Behavior*; under it you will see a list of all of the comments group members wrote down in reference to that affinity. You may see some of your comments there. These comments are provided to remind you what we talked about as a group; they may or may not speak to your specific experience, but can be useful in getting the

conversation started. Tell me about your experience with *Student Behavior* while teaching dual credit students on the high school campus.

The researcher guided the discussion, but the interviewee was given the latitude to move from one affinity to another, and back again. This latitude was important in letting the interviewee fully express themselves. The researcher listened intently and participated only enough to keep the conversation moving, asking for clarification and further detail. Only when the interviewee had expressed fully his/her experience with a particular affinity did the researcher move on to the next.

In the second phase of each individual interview, the researcher asked participants to define the relationships between each of the affinity pairs. Participants were asked to indicate the direction of influence, if any, between each affinity pair. If the participant felt a relationship did exist, he/she was asked to give an example or was asked to describe how the relationship might work. In some cases participants felt a relationship existed but could not articulate its nature.

After the transcription phase, each participant received a copy of the transcript to verify. If any discrepancies were found, the researcher was to work with the participant to correct the transcript. This type of correction was only needed in one instance. Four participants did not reply to the request for this member check.

How was the privacy of individuals ensured?

No identification of responses was attached in any way to the respondent. The brainstorming activity responses were not attached to any person. Similarly, the relationships defined by each individual were anonymous as well. The only *known*

response among the participants was during the grouping of like elements. When the data were taken away from the group activity for later analysis, there was no way to attach a particular response to an individual. Individual participants were not named at any point during the study. Voice recordings of interviews were not shared with any other individual. Names were not recorded during interviews. Data was immediately disassociated from the individuals who provided it. Data provided in written form from ,once transcribed into electronic form, were stored for future reference in a private filing cabinet (still with no names associated). Original files will be destroyed one year after the conclusion of the research. Interviews were recorded with no mention of names. Recording were for the purpose of transcribing interviews. In interview write-ups neither the name nor the location of the interviewee was divulged. Interviewees were assigned numbers for the purpose of reporting findings. Recordings and transcriptions will be destroyed one year after the conclusion of the research. There was only one primary researcher in this project. No other person had access to any raw data from the study.

What were the potential risks?

Coercion or undue influence was not applicable in the scope of this study. Minor social risks existed in terms of criticism by peers. Likelihood of this occurring was low as all participants were professional faculty. Education has a long history of collaboration and open acceptance of ideas. Because the IQA method required the groups to come to consensus in the creation of affinities, there was no avoiding this potential risk, albeit low. While the potential for loss of confidentiality also existed, this

was extremely low as there was only one investigator involved and names were disassociated from data immediately.

What were the potential benefits?

Participants may have potentially benefited from professional interaction and conversation around the dual credit experience. On a larger scale, high schools, community colleges, and universities may benefit by better understanding this same experience. Future researchers may also benefit from the documentation of the phenomenon as a basis for additional inquiry.

Summary

The IQA method proposed by Northcutt and McCoy was chosen by the researcher as the best method to capture the shared reality of the dual credit teaching experience on the high school and college campus. The group and interview sessions conducted in this study posed minimal risks to participants.

Chapter IV – Results

This chapter addresses the research questions:

- What are the elements (affinities) that define the dual credit teaching experience on a high school campus from the viewpoint of community college faculty?
 - What are the relationships between the identified affinities?
- What are the elements (affinities) that define the dual credit teaching experience on a college campus from the viewpoint of community college faculty?
 - What are the relationships between the identified affinities?

Upon completion of the interviews, the researcher transcribed all recordings in detail. Each line of each transcription was then coded by affinity, relationship pair, and interviewee number. The researcher then sorted all axial comments, those related to affinity descriptions, into groups by affinity and then into subgroups or subtopics within each affinity. Taking all quotes from an affinity, the researcher then pieced together a narrative for each affinity in order to represent the group experience. Similarly, the researcher coded and sorted all theoretical comments, those related to relationships between affinities, and threaded them together to represent the group experience in terms of the interplay among the affinities.

Because IQA [Interactive Qualitative Analysis] is designed to describe the perceptions of the phenomenon or the lived reality of the group, it makes sense to describe the affinity purely in the words of the group... [to] create a composite of the individuals' experience with the phenomenon.

(Northcutt & McCoy, 314-315)

The High School Dual Credit Teaching Experience at SSCC

Identifying affinities.

The eight affinities identified by the SSCC group, after renaming, were *Student Behavior, Disruptions & Distractions, Student Expectations, External Influence, Facilities & Technology, Homogeneity, Student Preparation, and Student Scholarship*. Affinities are described in the table by the exact comments written on cards by the participants.

Table 8: *High School Environment Affinities and Related Card Comments at SSCC*

<i>1. Behavior (renamed Student Behavior)</i>	
Students seem more peer oriented	Long discussion with their colleagues
HS students are more clannish at 1st	(socialization)
Immature behavior by some students	Much student talking
Students very talkative	Behavior problems
Students use class to make up high school work	Talking disruptions
Classroom management	Cell phones
Some classroom management required	Run (students running in hallway)
<i>2. Disruptions/Distractions (renamed Disruptions & Distractions)</i>	
Sports and extracurricular conflicts	Intercom announcements
Student absences especially in afternoon classes – baseball games, volleyball games, pep rallies	Lots of distractions interruptions by office staff
Pep rallies	PA announcements
Classroom interruptions	Speaker off
Announcements	Missing students due to school events
Bells	Abbreviated class time due to testing
Bells ringing	HS schedule and events
Bells	Not enough time to teach lessons
Noise	Disruptions from
Chaos	announcements/bell/office messages
Various high school trappings	Interruptions –
Passes	delivery of message/materials to students
Notes from office	Interruptions for HS events
Pledge of allegiance	Dealing with interruptions
	High school activities interference

(Table 8 Continues)

Table 8, Continued

3. Expectations (renamed Student Expectations)	
Feel students' anxiety	HS frame of mind
Students think they are still in high school	Expect college class to have high school policies
Overcoming high school standards	Expect A's
4. External Influence	
I do get \$ for travel to HS but not to college	Isolation (no support)
Less time in office due to drive time	Not accessible
College policy broken for dual students (drop date, attendance, etc.)	(to students as I am on the college campus)
Required attendance (body count)	Different schedules –
Strained relationships with high schools	HS holiday is not College holiday
Must sign in (faculty members)	Communication challenges
Evil glare from AP history teacher	Communication problems from me, counselor, principal, parents, etc.
Poor communication	Helicopter parents
(class location, test days, HS events)	More calls from hovercraft parents
Conflicts with staff	Conflicts with parents
Lack of institutional communications	Pressure to make students pass
	Parents' emails and calls
5. Facilities/Technology (renamed Facilities & Technology)	
Difficulty gaining timely access to room (keys) and building (parking)	Room changes for TAKS testing
Cramped	Computer working
Classroom is geared toward high school	No technology computer/projector
Dirty	Technology not very advanced
Erase the board	Equipment issues
Locked door	Technology challenges
Classroom/facility changes or availability	Inferior equipment
Lab availability	Inadequate teaching resources
6. Homogeneity	
Homogeneity of student's life experience (unwillingness to offer varied perspectives in discussion)	Homogeneous
	Similar ages, similar experiences
	Insular
7. Preparedness (renamed Student Preparation)	
Enjoyable working with the cream of the crop!	At same HS one class was best & next year's class was worst
Prepared engaged students	Taking students where they are academically
Underprepared students	College readiness issues
Tremendous contrast between those prepared/not prepared for college level work	"Honors level" students
	Not College Ready

(Table 8 Continues)

Table 8, Continued

<i>8. Scholarship (renamed Student Scholarship)</i>	
Some very bright students who blossom in class discussions	Students turn in work but not always on time
Students who grow as mature thinkers/scholars	More difficult to initiate discussion
Goal: to facilitate learning; prepare investigations; analyzers; creators	Difficulty in getting students to focus
Inspiring to share in the growth as students realize they have taken charge of their learning	Other priorities
	School needs often put before college needs
	No interest in education
	Engaged students
	Good class discussion

Describing affinities.

Affinity descriptions are a woven set of quotes from the participants. The IQA method uses this process to tell the story of each discriminate piece of the mindmap from the point of view of those that experience the phenomenon.

Student Behavior.

“It’s in their environment, and they never leave the high school frame of mind.” The familiarity of a student’s high school campus generally causes their continued high school behavior.

I’ve noticed different behaviors at different high schools. I’ve had students that wanted to be there and were excited to be there and were the equivalent of students we had [on the college campus] in our honors classes. They were generally good kids. Actually some of my best-behaved classes have been at the high schools. I have [also] had a class where I don’t know what happened, it was a bad class. That was a rough year. It takes a lot more energy to manage a classroom at those places [high schools]. It was very difficult for the first couple weeks. Once I started, they settled down. I’ve had a lot of different experiences with behavior because every class is different.

When students are on their home turf at the high school they have to act like they do in their other high school classes. I do think there is a high school culture. I think emotionally they remained at the high school level in terms of what they considered appropriate behavior, what they considered appropriate work ethic, what they considered their subject matter for discussion. Most of them have the capacity [to behave], it's just that when they're taking the class on the high school campus, they just came from a high school class, walking down the high school hallway, talking about whenever the latest thing is that's going on at the high school. The students are more likely to remain mentally and emotionally in high school mode in terms of depth of conversation, focus on the work at hand, distractibility, visiting with a neighbor, those sorts of things. They're still in that high school mode of raising their hands if they have to go the bathroom, or raising their hands for anything really. Some of them are immature, but that's what you expect.

In most cases the students have been in the same classrooms with each other for years. So they're used to interacting with each other. You know because they're familiar with each other, there was a lot of talking...chattiness among groups, you know background talking. That's the major frustration from my point. They're definitely more clannish. I did have four girls hold hands in a circle and say "let's pray" before an exam. I said, "I recommend you study."

They seem to say whatever was on their mind without restraining themselves. There always seems to be, in every class, a persisting group that just wants to talk all the time. Talking, without question, was my biggest issue. In my classes, for the first five minutes of class, until they are into thinking about the problems and working on the problems, there's this thing where when you start talking they start talking, and when you stop talking they also stop talking; it's like a circus trick. And apparently

what high school teachers do is just talk louder. I was so upset because I recall thinking I do all this work and they're just talking. Finally I said, "If you all don't want to listen, I'm not going to waste my time." I walked out and I told my division chair "I'm not going back." And I didn't come back until the next class. I had never done that before, but they just pushed my last button. Other than one particular incident at the bigger high school where I walked out, I did not have too many issues.

"The teacher has control over the classroom environment." Although the teacher does have control in the classroom, being in an unfamiliar environment can make classroom management difficult in the beginning.

Teacher's expectations: because I had heard horror stories from others about all the high school stuff that goes on and pep rallies and all that kind of business, when I stepped on campus I decided I was gonna be hard-lined. I was told that when I was on a high school campus I had to show that I was more powerful. It's your job as instructor is to ensure that there is an appropriate learning environment. As long as you know a little bit of that going in, it makes it easier as a faculty member. I spent a couple of class meetings to get them to understand that this is college and they should not talk during a lecture. I came in and stood my ground and I let them know that I had no problem taking them out of class.

So I had a little bit of class management issues at the beginning. Because the high school was not my environment, I did not feel comfortable in the beginning. Perhaps the students can see this and feel they can do whatever they want. They treated me, not exactly like a sub, but not exactly like one of their teachers either; so they're seeing what they can get away with. They expect to get away with more. One of the more interestingly challenging students I had prided himself in asking

questions that the teacher did not know the answer to; they were relevant questions, not out of line with the topic. When he understood that I knew what I was talking about because I had a master's in my subject, he stopped challenging me. I had passed some kind of test.

It's not that things are perfect. I see the behavior problems as being something that can be handled by better classroom management and the realization that all students are not mature and are not going to respond to suggestion. I try to handle it that way before running someone out of class. You have to confront them; "this is inappropriate in here if you continue I will insist you leave." If I did kick them out of class [they would ask] then where would they go? [I would say], "I don't care where you go, that's not my problem...just don't come back till tomorrow." That kind of shocked them. They thought, "Oh my gosh!" and realized this was serious stuff. I tell them they have to obey the rules; "If you have to talk on the cell phone, go in the hall, when you're done come back. Only one person speaks in this room at a time." I have the seating chart for each class; this is on both the high school and college campuses. It starts with wherever they are sitting. But if I have problems I'll move them. If someone's behaving improperly I tell them to leave the class.

[Differing opinion:] I don't have a seating plan; I don't care where they sit.

External Influence.

"Make it very clear from the onset that this is a college class." Even though the college class is taught on the high school campus, it needs to be understood college rules still apply not only to students, but the administration as well.

They expected you to keep roll for them. When the high school told me I needed to turn it in to them, I said, “No I don’t think so; I think you just need a body count,” and I worked it out with the attendance clerk. I call roll every class. As a faculty member what you experience is a principal coming into your classroom asking for your roll [and] they also observe you as if you’re one of their teachers. My opinion about that is that you don’t let it happen. My division chair said our commitment it is to teach the class the same as we do on campus.

Neither principal at either school made a point of meeting me and knowing who I was. I guess if I were a principal I would want to know who was on my campus. I made that happen by going in introducing myself.

“There were just these gaps of communication.” The high school tends to forget to notify dual credit teachers of important information, such as schedule changes.

Part of it is just a paradigm trap. [They think] you don’t really need to notify them because pretty much everybody knows what’s going on. So since we’re not on their mailing list, we’re not one of their general points of contact, they forget us because there are a thousand things that come up during the day that they have to deal with. School needs before college needs are always a fight. One time the principal decided that the pre-TAKS [reference to Texas' standardized testing] was not as good as he wanted, so he was going to have a full day of test strategy tutoring; this again was not communicated to me or the dual credit counselor; so the students were simply gone. It’s just lack of communication between the two schools.

There was an issue with the high school holiday calendar. One time the school had some dopey holiday that they didn’t tell me about. I

told them I had to have keys to the building so we can have class on Saturday. [Another time] I found out one week before class that there was a holiday. I had to cancel class. It was a major problem. I was concerned that I wasn't going to be able to finish my course, how I was going to get in 28 sessions during the semester. I lost at least 15% of my class time as a result of conflicts and time schedules at the high school campus. If the college holiday and the high school holiday are not the same, then we meet on [the college] campus. Almost everyone showed up.

My roll sheet is usually not accurate. All the students who are taking dual credit are on a roster, but they may not be on the right roster. So you have to prepare a completely new roster for each class.

On occasion I had the need, outside normal class time, to have a two-hour final exam period. But that was on me, I was left to solve the problem. The counselor and I went around and around about this. I finally compromised and was there for three hours so students could miss the high school class either before or after mine to take the exam. The school is putting their needs before mine. Your classes tend to be an afterthought by the high schools.

“I explained to the counselor and she explained to the parents.” Some faculty feel the counselors have a positive affect when it comes to student issues, while others feel it is not the counselor's job to interfere with the dual credit students once placed in their class.

The first time I taught at the high school the shared counselor asked me who wasn't going to make it and he would call them in and talk to them and help them withdraw. But the second time nobody really did that. I don't know if he was not allowed to ask any more or what.

On the high school campus if I had an issue with a student I would typically contact the counselor, and let them deal with that. Like if a student wasn't showing up, I would talk to the counselor. Most of my contact with the counselor is about students with bad grades. After the students let their parents know, everything was mediated by the counselor. Interactions with the counselors have been very positive. The counselor was right there to help me. I found myself quite often in the counselor's office talking to them about certain students. [However] I thought to myself, "I would never do this on a college campus."

Yes, you do get calls from the counselors. "How is so-and-so doing?" They are caught in the middle. I think they have two employers, the school district and the college; it's their job is to keep everybody happy and sometimes they're not making anyone happy. It's almost to the point where the dual credit counselors, the two that I have dealt with, feel the need to cover their butts constantly. I don't think they are intentionally trying to sabotage. So I send them an email and ask, "Why wasn't I told about this?" And they say, "We told you." Well, "No you didn't." So I go on the defensive instead of asking how I can make things better. One counselor, I don't get an email back from at all, and the other one I get a nasty email back from. So I have to be careful about how I ask things.

[Some college faculty feel] there was a tendency on the counselor's part to think that they are in the chain between the students and me. I had a counselor send me an email asking how a student was doing. I gave my standard answer, I said, "I recommend you ask her to show you the syllabus and ask her how much time she's spending studying and reading." That's the standard answer I have given to the one or two parents that have talked to me. That's not my job; I'm not going to give that information. We are confusing what FERPA [Family Educational Rights and Privacy Act] allows us to do and what we must do; FERPA

does not say we must give counselors information on the students. I had one counselor who was actually quite irate that I would not give her information on a student. I said, "I don't do that." Well she got to me because she cherry picks me now and tells students not to take my course. So another colleague of mine and I are on the blacklist. The counselors were definitely a problem.

"It's situations like that where you, as a teacher, are put in a precarious situation." Parents are still of the mindset that they are dealing with a high school teacher and tend to want to discuss their child with faculty.

There is an issue with the parents. They are in that mentality that they can call up a high school instructor anytime they want, so they look at me as just another high school instructor. Because you're not on the college campus it's a little bit different environment. And it's usually, "Why is my student failing your class?" not, "What did my kid do the fail your class?" So it's my fault. The parents are very pushy.

Fortunately I don't have any stories to tell about parents. I've had very few calls from parents [and] never had conflicts with parents. I never had a parent contact me about grades. I don't get helicopter parents.

We do need a more definitive policy at the college on what we can and cannot say to parents. Or if we choose not to discuss it that it's not going to come back and bite us. I had some emails from the parents and I did not respond to them. I have even had situations where a parent has asked, "Why is my daughter failing your class?" As it turned out the student had never been in the class. I had one parent call me and ask, "How's my son doing?" I said, "I can't tell you that; there are laws against that." She argued that her son was a minor... [and] yelled profanities at me. I simply told her that she misunderstood and I could not

tell her. Usually it's not nice to talk to them when they call because they're not happy. Without divulging too much you have to talk to them. I would like to have the ability to tell parents of minor students how they're doing. I am representing the college. I tell parents to have their students contact me. You don't want sell the student down the river without talking to them first, but sometimes you have to.

I had a colleague who had a child that never showed up to class. In the last week of class the parents wanted the child to be able to make up the entire semester class in order to walk in graduation.

Part of a dynamic you get caught up in is the parent/child relationship. I found many students take the course because their parents want them to. The student is not necessarily there because they want to be; it's that their parent told them they had to take the class. Many of these students would not be taking these classes on their own. It's their parents who are concerned about being able to brag about their children taking college classes during high school. Sometimes the prestige means more to their parents than it does to them. It's cheaper to pay for dual credit than it is for a university class. Parents are looking for money.

“That would be the kind of thing that would cause a little bit of friction in my day.” When using another teacher's room occasionally they can be a bit unreasonable.

I still remember the teacher that I was sharing the classroom with asked me to hand something out for her. I forgot to hand the items out and it became an issue. The teacher was upset with me, “Why didn't you pass out my handouts?” So it was causing drama. That sounds like a little thing. So I thought, “Why am I even put in that kind of position, passing out someone else's work?” So I started really being hard-nosed about it

and said, “If you want to come in and pass out items that’s fine, but I’m not going to do it for you.”

One of the coaches would write test questions all over the board for the next class. And he would write down, “Don’t erase.” Well that would leave me without a board. Those are the kinds of things that the counselor would have to get involved in.

“It was just crazy.” Often times parents, principals, counselors and students don’t think the rules apply to them.

I had a parent email me. I had an issue where we were having a quiz and some of the girls had a volleyball tournament. And I said, “Well, you’ll just have to miss the quiz and that will be the one you drop.” Then one of the parents, of course, called the principal [and] sent a nasty email to the counselor. Then the counselor sent something to me. The principal sent a big long letter about how these college teachers have to be aware of all of our kids’ activities and be able to accommodate them. This principal was the one who came in my classroom five minutes before class and wanted to talk about it and he was talking down to me. He said, “You know you’re coming into my house; we’re not in your house.” I tried to be diplomatic and said, “This is the way it is at the college.” The students were all waiting outside and I said, “If you’ll excuse me, I have to get my class started.” He was a bully. But I had heard that. That was last time I talk to the principal. My boss talked to the superintendent and we didn’t have any problems after that. The way he talked to me set me off on a combative mode; so I’m sure I was not extremely nice back.

Sometimes parents would bypass the counselor. I still remember one of the students I had was football player, he turned a paper in late. His father was very upset that I would not take the paper. The father was also

an instructor at the high school so he caught me after class. I was not expecting to be waylaid by this guy in the parking lot. I remember I went down with him to the counselor's office so I would have a witness. He kept arguing that it was a high school class. The new principal at the high school was very helpful. He explained to students, "Unless I say otherwise you need to go to your college class."

I had a lady who actually came into my class; we were in a circle having a discussion, and she came in and started to assemble a computer desk at the front of the classroom, pulling things out of the box, unpacking Styrofoam. We were having this wonderful discussion. Everyone turned around. It killed the discussion. I asked if she could do it at another time. She got so angry with me that she went to the counselor's office and complained about me. The counselor suggested that I apologize. So I actually did. And when I did she let me have it; she basically unloaded a whole barrage of hate and anger.

"And there's more pressure to pass because they don't graduate from high school." The pressure to pass students is felt from many sides.

You're trying to get them all to graduation. At least in my class it was required for graduation. Some of them have to take summer school. There is more pressure because you hate to be the person that prevented them from graduating from high school and walking with their class, where I don't think twice about it with my other students on the college campus. That pressure exists on the high school campus... to make students pass. I think it's a real problem when dual credit classes impact graduation. They should be the gravy; they should not be graduation impacting.

Students, who weren't ready, clearly were being encouraged and allowed to take dual credit; not ready intellectually, not ready emotionally. This was really due to pressure from the parents to put them in the class. Sometimes the parents and the counselors have this idea that they can accelerate [students'] learning because [the students] are brilliant, and they are not.

There are still people (counselors and principals) on that campus, even though it's a college class; they still hold the students accountable. You constantly have to report how they're doing and they call them in and talk to them. They are still called in because of their grades [and] because of their attendance. They still have that little bit of fear. And that structure does help a lot I think. I don't think the counselors pressure us to pass students. I don't think they expected us to change our standards. But [on the other hand] then I get too much pressure not just from the college administration but also from high school...I feel like there's lots of pressure on us to bend those kinds of policies for students in extracurricular activities.

We have regular registration, late registration, and the *wink-wink* registration. I had two students who were put into my class two weeks after it started. I found out the reason they were added so late was because they had failed their TAKS and had failed the retest. Finally, they passed the college entrance exam and then were allowed to register late, very late.

This idea [exists] that if students are not successful in your class, you might not be asked back. I didn't get fired from there; we just could not work out the schedule. At least I don't *think* I got fired from there. The college started using another teacher that was so easy that the enrollment went up.

“I didn’t really want to make the high school teachers hate me.” High school faculty often feel animosity toward college dual credit faculty.

High school teachers, especially Advanced Placement teachers, tend to resent dual credit teachers; they feel we are causing their enrollment to drop. I got the distinct impression that the AP teachers were not happy that we were on campus. And I definitely sensed some resentment there. We were taking some of maybe their best students. That’s why I got the evil glare from the AP history teacher because I was taking away her students, and she does have a right to be concerned about that I think. At first I thought, “She’s just not a friendly person.”, but then another instructor made the same comment; it’s not my fault, but I understand her frustration.

Several years ago we had a meeting with some of the teachers from the high school; it actually turned out to be uncomfortable. They were afraid we were going to take their better students away from them. They were afraid students would take the college class instead of taking the AP calculus at the high school. There’s some sort of resentment sometimes in terms of these college classes. We get the students when they’re fun; this is why the high school teachers are mad at us. We scraped the best ones off to take them off to the college classes. High school teachers think, “I would love to have those students and teach that subject.” We’re giving them [high school personnel] more work to do, in the sense that the college being on the high school campus creates more work for some people.

You’re not met with a friendly attitude. When I asked where I should park, I asked should I park in the teacher’s parking lot. They said, “No, just park in the visitors’ parking.” So there were some hostilities that I got in general from some of the staff and from faculty.

[Dissenting Opinion:] Now at the other high school it was much different. They were much friendlier about it. I never had conflicts with staff because I never met them.

“If your behavior is distracting to two-thirds of the class, then my responsibility is to the two-thirds, not to you.” Discipline issues influence the learning environment in a negative way.

In the college setting I tell my students, “I don’t have the responsibility to compel you to learn, I have the responsibility to create a learning environment that is conducive to the majority of students.”

[However] honestly, I did not feel I had the latitude to remove a student from the class for behavior issues. I did not have the support than I expected in dealing with the discipline problems.

“The school does put constraints on them, where they could be better students if they didn’t have that tennis match that they had to miss class for.”

Occasionally students are placed in dual credit classes when the counselor knows there is a conflict with their schedule.

Although their high school activities do take them away, they typically come to class regularly. I talked to the counselor and they told me they should not have signed up for the classes; they had a commitment.

Disruptions & Distractions.

“The things that come to mind to me on the high school campus are disruptions.” Disruptions on the high school campus take away from the learning environment and the college atmosphere.

There are a lot of disruptions that keep them from focusing on the class; I might have to get on them a couple times before they would settle down. We had the pledge of allegiance, morning announcements, and various other interruptions. It was funny how many bells were ringing, and announcements, people walking in and saying, “Send *so-and-so* to the office.” It was extremely disruptive. Pep rallies, bells ringing, all of these things. The high school environment affects the class on occasion like when it’s pep rally day and the theme is *come to school in your favorite superhero outfit*. It’s crap like that, that makes it hard to think because it’s all just focused on the zaniness that is going on around a high school activity. School needs before college needs is definitely true. All of the disruptions, those are not the students’ fault, that’s just the situation they are in. I would consider this a cultural conflict, a college instructor in high school environment. That’s part of it, all the distractions.

But it’s just dealing with all the high school things that are going on; for example, I arrive at 7:35 but at 7:50 the bell rings and students are heading for class and students are loud outside. At one high school I’m at the end of the hall and you have to walk past where I am, so there’s a lot of foot traffic outside my hallway. [However] I did not have a lot of disruptions because I taught what was called zero hour that started at 7:30 AM. I didn’t have a lot of hallway noise [during that time of day].

I talked to a counselor about the class next door. The teacher next to me was extremely loud. But the noise picked up again after a few weeks ... but it was manageable. Maybe I just need to get louder [*laughing*].

“Bells of course.” Loud bells ringing during class cause distractions for many faculty.

The bells were a bit of a problem... [They] are annoying because you have to be quiet because they are so loud. That's the biggest difference when you go on a high school campus because we don't have any of the bells and all that [on the college campus]. It could be the bells ringing during the class for other classes changing; that's obviously a distraction. But once I learned the bell schedule and which did, and did not apply to me, I just ignored them.

“They are doing the announcements!” Announcements can cause faculty to lose valuable teaching time.

Inevitably you would've already started class and then four or five minutes into the class it starts, the announcements and then you have to stop for five minutes... we would not do just the pledge of allegiance, but pledged to the Texas flag, the moment of silence, and announcements. They did finally make that period 10 minutes longer. What would happen was the announcements would start about 10 minutes into the class. They do it during third period and they don't do it right after class starts; there's a several-minute delay. And invariably it would interrupt what we were doing. I had disruptions from the announcements each class. Students don't even listen to the announcements most of the time.

Other general things that got me nuts are things like making announcements during class. Every once in a while an announcement would come over the PA [public address] system. Unanticipated announcements over the PA system happen often enough to be disruptive. On one campus it came through the phone system. I decided to pick up

the phone and set it on the desk. On the other campus I could not do that because there was a speaker on the wall. The announcements took a huge part of my teaching time. Because once the announcements are over, it takes a while to reign [students] back in and even get me focused again.

“So there were constant interruptions.” Whether it is someone coming into the room or a loud noise outside the classroom, faculty feel interruptions were a problem.

I didn't have a whole lot of people come into the classroom. Every once in a while you have the delivery of a message. I don't really mind that but it is a little inconvenient. They don't just deliver the message to the student they want to give it to me and have me deliver to the student. I'm thinking, “If you gotta do it, just give it to the student and get out. Why give it to me?”

There was a lunch break that happened during the middle of my class. Outside of my classroom it was like a jungle, so I had to stop from two to five minutes because we couldn't understand each other.

Students saying... “I have to go to *so-and-so*'s class.” They're selling tickets to this or that... delivering a note, someone forgot a book so mom drops it off in the middle of class. If there was anything dramatic that was going to happen to a student during the day they would have to go to the office and get a pass for that. The interruptions began to be a real problem.

“I showed up for class and no one was there.” Creating a backup plan is sometimes necessary when working on a high school campus.

Lack of awareness of the ripple effect that the pullouts have on a college class is a real problem. It simply never occurs to the high school

administration to forewarn us about testing, pep rallies, assemblies, etc. No one bothered to tell me that they were taking all the students out for military interest testing. There was another time when they decided all students had to come over to the college campus to attend a career fair, which had nothing to do with my class; again I was not notified. There were a couple of times I walked into a class and less than half the people were there because they were all out for athletic activities. I never would hear anything from the school. Sometimes a student would give me a heads up, but never anything communicated from the high school to the college. That kind of thing happened every year I was on the high school campus. I remember one time only four student showed up because everyone else was testing. There is a lack of communication as far as when the students are supposed to be tested... I may go out there and the students rush to class and say we can't come today we have to take this test. "Why was I not informed about this?" The lack of communication is huge. I really have learned I need to have a backup plan...in case all the students are all gone having their picture taken.

One time on the first day of class, you know how important is to set the tone for the semester ... it was my first day of class, but they still did not have a computer or projector for me. So I brought my own. So I'm there and I'm set up. There's no one there, there's no one there ... so I go to the administration office, and they say, "Oh, no one told you? Your class has been moved." Not only did I not know where the class was going to meet, that's when I also found out that my class had gone from 30 to more than 50 [students]. When I got back to the college campus I raised Cain about the room change, the technology issues, and the number of students.

I remember last spring walking in, and there literally were only three students there. “Why did I drive over here?” Sometimes you get a surprise. You come in; you expect 25 students and you only have say 7. All too often teachers are just left to deal with it.

If I didn’t go to the web site... and download their calendar to check for holidays... I wouldn’t know what’s going on. Nobody gives you that kind of information or coordinates with the instructors. It doesn’t seem like it would take much. It would seem like there would be somebody to give the faculty the information. Because the only information we get is from the counselor and maybe from other faculty. Sometimes the counselors don’t even know what’s going to happen. These issues aren’t that big a deal if you know about them ahead of time.

“Sports seem to be an excuse to miss class.” Students who participate in extracurricular activities often disrupt class.

Sports and extracurricular conflicts, that’s the main thing that we have to deal with; that’s a big issue on the high school campus I think. Usually later in the day students are pulled out for extracurriculars. But definitely they were always leaving early to go to something or coming in late you know because they were doing something.

When I started teaching, the classes were in the afternoon, and so there were lots of conflicts with athletics, particularly in the spring with anyone who played baseball or softball or golf or tennis; all of those seemed to have early dismissals. They would be released for baseball games and volleyball games, and you know I told my division chair that I never wanted to teach another high school class in the afternoon. Someone would have to leave to go to a sporting event, so they packed their bags and rustle around; that disrupts the entire class. Then they

changed classes from the afternoon to the morning and I thought, “Great I’m not gonna have these constant people missing from my class because they’re off in athletics or something else.” It reduced that problem but it’s still an issue... students would have to miss my class to take a pre-TAKS test, class photographs, or testing, or things like that. TAKS testing, they have to do that, but other piddley things they have to pull them for. You can’t get around these things by changing the time of the day the class is held.

It’s the hardest thing for them to wrap their head around. They say, “”But we’re in high school. ” There is no excused absence. High school functions are not excused absences. I also let them know, “If you’re a cheerleader and you really are going to be gone then you need to drop the class. ”

“And I’m just looking at the clock and looking at the clock.” Instruction time is lost due to announcements during class.

They would have the announcements and that would last about 15 minutes. And they would do the pledge and all this other stuff. That was some of the stuff I’d been warned about. Thinking, “There goes some of my lecture.” Almost every semester we have to have at least one makeup class, about 80% [of students] make it to the makeup session. One time we had to have two or three makeup classes to make up for the lost time. So you’re caught between two unpleasant choices; one, you come in and teach the class anyway, knowing that the students who left to do this school activity are going to be disadvantaged; or two; you pretty much waste a day. There’s not a good option there and you resent it. I’m not talking about five minutes for announcements; I’m talking about missing class! It was horrendous! I started tallying; I lost more than 20% of my instruction time.

“Whatever it is can wait until next period.” Faculty explain to students, counselors and high school teachers disruptions are not accepted, as this is a college class and it will be treated like one.

The very first day I talked to one of the counselors, the counselor told me not to let students come into letting them out of class for pep rallies etcetera. [Also] I talked with a counselor and made sure they understood I don't accept classroom interruptions. So if the hall monitor comes around, I don't let them in. I did have one kid come to the door one time with an envelope for someone... I finally had to scare off the delivery person... I told him to go away. This worked and they simply delivered items later in the day to the students when they were in other classes. I told them, “We don't do the pledge in the class.” I told them, “This room is college.” When the office or some other teacher will send someone into my room to give a message to someone that is irritating as well. Finally I taped a sign to my door, “college class no interruptions”.

I had a coach come to my class and told me he needed to take a student out to give him a shave. I said, “No, not in this class.” He said, “You and I need to go to the principal.” I said, “No, this is college.” So I guess they got to shave him after class.

Student Expectations.

“They come in expecting that this is going to be like their other high school classes.” Students remain in a high school state of mind when on the high school campus.

They were expecting me to be different, to teach more high school style. They're definitely more in a high school frame of mind. A lot of them think it's like high school with benefits; we can chew gum [and] we

can untuck our shirts. I see this as a real challenge. When we're on their home turf, the expectations and behavior are different and we are in a *Catch 22* [situation].

“They all expect the A’s and grade inflation.” Many students are not prepared for college classes and expect college classes to be easy.

A lot of people thought this was going to be a blow-off class. They think [this class] is just reading the book and answering the questions at the end of the chapter. They feel validated in expecting A’s. They expect A’s for reasonable but not even great work. Even students that are not top 10% expect high grades because grade inflation is so rampant on the high school campus. When they’re on the high school campus and feeding off of each other, they reinforce this expectation and they kind of embolden each other. Many times they just expected an easy ride, not necessarily a good grade. I don’t think they all expect A’s. Many of them are just happy to take the C and go on.

They’re not prepared in general for what they’re going to have to do, and that’s why we need a student success course so [that] they understand what kind of study is involved [and] how long they would have to work on the papers. ... In comparison with their high school classes, they haven’t had to work perhaps as hard.

There was a very clear expectation that I would lower my standards based on their low achievement. They would expect review sheets and to be given the questions ahead of time. When we get to the first test, I give essay and answer exams. They’re certain that I’ll change my mind if they keep talking enough. They try to convince me to go the multiple-choice test. Some of them don’t do as well, but that’s kind of what they expect. They expect to be able to talk teachers into doing what

they want. Sometimes it puts their ability to graduate in jeopardy or then they would have to take a class on the high school campus that they don't want to take, whether that's AP English or something else.

“I would definitely say that students feel anxiety.” When students do understand college is not like high school, they may become anxious about their grade.

It causes a lot of anxiety when they realize this is not going to be like their high school class. [Students] have grade anxiety at the high school in a way that they don't have on the college campus. Some took it seriously [and] they might be a little bit more prepared on the high school campus because they're still kind of in awe. Students still have more anxiety on the high school campus.

“This is a college class, not a high school class.” It takes time for a high school student to understand expectations are different in a college classes.

They weren't prepared for the amount of reading that was involved, for the amount of work they would have to do, and that they would have to do research on their own. The way I teach, I send at least 25 single-spaced pages of current event articles...on top of all the chapter notes and everything, it's a lot of reading and they are not used to that. They were very concerned after two or three weeks when they realized my teaching was not what they were used to in the high school. My class is lecture oriented. I didn't show movies or power points, I actually taught. That's an adjustment from high school. It took time, not too long, while the first thing I did was to tell them they were not in high school. I make them understand, my expectations are that they're going to do the work [and] if they don't do the work I don't have a problem not passing them. I'm not going to beg them to do the work. That's in the syllabus and I will go through it once and that's it. I'm not going to tell them 10 times,

“Don’t forget to read this chapter.” Usually after the first test they realize this isn’t for them...and drop... or they bring [their grade] up.

In college, marginal performance will fail you. That’s a really hard transition to make. I tell them, “You have been in a system for 10 to 12 years that rewards marginal performance. Now, coming to class and not making trouble is not enough to advance you. Marginal work is not acceptable at the college level.” Some of them get it right away and some of them never get it all.

The dual students don’t get that it is their responsibility to make up for lost material when they miss class, regardless of the reason for missing. The environment of the high school encourages them not to get that. You have to make a choice between going to Spanish Honor Society and coming to my class. I have students that say they had to go to a pep rally on the day of the first test, I told him that was fine but he would take to zero on the test. “There is no excuse to be absent, you’re either here or you’re not.” They think that getting a note from someone is going to make it okay. It doesn’t change the fact that they were not there. What happened in the first class was when I gave the first test three-quarters them failed, two of them dropped. When I gave the next test everybody passed. What I learned was, that the students in the class had plenty of talent, but they had to adjust to my expectations, which were apparently different than what they’re accustomed to in high school.

[For some students] it put them at ease to say this really is college. One of the students put up a sign outside the door that said, “college room.” I noticed on the notebooks it wouldn’t say [the course name]; it would say “college.” It was, like a badge.

Student Preparedness.

“Some are prepared for college and some are not.” There is a mix of students, in terms of preparedness, enrolled dual credit courses.

At different high schools they are prepared at different levels. I see this as a mix. I would say about 10% are absolutely ready, that can walk on a college campus, any college, and breeze through the survey courses. I would say 30% are not ready and are not going to be ready because they are not mature enough or are not academically ready. The rest are not ready, but by the end of the semester they are ready. It's fun to watch. It's extremely rewarding but it takes a lot of work on their part.

When I first started teaching at the high school, I thought the counselors did not do a good job of putting students in classes who were ready for those classes. But, as time went on and students had to repeat courses and did not graduate, the counselors got much better.

“It was a failure of the system, but we were complicit in the failure.” Many students who are placed in classes are knowingly not prepared for the course.

They're not at the point where they should be because a lot of the K through 12 socialization [social promotion]. A lot of them weren't prepared for class. I can do some remediation but I'm not really qualified and I don't have the time to do that. So I prepare my class differently, I help them with notes, power point, definitions, outlines for essays, study guides with the actual essay questions on them. Again, part of it is a trust relationship. You expect them to push their own boundaries, which they are a little hesitant to do. You have to put them in a safe environment.

For college algebra, they do have trouble because they've been introduced to the material in a shallow way in the previous high school

class. I don't mean that in a derogatory sense; it's just that they go over some of the material more quickly. So they can think they understand this topic. Well, they understand the first day of class what we're going to talk about, and beyond that they haven't seen it; that can cause a problem for some of them because they think they already know it.

I had two students who were in my class; they were really struggling. After working with them and tutoring them, it was apparent that something else was going on. When I talked to the counselor, I found out that both of the students had been Special Ed their entire life and had never once taken a regular class, even at the high school level. Without question we had set them up to fail. They were unable to make observations and draw analysis.

I think the majority [of high school students] are not ready. It's not so much their fault; it's just that they aren't prepared to think like college students. You have a few who breeze through it and are absolutely prepared, but the majority are just not ready yet, and sometimes they will become red ink. I remember talking to the counselor and asking if the class was advertised differently. And he said, "No, this is just this particular class of students." And there were a lot of C students. Their literacy levels were not that high and they had problems with basic reading and writing... a lot [of them] had no business taking the class. I did not find that I was working with the cream of the crop.

When I first started teaching, it was very rare for me to encounter a student in the lowest level math class that did not know multiplication facts; now two-thirds of them don't know. That's from 40 years of teaching.

The first time I ever taught on the high school campus it was the very best class I ever had. So these were the very best students, and then

they just opened up to everyone. The next semester it was the very worst. There was a whole class of overachievers and then the next year there was one overachiever.

“It’s just a pleasure having really good students.” Bright, prepared students provide a positive classroom experience.

The group I had was ready. In general students from this one particular high school were very well prepared... and will do well... we’re usually getting the top level students from the high school. On the whole I’ve had a very positive experience with how prepared students are. I’m dealing with the best and brightest. We get the cream of the high school students. I had the valedictorian of the high school a couple of years in a row. I never worried about them being ready; they had excellent teachers before they got to me. There are always a few students on the bottom of the class who struggle. But, for the most part, all the students I had were what we would consider honors level students.

Most of them can do the work. I think it’s an intellectual level that they’re at. Students that are ready to go to that next level, they understood me and picked up the concepts. Of course they were fresh from just having math. These are students we will never see on our campus. They will be off to the top tier state and national universities.

I changed a lot of what I taught. Instead of reading older texts, I tried to make my examples more modern. These are students who are coming into English 1301 already knowing and already having background knowledge that students on our campus don’t have.

“The majority of dual students I think would grow so much more with a little bit more development.” Students are better prepared for college after they graduate from high school.

The bright students were still in high school; I recognized this the very first semester when I was disappointed when the best and brightest were, in fact, not. They were not as good as the best and brightest that had graduated from high school.

I do see a difference in preparation between the high school dual students and the traditional 18 year old graduate or someone that’s gone to work or joined the military and then come back to college. I think, frankly, it has something to do with their brain development; they are just able to grasp more complicated concepts. They have more life experience with which to compare the material we are discussing or relate to other students’ experiences. Even the very brightest high school students, I oftentimes wonder how much more they could’ve gotten out of the experience in another year or two.

If students waited to take college courses, they would be better prepared for couple of reasons; one, they are more mature; secondly, they would be better academically prepared. I can tell you I have had three students that I’ve taught at both levels, and there is a tremendous difference in their motivation and their academic skills by that time [when they get to the college]. In two cases they were repeating the class, and in [one case], the student needed the second semester. Better students, better motivated, better able to handle college work. On the other hand, I have had students tell me that this was their saving grace; that they were tired of the high school silliness and frivolity.

Student Scholarship.

“I think that it’s not only acceptable, but it’s become normal.” Faculty point to a lack of regard for traditional academic values.

They are very adept at sharing information. They study together, which could be good and bad. On the bad side, when one student is going to be taking notes for several, the several then are not going to be familiar with the lecture. There’s a higher incidence of lack of regard for education at the high school level than on the college campus. Inclination toward collectivism, plagiarism, cut and paste; I see that much more on the high school campus. They don’t even realize there’s something dishonest about that or that it shows a lack of effort and growth on their part. But that’s understandable because of where they are [on the high school campus].

They were cheating on the review material and when it came time for the exam I had the first failing average for the first exam in my career. I knew something was wrong. With the help of IT [Information Technology] we were able to backtrack to figure out they were taking the reviews together. They would go in as a team, 15 to 20 of them, they had an organized method of cheating; they were breaking the code. I confronted them and gave them an ultimatum. Out of 56 students on the high school campus 36 of them confessed within 24 hours. The superintendent of the public school was certain that students failing had more to do with my inadequacy than anything. The superintendent went to the president of the college wanting proof that I was qualified to teach my subject. The students didn’t think I could hold to my policy if all of them were cheating, and *that’s* a high school mentality.

“We had pretty good class discussion.” High school students’ perspectives make for broader discussions.

I would say this for scholarship; I think class discussions in my high school classes are just as good as any college class. We talk a lot about a lot of abstract ideas, about truth and nature and man. There were some really good conversations and *aha* moments... they were able to stay on a more mature level. They were very interested in the class and they were trying to get it. I could see the sparks and connections and intellectual growth. When you see the students start to put together the pieces and seeing the bigger picture, it’s super rewarding, but it was hard. We’re getting to them. It’s different when you get a bunch of 16-year-olds in room; they have a different perspective and sometimes it’s eye-opening to me. They question things other people don’t, things we just take for granted. They are more critical. I think it’s just that this generation of kids questions things.

[Dissenting opinion:] It’s harder to get a conversation going on the high school campus. It’s at least double the effort to get the same conversation going. On the high school campus they are... less free to with their comments.

“There’s much more diversity in terms of scholarship.” Some students are ready and willing to learn, while others or not.

Some students are highly motivated to do the best they possibly can. I never had trouble getting them to focus, to get them engaged, to have discussion, or getting them to do the work. They seemed to get their work turned in and do okay on the tests. Their work ethic was very, very good. And the quality of their work was very good. Every single one of my kids turns in their homework, even though it’s optional. I definitely

see growth in scholarship in students who are willing to put forth the effort just like anything else. I think the grades reflected their amount of work. It's a very, very strong class. I lost 4 in the first semester out of 22. I did not have anyone fail my last class on the high school campus and I don't think anybody failed the first semester. The quality of work for some was great and for others it wasn't. Failures stemmed from not doing speeches and not coming to class. It could just be the students I had that semester. They pretty much did well on their work and they achieved their goals. Other students are perfectly happy to make a 70 [and] some fell below a C, which meant they didn't get high school credit for the class.

At what point do you stop working with people and say, "Look, we have an attendance policy in our department."? I had a girl that missed 14 classes. School needs were often put before college needs [by students]. It's a mixed bag of some that are really conscientious and a do a good job.

Sometimes I give the first test back when they didn't do very well. A high percentage of my students fail the first test and, since no one likes to fail, they are forced to work a little bit harder. I try to explain to them that they can't memorize the material; they have to know it. Some want to get through with as little pain as possible and then some don't do anything at all. I have very few fail on the high school campus because it's very hard to skip class. They just don't drop in general. They can't withdraw from their high school classes. They're stuck.

Homogeneity.

"They all go to the same high school and had the same teachers." Because high school students have grown up together they tend to know each other very well and have similar life experiences.

Homogeneity definitely has an impact on the class. I felt that most of them had known each other since kindergarten. You have total homogeneity because they're all the same age. They all have the same pool of experience.

In the high school class they have tunnel-vision. They are more set in their ways, think they know it all, and don't want to hear anything that's not coming from their small-town perspective. I tried to get them to understand how people perceive things differently based on their background, where they have lived, where their parents are from, what church they go to. Life experiences lead us to perceive the same events quite differently. I was trying to work them through this concept. The idea that history is not fixed, that changes are based on who's interpreting it. In a class of 30 students they had all been together, not only been together, but had been sorted and tracked in the same group since the second grade. Only three students were new to that mix since second grade, which affected their willingness to open up in this environment. All of them had very similar economic, religious, family, travel experiences. They don't have a whole lot of life experience. There seems to be far less life experiences than you would have in regular class. In terms of being able to draw on a variety of experience in discussion ... the homogeneity of the age, experience, value set, economic background, it was just sterile.

The upside is that they know each other well and see each other outside of class. So they're usually looking out for each other. It's not that difficult for them to help each other out. They have a better support network on the high school campus. So you can reach students through their peers a lot easier than you could if you're on a college campus

They are very homogeneous in their preparation and that lets the class go more smoothly. I encourage them to do study groups, and it's not really a problem because they come in knowing each other. They are comfortable with each other, all had the same class leading into this, all have the same teacher leading into this, and they know exactly the same things. I have to say when something would fail it would fail massively. Mostly it's helpful because if someone is baffled, they are all baffled. They are not clones, but my goodness it's easy when they all know the same things. If I'm teaching beyond college algebra in pre-calculus or calculus, the most difficult times for me is when half the class understands a topic and considers it trivial and the other half of the class does not know what we're talking about. That's a real challenge for me in some classes, and that never happens on a high school campus.

Facilities & Technology.

“I know it's an old campus, but you can paint and you can clean.” While some facilities have improved, faculty find technology and facilities still lacking in many ways.

When I first got there we wouldn't have enough desks and no one seemed to know where to get more desks. It was pretty bad on both campuses years ago when I was there. I had to steal a music stand from the music room for a podium. It was definitely not what we were used to. We didn't have the ceiling projector, so we had to balance projectors on desks and use a pull down screen that was real rickety.

I ended up back in a small room with 35 students, but the room was so small there was no room to walk, it literally was a fire hazard, not to mention completely ineffective as a learning environment. When I first started I had a seven by seven area of a blackboard to do all of my

instruction on. I do find that high school classrooms are more cramped; we were in room that was probably too small. Now, one time I subbed at the other high school and that was not a very nice high school and it was cramped. A marker board that had a lot of bleed-through stuff over the years, the paint was bad, old wooden desks. But then you would walk by some of the regular high school classrooms and they were very nice. But the dual credit college classes are being held in the old decrepit ninth grade building.

“I was dealing with a situation that was significantly worse than any high school teacher had to deal with.” Faculty are placed in the least desirable classrooms on the high school campus.

I teach in a dirty and old room. And the bathroom facilities that I used were, yuck! One sink I used, I took a towel and wiped it and thought, “This has not been cleaned in days.” I actually asked someone to come clean my classroom, it never happened. A classroom that I had at one high school, I don’t think it was ever cleaned and I never had a trashcan; I asked several times to get one, and it never happened. The cabinets were never cleaned out. What the students were expected to walk through and get to class, just the scruffiness.

We were in the oldest part of the building. The first semester I was there, I was in a classroom that used to be a storage room. It actually had desks turned on their sides and stacked on top of each other against one of the walls. Stuff was propped on books to make the projector high enough.

“I could not get on the computer for five weeks in one case.” Technology often is either missing or antiquated.

When I first started, technology consisted of an extremely old overhead projector that was decades old. Even when I had a room with a screen and projector, the screen and projector didn't match up. If we're going to send a college teacher to a high school campus, there needs to be consistency; they [the high school] did have a consistent technology environment.

I tried to use the high school's projector in the first year, but the system was so wonky that even a high school computer tech could not get it going... The high school's computer tech folks were completely unprepared. I had to get the basic thing working myself. The computer and the technology was clearly a problem. The labs on the high school campus were typically a problem. The computers were either sick or not dependable. Not only inferior equipment, but sometimes nonexistent equipment; I had to bring my own often.

I had to turn my [electronic] slides into overhead slides. Then I had to beg for an overhead projector. Finally, at the end of the semester in spring 2009, a college support person went out and put in a data projector, but he had trouble dealing with the school district to get permission to do it; after that it was fine. But at first the students were missing a lot. We had one semester where students were not allowed to bring jump drives; this prevented students from taking their papers home.

[Neutral opinion:] I don't use the computer projector. I don't use much technology. I don't really use technology or a computer. I'm a caveman, I prefer to use chalk.

“We had a nice big classroom.” Some facilities have been upgraded and recently built.

In the other school district I teach in they built an entirely new high school ... that's very nice. So the facilities there were quite advanced. I would say now, especially with a new high school, the technology is actually better at the high school than at the college. I had a great room, had a great facility, everything was very clean, very neat. Then there were some upgrades ... and we have a dedicated classroom where we have a computer and the projector and two huge dry-erase boards. Having a college-designated classroom is something that was really important, although I didn't have it every semester.

At one high school I essentially have the facilities that I have available to me at the college now. They have presentation stations. They had a desktop hooked up to a projector and they had HD [high definition] television. The technology is outstanding. Now we have access to computers and the projector to put things on.

“For example *Time Magazine* is blocked, C-SPAN is blocked.” Not having access to the Internet can be frustrating and limits instruction.

I would like my class to be a bit more media focused, and I haven't always been able to do that. One problem is that they significantly block Internet access. They have such a fierce firewall that I can't use [Internet] videos. I insert into my lectures a number of video clips. I could not use anything video related for about eight weeks. Other things on the Internet that I would use to supplement my classes were not available. I would get them to unblock certain things but it was difficult. I remember I wanted to show them something on the Internet and I had to fill out ten papers to get permission to show what I needed. It was not impossible, but it was a

pain. We have to do a lot of requests to get something done. Accessibility on the Internet was a constant source of frustration.

There was one semester I didn't even talk about the college library databases. I'd bring [students] printed articles to work from on their assignments. Because they're not on the college campus they may not know their college ID and password. I would bring students a password and a way to log on, but they had a lot of trouble logging onto the college system from the high school campus or from home. When I have the problem with the student logging on at the college I can send them directly to the [college] IT department. There was never a permanent solution [at the high school].

“You don't really know where to go and it interferes with your class time.”

Faculty find that resources are often limited on the high school campus.

I bring my technology with me wherever I go... lugging probably 40 pounds of equipment and materials every day. I'm not sure how that can be changed. The first day of the semester I get a TV with a VCR that I get myself. I didn't feel like they're ready for me to come in. [However] I asked for a document camera and they got me one.

You don't have any resources. Getting access to keys, oh my gosh... you have to go early and make sure you can get in. At one time it took two or three months to get a key. It seemed as if I was asking for the world to have my door opened. I would have a class starting and 35 and my students are waiting outside the door. You would think it was an act of Congress to get into the exterior of the building. Before we had keys we had to track people down and find keys. Every time I had to go to the janitor to get in.

“Accessibility was a bit of a problem, I can see that’s always going to be a problem.” Getting college services to the students on the high school campus can prove problematic.

When I’m teaching on the high school campus, I can’t get the college police officer to come talk to my class, which is something I do when I have them on [the college] campus. [Students] are not getting the whole idea of here’s the library, here’s the college resource, etc. They are missing something. Then I got to a point where the student said, “These books are not in our library.” And I thought, “Of course not, you’ve got a baby library here.” So I directed them to the county library. They could also come to the college. About 75% of the books on the reference list are at the college library. When I started talking to students about coming to the college, that’s when I realized many of them had never been there... which surprised me. I thought they were required to come there as part of orientation. I started asking for volunteer drivers for those students that don’t have cars... for some of them it’s hard to get here, transportation and things like that. When one came onto campus to the library, they would typically bring one or two others with them. I assumed they would all have a car. Many of them were 15-year olds; that would be an issue for me at the high school.

In my regular classes on the college campus I have students grade homework, and then meet with me later to go over it in my office. I realized that this was something that I could not do on the high school campus. And when classes are over on the high school campus, I’m not going to hang around there; I come back to the college. How do you deal with that when the students really can’t see you? This problem has to be solved case by case. I don’t know if the teachers are spending more time on [the high school] campus to accommodate them or not.

Identifying relationships.

At the completion of the discussion on affinities, the researcher asked participants to indicate the direction of influence in each affinity pair using an affinity relationship table (ART).

Table 9: Affinity Relationship Table for High School Dual Credit at SSCC

The High School Dual Credit Teaching Experience at SSCC Affinity Relationship Table (ART)		
For each affinity pair, indicate the direction of influence by using a right arrow (>) indicating the affinity on the left influences the one on the right, a left arrow (<) signifying the affinity on the right influences the affinity on the left, or signify no relationship with (<>).		
Affinity #	Influence <, >, or <>	Affinity #
1		2
1		3
1		4
1		5
1		6
1		7
1		8
2		3
2		4
2		5
2		6
2		7
2		8
3		4
3		5
3		6
3		7
3		8
4		5
4		6
4		7
4		8
5		6
5		7
5		8
6		7
6		8
7		8

#	Affinity
1	Student Behavior
2	Disruptions & Distractions
3	Student Expectations
4	External Influence
5	Facilities & Technology
6	Homogeneity
7	Student Preparation
8	Student Scholarship

The researcher recorded the direction of influence, if any was perceived, and the comments for each affinity pair. All ARTs for all participants appear in a single frequency table.

Table 10: *Theoretical Code Frequency Table for High School Dual Credit at SSCC*

<i>Affinity Pair</i>	<i>Direction of Influence and Frequency</i>		
	<i>> Frequency</i>	<i>< Frequency</i>	<i><> Frequency</i>
1 - 2	3	7	3
1 - 3	0	12	1
1 - 4	1	6	6
1 - 5	0	2	9
1 - 6	1	9	2
1 - 7	3	4	6
1 - 8	4	6	3
2 - 3	7	1	5
2 - 4	1	5	7
2 - 5	1	3	8
2 - 6	2	1	9
2 - 7	6	1	5
2 - 8	6	1	6
3 - 4	1	7	5
3 - 5	0	4	7
3 - 6	1	6	5
3 - 7	9	3	1
3 - 8	9	3	1
4 - 5	3	0	11
4 - 6	3	0	8
4 - 7	5	1	6
4 - 8	7	2	4
5 - 6	0	1	10
5 - 7	6	1	6
5 - 8	5	1	7
6 - 7	6	2	4
6 - 8	8	1	4
7 - 8	9	2	2

Sidebar on model power.

The power of the system influence diagram (SID), or mindmap, developed through the Interactive Qualitative Analysis (IQA) process, is its ability to describe a great deal of a system through only a fraction of its potential relationships. The goal is to find a point at which the greatest variability of the system can be described with the fewest number of relationships. Northcutt and McCoy (2004) suggest finding this cutoff point, or *MinMax* criterion, can maximize the *power* of a system.

The decision involves optimizing a trade-off between two criteria: The composite should account for maximum variation in the system (cumulative % based upon frequency) while minimizing the number of relationships in the interest of parsimony (cumulative % based on relations). (p. 160)

To restate, the power cutoff is the point at which adding a relationship does not add at least its own weight in explanation. For example, if five candidates are running for political office, then according to the power cutoff, we would not invite any candidate polling below 20% to a debate; bringing this candidate into the discussion would complicate the debate without significantly adding to it.

The power cutoff is found by sorting all pair-wise affinity relationships by the frequency with which participants indicated their existence and calculating a cumulative frequency percent. The relative cumulative frequency is then subtracted from cumulative frequency percent. As each affinity pair is considered, as long as the difference between the two frequencies is rising, that pair is considered in the final system diagram. The cutoff is found when the difference in frequencies begins to fall.

The rising difference between cumulative and relative frequency suggests the particular relationship being examined is contributing more than its fair, or relative, share to the explanation of the entire model.

While good reasons exist to include affinity-pair relationships beyond this power cutoff in an IQA study, this particular study examined four models. Hence, the power cutoff was used as an equitable metric as the deciding factor for all models.

Power cutoff for SSCC high school dual credit model.

Eight affinities were identified in the SSCC high school dual credit teaching experience, creating 28 pair combinations. These 28 combinations can be perceived to work in one of two directions: A influences B, or B influences A. This multiplier of two creates 56 possible ways to *cast a vote* in the system. While each participant could have potentially cast all 28 votes in either direction, it was not required. A participant, in many instances, would say, “I don’t see a relationship there.” Participants indicated perceived relationships in 219 individual cases, while 392 cases were possible [28 votes times 14 participants]. The 219 is multiplied by the relative percent of one of the 56 vote possibilities, or 1.8%. Any pair-wise relationship capturing less than 1.8% of the vote was excluded from the model. This percentage multiplied by the total votes was 3.94, meaning any pair-wise affinity combination not receiving at least 4 votes was excluded from the model. The perceived relationships for all participants were then sorted in frequency order to find the power cutoff.

Table 11: Combined Theoretical Interview Table for High School Dual Credit at SSCC (Truncated)

<i>(Affinities in Descending Order of Frequency with Power Analysis)</i>						
Driver	Outcome	Frequency	Cumulative Frequency (%)	Relative Cumulative Frequency (%)	Model Power	Relationship Explanatory Power (%)
3	1	13	5.9	1.8	4.2	5.9
3	7	10	10.5	3.6	6.9	4.6
3	8	10	15.1	5.4	9.7	4.6
7	8	10	19.6	7.1	12.5	4.6
6	1	10	24.2	8.9	15.3	4.6
4	8	8	27.9	10.7	17.1	3.7
6	8	8	31.5	12.5	19.0	3.7
4	3	8	35.2	14.3	20.9	3.7
2	3	7	38.4	16.1	22.3	3.2
2	7	7	41.6	17.9	23.7	3.2
2	8	7	44.7	19.6	25.1	3.2
5	7	7	47.9	21.4	26.5	3.2
2	1	7	51.1	23.2	27.9	3.2
4	1	7	54.3	25.0	29.3	3.2
6	3	7	57.5	26.8	30.7	3.2
4	7	6	60.3	28.6	31.7	2.7
5	8	6	63.0	30.4	32.7	2.7
6	7	6	65.8	32.1	33.6	2.7
8	1	6	68.5	33.9	34.6	2.7
4	2	6	71.2	35.7	35.5	2.7
1	8	5	73.5	37.5	36.0	2.3
5	3	5	75.8	39.3	36.5	2.3
1	2	4	77.6	41.1	36.6	1.8
1	7	4	79.5	42.9	36.6	1.8
7	1	4	81.3	44.6	36.6	1.8
5	2	4	83.1	46.4	36.7	1.8

Notes: 1) Shaded cells indicated potential conflicts in the model. 2) Table is truncated at power cutoff for readability (see Appendix B for complete table).

The power cutoff suggests that 83% of the model can be described using 46% of the relationships (26 of 56). Using this cutoff revealed three potential conflicts. These potential conflicts are addressed later in this chapter.

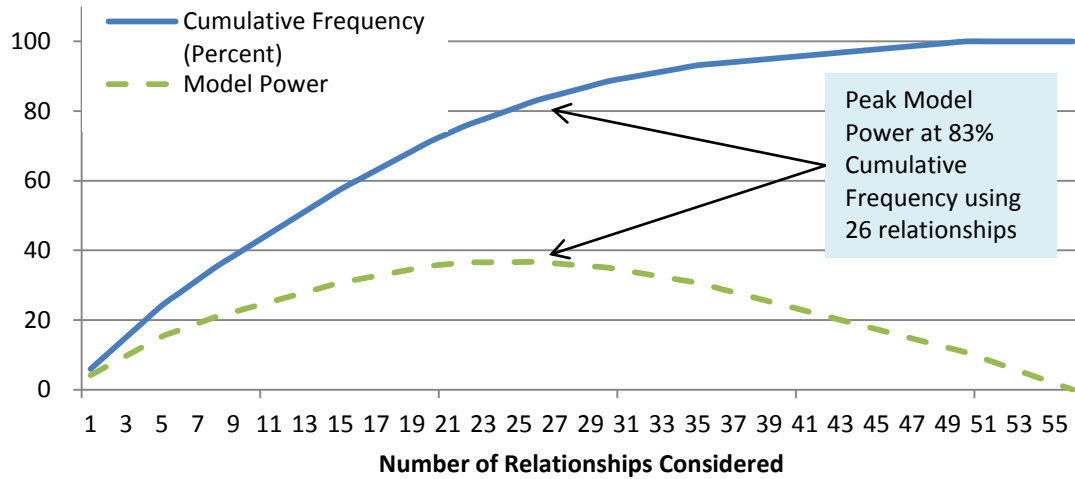


Figure 16. Power analysis for the high school dual credit teaching experience SID at SSCC.

A table was constructed to tabulate the frequency with which each affinity influenced others (serving as a driver) and the frequency with which each was influenced by other affinities (serving as an outcome).

Table 12: Driver/Outcome Frequency for High School Dual Credit at SSCC

Affinity #	Affinities Serving as Outcomes								Frequency: Influencing Others
	1	2	3	4	5	6	7	8	
Affinities Serving as Drivers	1	x					x	x	3
	2	x		x			x	x	4
	3	x					x	x	3
	4	x	x	x			x	x	5
	5		x	x			x	x	4
	6	x		x			x	x	4
	7	x						x	2
	8	x							1
Frequency: Influenced by Others									
	6	3	4	0	0	0	6	7	

Note: Shaded cells indicated potential conflicts in the model.

Each affinity was placed in the diagram according the difference between the number of times it influenced others (driver) and the number of times it was influenced by others (outcome); this difference is referred to as the affinity's delta.

Table 13: Affinity Delta Order for High School Dual Credit at SSCC

<i>Affinity Name</i>	<i>Affinity #</i>	<i>Frequency: Influencing Others</i>	<i>Frequency: Influenced by Others</i>	<i>Delta</i>
<i>External Influence</i>	4	5	0	5
<i>Homogeneity</i>	6	4	0	4
<i>Facilities & Technology</i>	5	4	0	4
<i>Disruptions & Distractions</i>	2	4	3	1
<i>Student Expectations</i>	3	3	4	-1
<i>Student Preparation</i>	7	2	6	-4
<i>Student Behavior</i>	1	3	6	-3
<i>Student Scholarship</i>	8	1	7	-6

The 26 relationships are represented by arrows, connecting the affinities in the cluttered system influence diagram (SID). Primary drivers of the system sit on the left and, as affinities become progressively weaker in delta, they become outcomes of the system and are situated further to the right in the diagram.

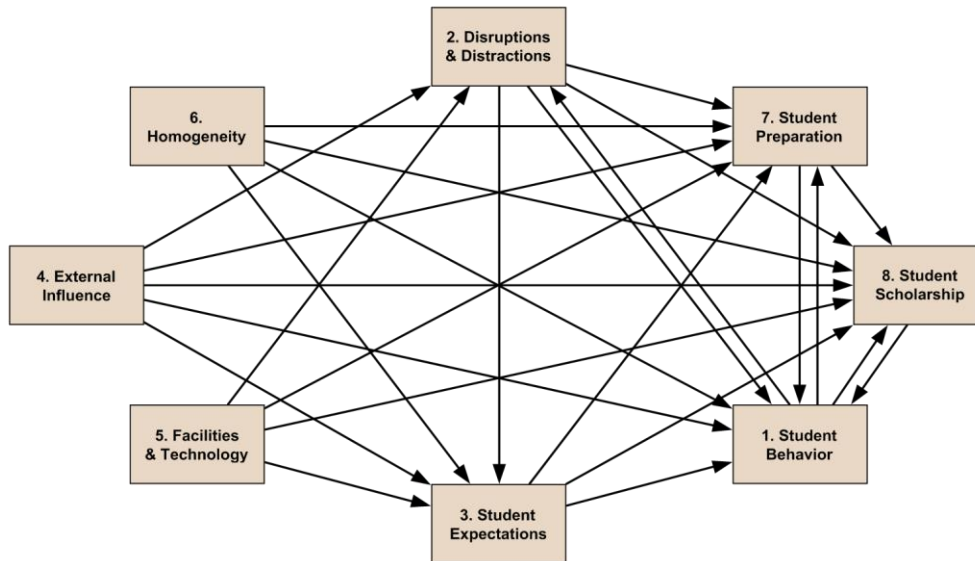


Figure 17. The Cluttered SID for high school dual credit at SSCC.

Describing relationships.

Each relationship is described in the words of the participants. The researcher threaded the participants' comments together to capture the group experience of how affinities relate to one another.

The effect of External Influence.

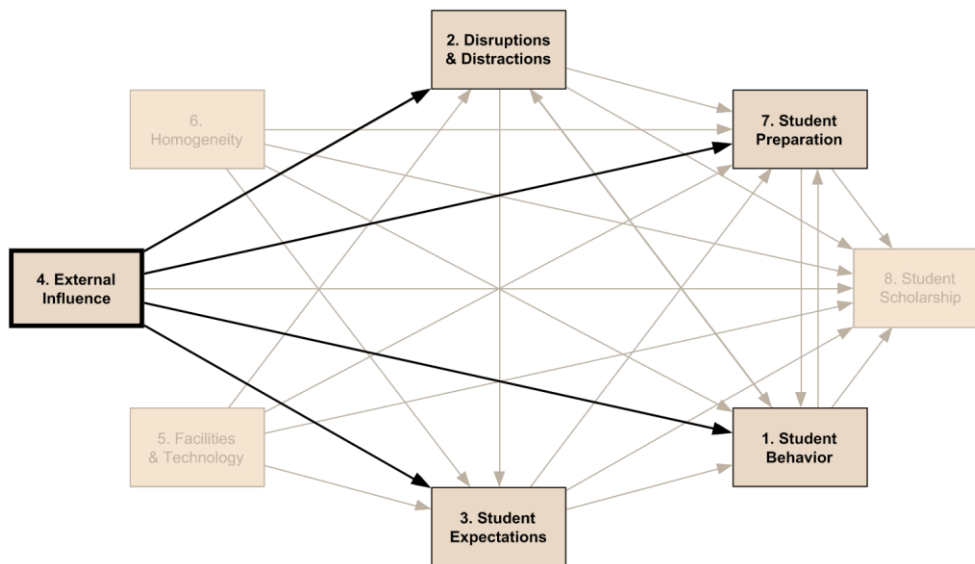


Figure 18. External Influence for high school dual credit at SSCC.

Disruptions & Distractions.

I did not allow disruptions such as *pull-outs* or messages or announcements. Problems [disruptions] affect their focus. Office personnel interrupting class either with a student aide or over the intercom with instructions to send this or that student to [another place]. Parents and administrators allow and perpetuate disruptions.

Student Expectations.

I'm always hoping that their parents are keeping high expectations of their students. [However] parents and counselors hold the students'

hands and push/prod them; it won't be that way when they're on their own at college. Sometimes the advice they get from their parents or counselors can affect their expectations: either, "This is going to be easy." or, "I can do this and everything else; it won't be a problem. I expect to become a *blank*... My cousin earns a lot money." [Students] talk like this a lot before the class begins. They are getting bad advice. Grade inflation perpetuates similar expectations among students, parents, and administrators of the dual credit experience.

Student Preparation.

The attitude from others that have taken a dual credit course, "Oh you are going to do fine." Some of my dual credit students have been told explicitly that their college grades would not affect their high school extracurricular eligibility. That the six-week pass/fail report does not result in removal from extracurricular activity conveys this same message by implication. [Some] parents and counselors push students and hover over them to encourage them to put in the time necessary to do well in the course.

Student Behavior.

Parents and counselors hover over students so much sometimes they aren't given the opportunity to suffer the consequences of their behavior. When dual credit students felt empowered and protected by others... parents, friends...their behavior tended to remain counterproductive.

Student Scholarship.

We tend to have some of the brightest high school students in our college-level classes, but sometimes have students who are not academically ready for college-level classes. Possibly, students who can't

come see me during my limited campus office hours might not get the help they need, though I often have office hours at the high school to offset this problem. The external influence of counselors and friends are pushing the socially upwardly mobile students, the upper echelon, into the dual credit classes. I would like to see the high school counselor make recommendations based on a student's ability to complete the college-level work without impacting a student's graduation requirements.

[Note: This content is intentionally repeated as the participant stated that the same comments applied to both *Student Scholarship* and *Student Preparation*] Some of my dual credit students have been told explicitly that their college grades would not affect their high school extracurricular eligibility. That the six-week pass/fail reports do not result in removal from extracurricular activity conveys this same message by implication.

The effect of Homogeneity.

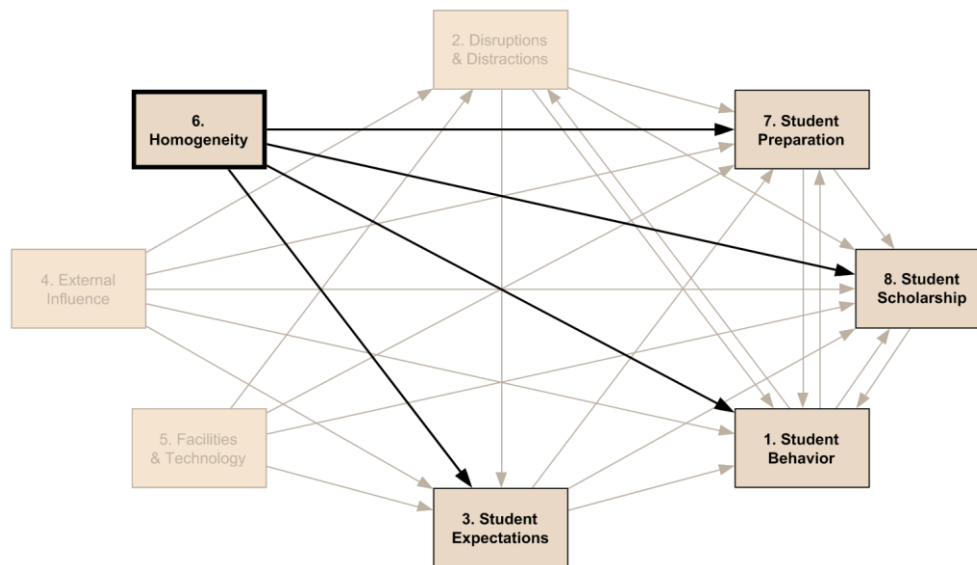


Figure 19. Homogeneity for high school dual credit at SSCC.

Student Expectations.

My colleague's expectation is ... my expectation is people form ideas of what college is going to be like from each other. Most high school students have high opinions of their scholarly abilities, having come of age during the period when parents were obsessed with not hurting their child's self-esteem. [Students] often have no idea what they're good at or bad at because they have been told they're wonderful at everything their whole life. If we're all the same, then same is normal, thus there is no need to strive for more.

Student Preparation.

I think students' relationships to one another greatly affect their concept of being prepared or not prepared to take a college class. I mean, if everyone else in your class is signing up for a college course that might be a powerful incentive. Specifically, I had an entire class of students nod their heads as one explained that they all signed up for my class because

they didn't like one of the AP English teachers! If you have the same group of students that have been together forever and they know each other and if they use it to their advantage, they can be very prepared if they study and work together. This can work both negatively and positively. If they decide to goof off together, [thinking] the teacher won't count an assignment if we all fail it... then it has a negative effect. I've seen this work both ways. Good enough is good enough.

Student Behavior.

When students have the same interests, have the same classes, they are the same age...student are slightly inclined to chit-chat but this is easily controlled. They have known each other, they are cliquish, and you have cliques within the classroom...they try to be disruptive. Students are only around people like themselves—not exposed to diverse viewpoints and ethnicities. This feeds a sense that their behavior is normal and acceptable.

This is a weak association, but I have less classroom management trouble in a class of kids who are all alike. Athletics students have almost the same behavior...too much in common to distract them. I will on occasion have trouble in a class at [the college] where the student expectations are very different.

Student Scholarship.

Occasionally their togetherness may have encouraged scholarly competition. In order to draw *all* students into discussions I use a discussion board where everyone is expected to respond to my prompts as well as respond to at least two other classmates. I respect a student's culture, upbringing and, right to take [part] in the discussion.

Peer pressure can work beautifully for a student that is not doing well, and the students take that person aside and say, “You have to bring it up a level.” Sometimes a student that is doing well gets made fun of. Some students can handle this bullying, but others are embarrassed by it when their classmates make comments like, “I guess you topped out on this test,” in a hateful tone; this is true in politics. “Vote for me, I’m not an intellectual elitist.” I’m sorry, that’s not who I want as president. Again, this can be good or bad.

Perhaps a relationship exists in a limited sense. It’s common for me to read essays from students who are writing about other students in the class. For example, Lisa is good friends with Kara and Grace, so Lisa’s essay is about a story involving Kara and Grace. Kara is also friends with Grace and Megan, so her essay may be about them ... it’s a strange experience reading essays and learning about the complex connections and inner-workings (friendships, crushes, childhood memories, etc.) of an entire class. Also, it’s interesting to me that everyone seems to know everyone else’s grades. When I attempt to give someone a course average while keeping the grade hidden, often students will say something like, “That’s okay; you can just say it aloud.”

The effect of Facilities & Technology.

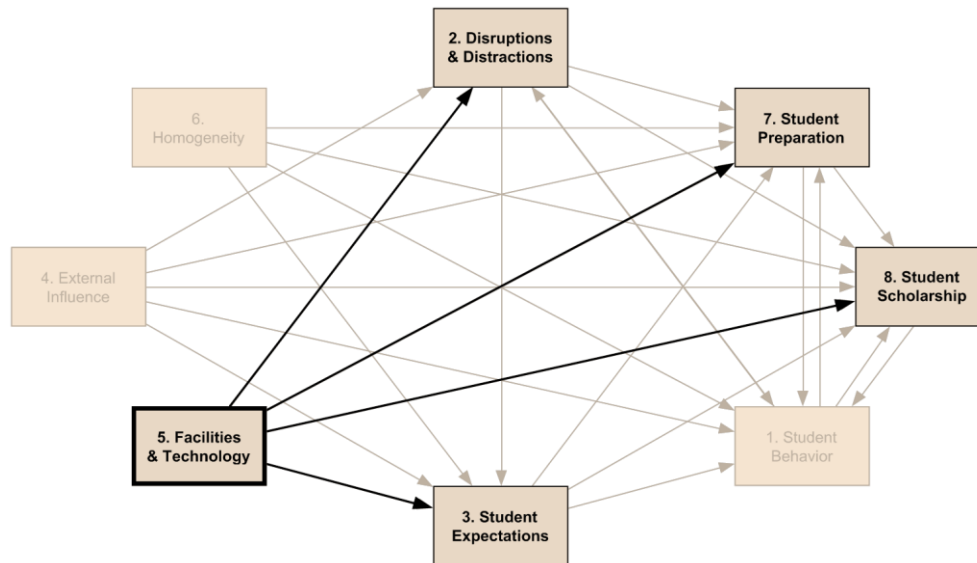


Figure 20. Facilities & Technology for high school dual credit at SSCC.

Disruptions & Distractions.

If computers, projectors, etcetera aren't working and the teacher has to lose class time trying to get them to work, students use the time to talk, laugh, etcetera ... It disrupts the learning environment. When the technology doesn't work, which sometimes happens, then that has an effect. If I don't have the technology, it's difficult to get students engaged.

Student Expectations.

I use [course management software] in my face-to-face courses and Internet courses. Some students express surprise that they have to do so much on the computer. I like to think that my smooth use of technology was at a new level to them and positively contributed to their student expectations! Substandard facilities and technology convey a low value on the educational experience.

Student Preparation.

The facilities of the high school, the library and computers, can affect how prepared they are. I had a class one year where many of the male students weren't comfortable using word processing tools and I had to spend a good deal of time helping them catch up with the rest of the class. Basic computer skills are needed to be prepared for a college English class. [Occasionally] technology frustration leads some students to give up on assignments.

For high school students who do not have computers at home, it is necessary for them to have access on the high school campus to computers that work well, otherwise students can't access course material and take on-line quizzes. Issues with technology have impacted student preparation, no more so than anyone else or anywhere else. Technology is technology, and we learn to work around the occasional issues.

Student Scholarship.

Students who feel comfortable with technology and have adequate support services are able to write in the lab portion of our class; I can then preview work before they submit it and give students instant feedback. Also, a big part of teaching at the high schools is "building bridges" between what students know and what they don't, and technology is an important tool I use to do this.

It's important in government for students to be able to have access to YouTube, CNN, Fox News, MSNBC videos; sometimes these are blocked on high school campuses, which prevents students from being exposed to the same information as the college campus students. Without support and materials, students lack the building blocks for advanced scholarship.

The effect of Disruptions & Distractions.

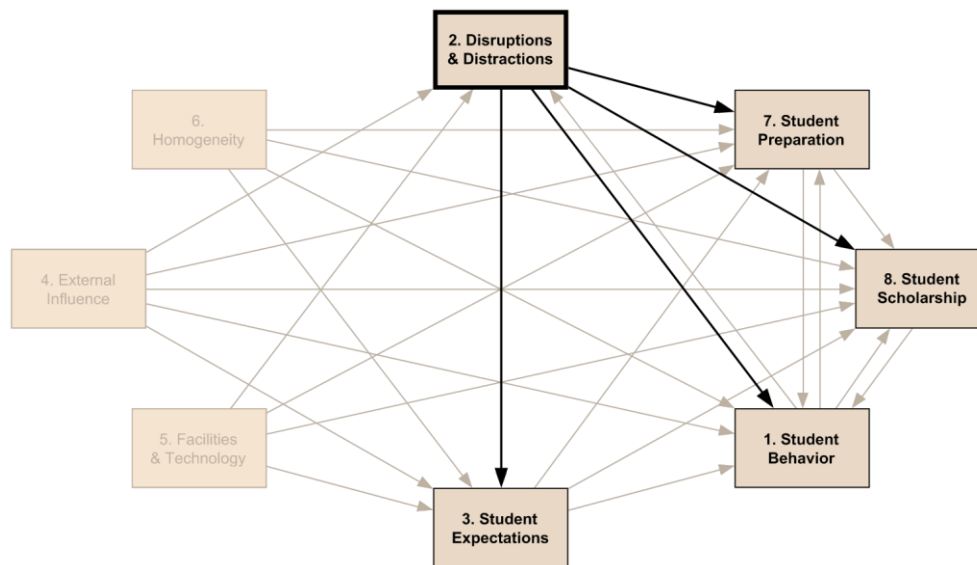


Figure 21. Disruptions & Distractions for high school dual credit at SSCC.

Student Expectations.

These [disruptions and distractions] reinforce the idea that class is not important. I've always noticed such a difference, wondering if they could be on my campus how the class would be different. You tell students it's a college class, but then you still have to do those things and participate in those [high school] things... to stand and say the pledge. Especially the extracurricular, the expectation that they can do all the other things and still do well in this class; it is a negative correlation usually.

Student Preparation.

When class instruction is disrupted it leaves students without adequate information to complete out of class work. More disruption [means] less preparation. When class time is taken up with announcements, pledge, etc., students lose instructional time in class that helps them master the material. The extracurricular activities can distract from their preparations. They may have good intentions, but they may not

have the time ... [such as] with football players, but at the junior college or university, you see the same as well.

Student Behavior.

This [disruptions and distractions] directly affects behavior. It's hard to reel them back in once something has happened. Once I was giving a test, an announcement came over the PA that two students had been killed in a car wreck. This was the extreme.

There is certainly a connection between behavior and disruptions/distractions. Even when people bring in handouts or students are taken out of class.

It's in the culture of a high school to talk over and ignore the announcements. It's then a short step to talking over and ignoring me which takes a certain amount of time to fix.

Student Scholarship.

Bells ringing, noise in the halls, etcetera cause students to lose focus, which affects grades. Similar to preparation, distractions leave inadequate time and convey low value on coursework, which perpetuates a disincentive for scholarship. If you have disruptions, announcements, people being pulled out of class, notes being brought into the classroom; all of that affects people's ability to learn and the depth of conversation we could get into.

The effect of Student Expectations.

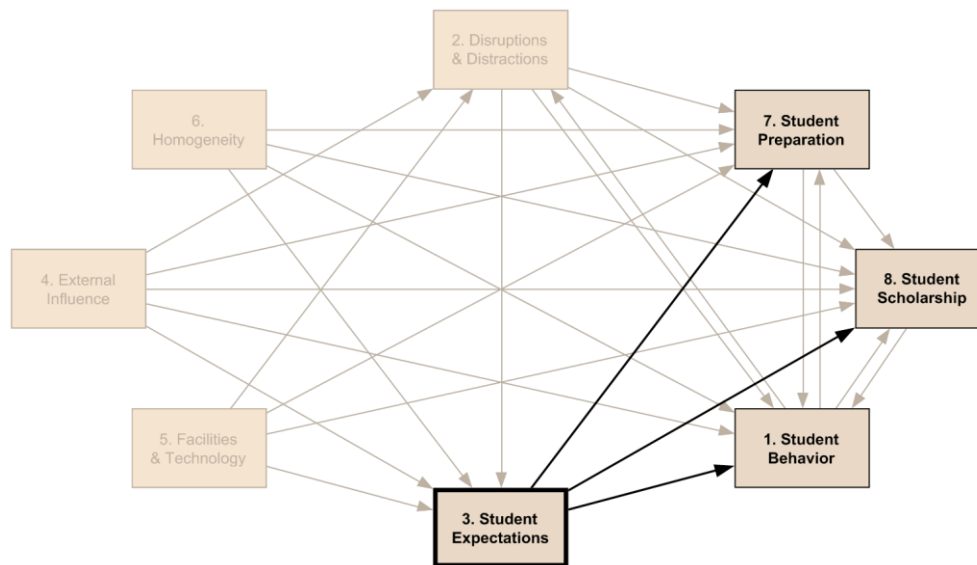


Figure 22. Student Expectations for high school dual credit at SSCC.

Student Preparation.

High school students, at first, expect the college course to be similar to their high school courses; [they are] unprepared for the amount of reading and outside time required to do well. Treading water has worked so far; why push harder if good enough is good enough? At first, high school students think the college course will be easy and not require too much effort; they soon learn otherwise. [Students] slowly understand that they have to be prepared; otherwise I simply pass over them. Most of them figure this out. I think they expect it to be harder, but they don't know how it will be different or harder. When students expect challenges in their coursework they steel themselves to meet those challenges and invest in the preparation work to succeed. Expect more, prepare more; expect less, prepare less. I set the student expectations high. Everyone is expected to come to class with questions and prepared to participate, ... and they know a lesson is due by 11:59 P.M. and if not, it's late. They are then expected to complete the online assignment after having their

questions answered. I think that my students' expectations encouraged their preparation. I think their expectations of what they are getting into have an effect on how much they prepare.

Student Behavior.

Student expectations drive behavior on the high school campus because there is the whole idea of, "This is just another high school class." So they behave accordingly; hopefully they change. Students expect college instructors to adjust the course schedule to accommodate high school activities. If you have your peers all around you and nothing really seems different, you are still in your high school classroom. There is the expectation that this is a high school class and we are going to act like we do with our high school teachers. When traditional or older students interact with dual credit students, their expectations and behavior often moderates.

Classroom management sets student expectations on behavior and attendance, as well as academic policies. Teacher expectations can influence behavior. Students seem to behave better because they feel that are in college even though they physically are still at the high school. A student with high expectation will watch their behavior.

Student Scholarship.

[Note: This text is intentionally repeated as the participant indicated it applied to both *Student Scholarship* and *Student Behavior*]
Students expect to make an A without doing too much work. Treading water has worked so far; why push harder if good enough is good enough?

The facilities of the high school, the library and computers, can affect how prepared they are.

Seeing students take control of their learning; become creators, investigators, and analyzers.

The effect of Student Preparation.

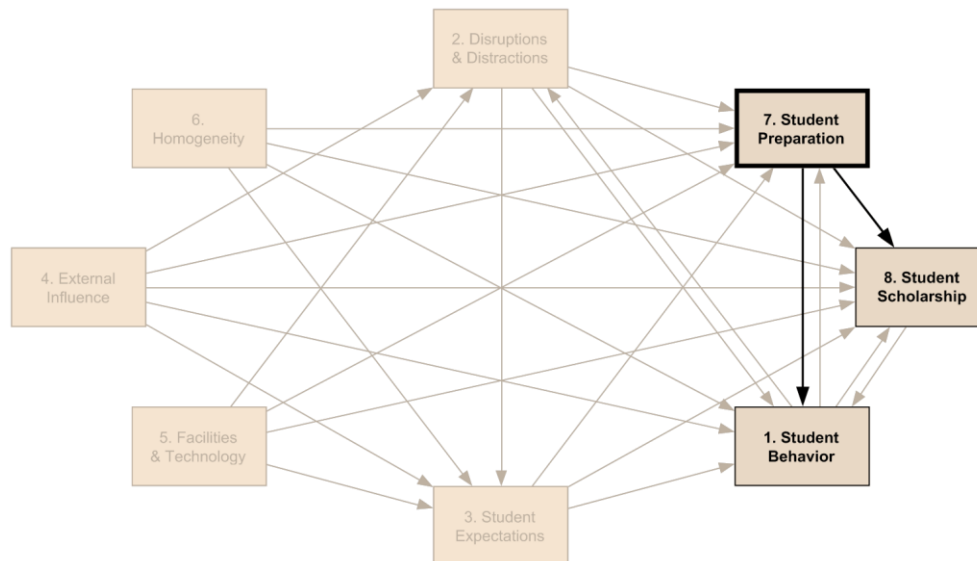


Figure 23. Student Preparation for high school dual credit at SSCC.

Student Behavior.

If you are prepared, you are ready to learn; you have done your work, and you are ready to learn. If you haven't, or [if] your mom or counselor told you that you had to be there, then there is going to be a behavior problem. I would say about 40% of them wouldn't be doing this if they had the choice of their own. I would say that 60% of my students are taking the class because there is nowhere else to put them, their parent told them, or it's, "Hey, my friends are doing this, so I will do it too." I would say few are there because they want to be.

I had a particular student who was not ready for the class maturity wise. He was not able to work with deadlines. I noticed he moved further and further back in the classroom. The less prepared they are, the more they misbehave.

Student Scholarship.

If base work is incomplete or underdeveloped, the larger conclusions of scholarly inquiry lack solid foundation. High school students often pass their courses with very little studying; [they] sometimes expect to do the same in college and discover they're not doing too well.

Well, of course [expectations affect scholarship] from a content perspective. If a student has written countless essays before entering my class, she'll probably do well in the class. But also, emotional preparedness and maturity directly relates to academic success.

Because I have the cream of the crop, the top 10%, my students are much better prepared to do what is needed to make the grade they want, to succeed, and to achieve the expectations I have.

The effect of Student Behavior.

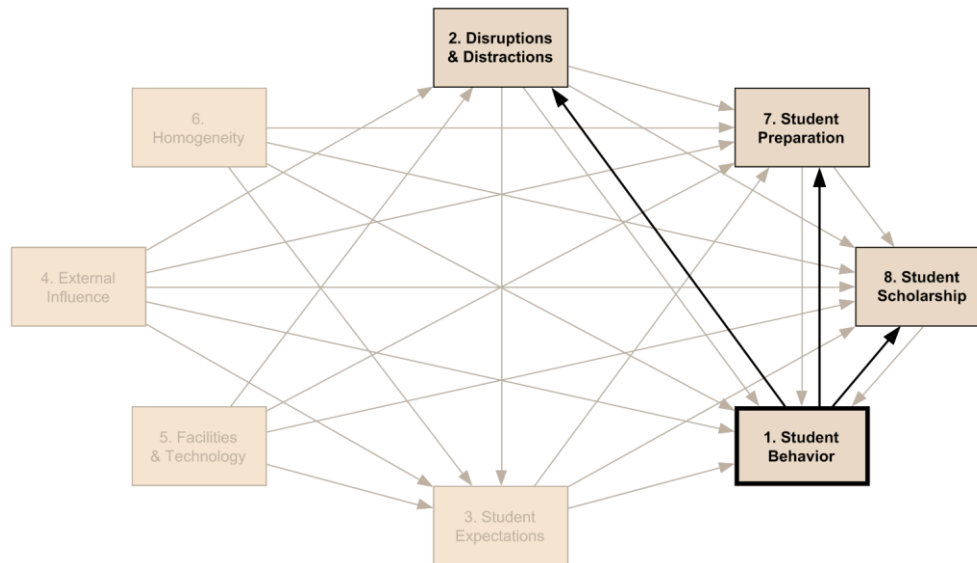


Figure 24. Student Behavior for high school dual credit at SSCC.

Disruptions & Distractions.

Immaturity of students, misbehaving student will usually disrupt the class... talking to friends while teacher is lecturing...students interested will ask the others to stop, so it is a distraction.

A cell phone goes off; I keep talking; we keep working; ...it's only a disruption if I make it one. Again, classroom management says, if it rings, turn it off.

Student Preparation.

Many students are so involved in extracurricular activities and outside jobs that they don't spend enough time on studies.

Student Scholarship.

Cheating, taking shortcuts, plagiarizing material off the Internet results in students not really mastering the material. The better students are generally better behaved. I'm thinking here of the success-breeds-

success loop; scholarship leads to increased interest and better behavior leads to increased scholarship, etcetera.

The effect of Student Scholarship.

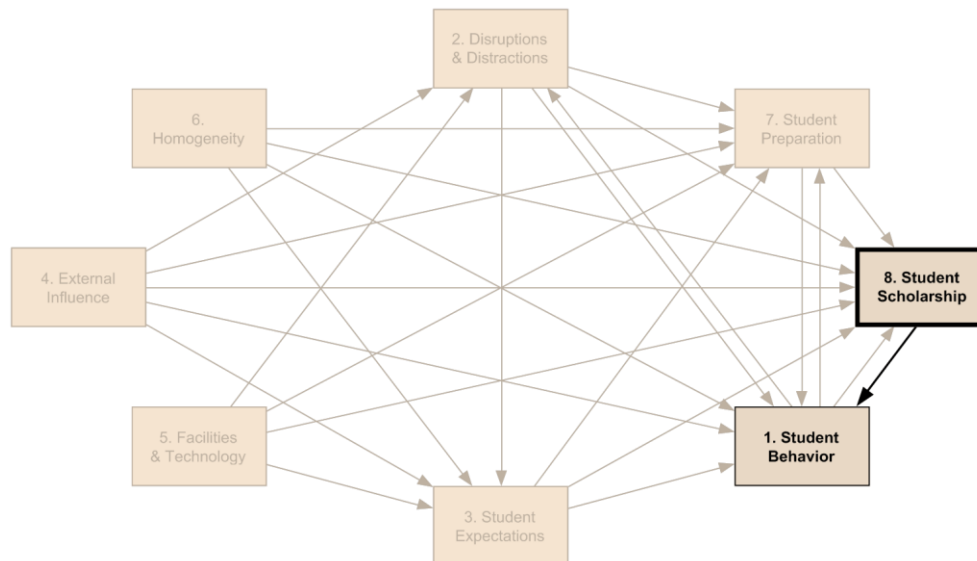


Figure 25. *Student Scholarship* for high school dual credit at SSCC.

Student Behavior.

Students that sit on the front row are interested in being engaged in the class. More dedicated, mature students use peer pressure when needed to quiet rowdy boys.

I'm thinking here of the success-breeds-success loop; scholarship leads to increased interest and better behavior leads to increased scholarship, etcetera.

Note: The *success-breeds-success* quote in this and the previous section highlights the apparent model conflict between *Student Behavior* and *Student Scholarship*.

The College Dual Credit Teaching Experience at SSCC

Identifying affinities.

The eight affinities identified by the SSCC group, after renaming, were *Student Behavior*, *Student Expectations*, *External Influence*, *Facilities & Technology*, *Home Turf*, *Student Mix*, *Student Preparation*, and *Student Scholarship*.

Table 14: *College Environment Affinities and Related Card Comments at SSCC*

<i>1. Behavior (renamed Student Behavior)</i>	
Clannish chit chat	Talk more to fellow students in class
They cluster in groups	Immature students
Clumping – pockets of high school students sitting together or taking the same class	Students respond positively in different environment
Cluster together	Behavior not worse than other students
Sit together	(I have had no class with large number of dual credit students)
Help each other	Cultural ignorance
Friends	
Students act more like college students	
<i>2. Expectations (renamed Student Expectations)</i>	
Students expecting more than math class with friends	Don't have to think of them as different from other students
Level of understanding – students apprehensive	Understanding that the course impacts their post-secondary decisions and plans
Not used to college level standards	Students get real college experience
College student	Make students understand that it is college – not a dual credit focus
Expect accommodation for high school activity schedule	Students must “sink or swim”
Think they'll make the grades they made in HS	
<i>3. External Influence</i>	
Counselor interference	Students who don't want to be here (parents/peers push them)
Get calls from counselors (dual enrollment counselors)	Don't show, don't disrupt
Turning in numeric grades	More parental interactions
Six weeks pass/fail list	Helicopter parents
I'm not aware of who is dual credit (until I submit report)	Parental involvement
More trouble – have to fill out pass/fail forms and numerical grades	Pressure to pass so will graduate
Work out scheduling conflicts individually	Problems taking tests on computers – don't have computers at home and aren't on campus much to use college computers
Dual credit transportation to campus	

(Table 14 Continues)

Table 14, Continued

<i>4. Facilities/Technology (renamed Facilities & Technology)</i>	
Usually adequate resources	Technology easier to use
More resources	A place to keep “stuff” (materials, papers, etc.)
Easier to get help if they need it (library, LAC, etc.)	Great technology and support
Construction noise	
<i>5. Home Turf</i>	
No disruptions for extracurricular – either show up or don’t show up	Rewarding
See students more frequently outside of class – relationship different	Variety of subjects
Teaching from my power space	Freer, more broad/wide ranging discussions
In control of teaching/learning environment/experience	Faculty control of own classroom
	Pay to play
	Great colleagues
<i>6. Mix (renamed Student Mix)</i>	
Add diversity to classroom	They compare their effort work with older full-time college students
Mixed students background/goals/ages	College students resent their immature, often disruptive behavior
Strongly heterogeneous	Immaturity (especially frustrating to older students)
Dual and traditional students feed off each other in discussion (both positive and negative)	“Be quiet, I paid for this” (older student monitoring younger)
Mature students set tone/expectations for younger students	Disruptive to others in class
Older students <i>control</i> the dual credit students	
<i>7. Scholarship (renamed Student Scholarship)</i>	
Higher level of plagiarism	Turning in late work is normal
Leave immediately after class – can be a disadvantage	Interested
Dual students hesitate to ask questions or visit during office hours	Mostly engaged when here
I have to leave early today because _____	Students don’t attend class
Inoculation (small amount of material makes them immune to learning)	Tardy students
	Students who stay in class adapt and rise to new levels of learning
	Attend regularly
<i>8. Preparation (renamed Student Preparation)</i>	
Range of students’ maturity	Have trouble with study skills etc.
Students unaware of testing/tutoring and campus activities	Schedule/time management
Students unprepared for college level reading	Best students and worst students
Don’t know where to go to ask questions	Academic readiness (poor reading skills, etc.)

Describing affinities.

Affinity descriptions are a woven set of quotes from the participants. The IQA method uses this process to tell the story of each discriminate piece of the mindmap from the point of view of those that experience the phenomenon.

Student Behavior.

“I do notice that they tend to say closer together.” Dual credit students congregate with one another.

Well they [dual credit students] definitely sit together... they feel more secure that way and they're looking for something familiar. There was obviously clustering in groups... at the back or side of the rooms, and [they] have this tendency to talk from time to time; they are very cliquish. Sometimes you have students in class that like each other and that filters into the college. One of them will borrow a pencil or calculator from the other, small things; they help each other. They sit together and help each other; when one finishes, the others sit back and wait. It is rare for them [non dual credit students] to lean over and ask their neighbor for a pencil or ask what the teacher said; that's typical for a dual student.

One semester I got a group of students; there were about 10 of them. They were B and C students. They were more interested in each other than what was going on in class. There were so many of them and they sat together that they were a distracting force in that class. I even moved classrooms trying to think what I can do to help discussions in this course. We went over to where there were smaller classrooms or we put desks in a circle, anything to break the group up. I have to say it was a useful semester; I changed many course policies.

I had a couple of students that sat on the back row that had very strong personalities. Because I act like a nice person, [students] took that for me being weak; they constantly challenged me. I eventually had to take one of them out in the hall and gripe them out. But it's when they know each other and are trying to impress each other or one-up each other, that's when there's a problem, the same with boyfriend and girlfriend combinations.

“But once they get on a college campus they think they have more freedom.”

While some high school students are well behaved, others have a tendency to disrupt class more often.

I think you get less respect from them on the college campus because they have this attitude of, “I’m in college.” Just overall, in my classes, I’m amazed at students who just get up and walk out before classes over; I really need to crack down on that. I’m not comfortable embarrassing students, but this getting up and walking out, taking a cell phone call, and walking back in; I have some of that. I have more of that with high school kids. My biggest problem with dual credit students that come to the college is that they do have that feeling of, “Well, this is college and I was told I can do whatever I want. I can leave whenever I want.” “Well, yes, you can, but you can’t go to the bathroom five times during a three hour class.”

The most problems I have with students talking while I’m talking and rude behavior is from the high school kids. They’re more likely to chit-chat among each other than non-dual students. If you don’t rein them in, they can get goofy and stupid. Sometimes students bring their laptops to take notes and you realize they’re not taking notes but are browsing the Internet.

I have to direct comments related to discipline to the dual students 80% of the time, versus 20% for the non-dual students. That's a made up statistic, but that's the feeling I have.

[Dissenting opinion:] I think in general they've been good students. The high school dual credit students are quiet and well behaved. I like to have them in my class.

“I think when you step into the academic environment they act differently.”

Students tend to be more focused on the college campus, yet are more uncomfortable speaking out during class.

Usually they don't talk too much. When you ask a question they answer it, but that's it. They stick to the subject. They are respectful. At first they are intimidated because they're in the room with a whole bunch of strangers... I don't think they feel comfortable speaking out. I've had students ask me questions after the fact, but [they] were afraid to ask in class; they were afraid others would laugh at them. I think it's all about structure and environment. It's a hard thing to explain. But it's not anywhere comparable to what is on the high school campus. It's much diminished.

I'm not sure what the cue is, intellectual level, their willingness to talk about more serious subjects was noticeably different; they were more involved. They understand the college rules and act like college students. What I witnessed repeatedly was greater focus on the part of the students in taking notes, paying attention to me, or their fellow student who was speaking, as opposed to playing and staring off into space, being wrapped up in their own thoughts. It's not just the physical environment; it's the peer environment as well. When I had dual credit students from a high school class attend a class on the college campus because we were doing a

makeup day, ... they just responded to the physical environment differently. When I was physically at the high school, the level of conversation, the amount of focus, sort of the atmosphere of the students and their response was different ... than on those ... occasions when those same students came to the college campus and were part of a blended, normal kind of class. By the second or third week most dual credit students fall into line along with the rest of the students in the class. Maybe that's the reason they behave well because it's not their usual environment. The level of comfort about [various controversial] subjects is higher on the college campus than on the high school campus because those are taboo subjects on the high school campus. It's that level of depth of conversation, the willingness to engage them in conversation.

“If you have a problem, move them.” When dealing with behavior issues, faculty find it's best to set the tone early in the semester.

When I first started teaching I was more concerned about students being my buddies than I am now. Now I feel more like a parent or grandparent. What I have found over the years is that if I have a problem I need to address it right away. Whenever I started teaching, I probably had difficulty doing that. I make a seating chart; if they get clannish or talkative, move them... if it continues, kick them out of class. That first week there is a greater challenge to set the tone, to get them to understand academic and behavioral expectations, as well as discussion expectations. Usually it doesn't take much to get them to stop inappropriate behavior; a raised eyebrow or short comment is typically enough.

“Sometimes you don’t even realize who is dual credit.” Initially when dual credit students are on the college campus faculty are not necessarily aware of their presence.

It’s a little more difficult to answer this because on the high school campus we know we’re dealing with dual credit students, and on the college campus we don’t know. It’s not until you get paperwork partially through the semester, when you have to give the progress reports, or they might be wearing high school jacket, [that’s when] you find out they are dual credit. I try to not notice who the dual credit students are, but by the end of the week I usually have them picked out. A lot of the time if I’m dealing with the behavior problem or something like that, it does not spring into my mind that this person is a dual credit student.

Student Expectations.

“They’re totally shocked when they try to turn in work late and I won’t take it.” Students have a tendency to expect faculty will treat them as high school students.

It’s difficult to make a blanket statement about high school students in my class because they vary so much. There are many students that are ... not ready to take charge of their academic experience yet. If I have problems on the college campus with dual credit students it’s usually from the perspective of expectations.

They expect to be able to retake tests, so I guess they get to do that at the high school. They expect you to go slower. They expect reviews. I’ve also had some high school students, when it was not their only class and they had trouble getting their work in on time, have the expectation that they can turn their work at the end of the semester.

They are so used to the super regimented schedule and having to turn something in that's for a grade at the end of every class. "Well, [we] don't have to turn something in at the end of every class, so that means we don't have to be there, right?" Then students ask, "Hey, I'm not going to be here Tuesday. Am I going to miss anything?" What they're really asking is if there's a graded assignment that will be turned in.

I definitely have run into the situation where a high school student will have a conflict and say, "I've got a special practice for something," and this is a class that meets once a week; that's like missing three days of a Monday, Wednesday, Friday class. I do get that sometimes they feel they should be excused because they have a high school activity. I tell them, "You have to do what you have to do, but you're missing the material here." I don't want to have a long talk with them about it; I don't want to deal with it. I simply dismiss it sarcastically.

I had a student who was a baseball player; he came to me and told me he was going to miss [8] of our 16 class meetings. He wanted to know if that was going to be a problem. He couldn't understand why the absences wouldn't be excused. Sometimes I think they're so used to having those accommodations made at the high school that they don't quite get the transition to college.

"I don't think they hold onto those expectations of grade inflation and social promotion much past the midterm." It doesn't take long for most students to realize they have to work in college.

Although dual credit students start off with the expectations of getting an easy A, "I can tread water and make good grades"... they are dissuaded of that fairly quickly.

There's no one to baby you; I don't have time for that. I have too much material to cover. I give them written notes that contain everything, but they have to read through and figure it out. So, they do have enough rope to hang themselves, and they do. They do sink or swim more at the college. I'm not going to tell them the questions. Not being used to college standards is an issue for a lot of first-time college students. Either you're going to rise to the top or not.

They assume they're going to make the grade that [they] make in high school, and they assume it's going to be a high school class still, even though they are on the college campus. Those expectations are much more likely to fade on the college campus than on the high school campus. Dual students that miss the class figure out that that's going to hurt them in the same way that any other student figures it out. So there are some different expectations, but they learn they can't do all that stuff. I think it's the interaction with the other students, and that everyone isn't getting an A or B.

External Influence.

“A policy that appears in our catalog should be a policy for everyone.” The college counselor has been known to work around policy to make sure a high school student is either placed in a class or dropped from a class.

Because the college wants to continue to provide dual credit classes, the dual credit counselors are appeasing the high school counselors. The counselor should be guiding students based on their ability to complete. The counselor should never encourage a student to go into a college class they think might not pass if it impacts graduation.

Our dual credit counselor is totally incompetent. They see their charge as getting as many dual credit students as she can in classes whether they're ready or not. One of my colleagues had a daughter and she was enrolled in a dual credit class. This student was not committed and was immature. She was also involved a lot of extracurricular activities. The next semester she told the counselor she did not want to take the class anymore. The counselor simply told the student to register for a different class and that they "would only meet for an hour. You would not have to meet a full class time, and you will make an A." The end result was, that faculty member got hired full-time, tenure-track at the college. The classes were popular. Students did not have to do anything.

There's a lot of inconsistent advising taking place on the high school campus by both the high school and the dual credit counselors. The dual credit counselor often advises students to stay and get a two-year degree and not go off to a four-year school. We're talking about top 10% students. You should have to be recommended by the high school counselor first and then move on to the dual credit counselor.

The dual credit counselor does not want to rock the boat with the high school counselor and, to a certain degree, panders to the high school. We have certain counselors that baby our high school students. The counselor wanted me to drop the student and I refused to do it. I said, "That's for people that are moving, have cancer, have sick relatives." This particular counselor wants us to do whatever it takes, including breaking college policy to get the students through.

[Neutral opinion:] I had one email from a counselor this semester on a dual credit student, that's all. We submit reports, but other than that I'll never hear from the counselors.

“They can take an AP class at the high school and pad their grade point average.” College courses, if not already weighted, should be weighted as an AP class at the high school to provide a more level playing field.

They want to know how their grade is going to be calculated for their high school credit. The best students, if they took the college class, they lost rank against their high school class. You still have an incentive to take the AP classes on the high school campus rather than the dual credit classes. That was something that was working against us. My feeling is if they give that weight to AP they should also give that to dual credit as well. They did not used to do that for dual credit.

I think you still have the problem that college teachers are holding standards and high school teachers are not. I’m not faulting high school teachers; I realize the pressures they are under.

“Parents [are] calling wanting to know why their little Johnny isn’t doing well in class.” Faculty find parents do call on occasion to inquire about their child.

I think there is less parental interaction, but there is still [some] parental interaction. Usually the parent emails now again before the class starts, asking what’s involved in the class? ...What will the student have to do? That's just general information that I can share with them.

I have seen parents push their students to take dual credit to remove them from the negative environment of the high school campus.

I’ve never had problems with parents. Although on the college campus, you have a different reaction sometimes because many times little Johnny is not coming to class. I feel like parents and sometimes counselors need to let these dual enrollment students try things out on their

own, even if perhaps they aren't successful that time because I feel like overall it's going to help them take charge of that experience.

“The only thing that bothers me about the numeric grades is that it's not very accurate because I may not have sufficient grades for them to represent their long-term prognosis.” When reporting students' progress to the high school, faculty feel this may not be a good representation of the students' actual progress.

I find the progress reports that we send to the high school to be a minor thing. It's a bit of a pain, but is not a big deal, especially when you don't have much to go on or you're going on a single test grade. As far as the six weeks pass/fail, they could come at a time where I haven't finished grading tests so I don't know, so I have to put the 'P' for passing. I know it has to be done but it's not a good thing. The next six weeks it turns into an F and then the phone calls start. The student asks, “Why was I called in today at high school?” A lot of time it intimidates them, and they come in panicking.

If I report someone as failing, the high school ignores it anyway... there is no effect, as far as I can see. It's my understanding that part of the reporting has to do with *No Pass/No Play* [a reference Texas' public school rules on extracurricular eligibility]. I have seen this ignored and overridden in two high schools. Why ask me information that takes me 45 minutes to an hour to put together if you're not going to use it?

“I refused to sign it.” Faulty find that administrators will occasionally withdraw students after the withdrawal date, contradicting policy.

What I have a problem with is when students go past the drop deadline, all they have to do is go to the administrator and they will sign

all of the withdrawal forms. They did it for like 10 students! I found that so galling because to me it's not fair to students who are on campus and aren't getting that same kind of treatment and could also benefit perhaps from a late withdrawal. The policy should be clear and to apply to everyone, not just of those who complain. I had another student who was making a C in my class and wanted to withdraw; the student went over my head to the administrator, and the administrator signed it.

Home Turf.

“I know it, I know every corner of it, and so it's very easy for me.” The college campus is where faculty have their space, which makes it easier to work.

The classroom setup, it is my setup. So it's much better here for me. It is easier to be on the college campus. In terms of my classroom experiences, I really do love it. It's a really good place to work. You don't feel like that when you go to the foreign land of the high school; it's not your space. It's obviously easier to teach on the college campus because we know it's our home turf, exactly. That's my space. It's just a matter of being at home.

I know it's there and if it's not, I know where to get it faster. You know where everything is. I can get to the copy machine. I don't ever have to wait for keys on [the college] campus. You certainly have access to all your files. I have more access to technology on campus. It's without a doubt easier to get help from the library and learning assistance center if you're on campus. I can show them things on campus, the library, the IT department. I don't have to bring my stuff with me everywhere.

It's certainly more comfortable because you don't have to worry about all the distractions, with the bell ringing and announcements over

the intercom or students walking into the class delivering messages. In terms of freer and more wide ranging discussion topics, I always feel like that at the high school it is so conservative I have to be careful about what I say about God, careful what I say that might be too adult or too graphic. Not that English really goes there, but we might be discussing the poem about lust. I'm more comfortable on the college campus talking about those things. I don't get the giggles. It's a more adult environment. I have a better comfort level teaching here on campus than on the high school campus.

The environment is easier to control. Teaching from my place of power. I have much fewer disruptions, much fewer behavior problems. You have a lot more control. For example, if they're talking too much, you kick them out; that's not your problem anymore.

I also find that on campus I'm better able to get into a rhythm. Probably because your energy is on the presentation rather than your energy being diverted to what the students are doing. Back to the idea that it takes more energy to teach on the high school campus than it does on the college campus, you can focus more on what you wanted to do. There's also a trap to that; when you get in this rhythm, the students may not be asking questions because you're in your rhythm.

On [the] high school campus it's very difficult to see students after class because they're on their way to another class. I ... have contact with students on the college campus where they come by sometimes. There's definitely more of a relationship formed on our campus.

I have one interruption every three years; that's probably about the extent of it.

Student Mix.

“The mix is something I see as almost completely positive.” Faculty find having older and younger students in the same class adds to the college experience.

The duals benefit positively from the older students. They seem to get along fine. Many of the things that older students say resonate with the dual students. Even what the older students know that the younger students don't; I had a younger student that was supposed to be helping the older one with a paper on Wall Street. But the younger student didn't know what Wall Street was. When people don't have the cultural background and that pool of knowledge it does change the class. When I have younger students I used more modern examples.

Sometimes it's nice to have the different viewpoints, especially when you're talking about current events or something...the perspective of younger and older students... adds to the conversation. The diversity of students on a community college campus is one of the things I enjoy the most, and dual students are part of the diversity; that wide-eyed curiosity that, “Wait a minute, the world is black and white.” and then they realize it's not, and the light bulbs come on ... having the world open up to them, and that's a blast.

“Dual credit students can be very annoying to the traditional or nontraditional students.” Traditional students find dual credit students are often disruptive in class and tend to deal with this misbehavior themselves.

I think when you have too many dual enrollment students in the class it really affects our nontraditional students and how much they enjoy the classes. Dual credit students are definitely quite noisy, especially at the beginning of class. The younger students don't realize what others

have gone through to get here. They haven't worked two jobs. I've had several older students express to me, "I just have nothing in common with the students." I had an older student come up to me and say, "Thank you very much [for dealing with the disruption]; they were being very disrespectful." I think it's important for older students to have that respectful atmosphere.

The local high school has changed their bell schedule the last two years running... they decided it was better for their students. But we already scheduled our classes. So now, dual credit students have to leave 10 minutes before class is over [disrupting the class].

But my night class which is mostly dual credit and mostly from the same high school, that's when you get the conflict between the dual crowd of students and the nontraditional students who are working all day, and this is the only time they can come to class, and they're a very upset that this is what they're getting; and rightly so. I see older students control younger students. Frequently the older students will get onto them. We do have older students who will turn around and tell them to please be quiet, and it means more coming from them. They get irritated [and] feel a lot of frustration. I see it happen; they take care of a lot of the discipline issues. I'll come into the class and hear older students, those 20 and up, turning to younger students and saying, "I messed around when I was your age; quit it; you're not only screwing up your education, but you're making it harder for me to learn." I'll hear comments to that affect as I'm setting up for class. Every once in a while an older student may say something mean to younger students.

"They're not as talkative on the college campus." Dual credit students tend to be quieter and keep to themselves more on the college campus.

Younger students definitely follow the lead established by the older students. They are quieter because they don't want to appear to be more immature. In the late morning classes I may only have two or three dual students, [and] then they tend to keep to themselves. They're acting adult. You do have the chit-chat, which is the biggest problem. On the other hand, sometimes I don't even realize they're dual credit students because they seem more mature.

“So I would ideally much prefer the mix, that's the way dual credit should be done.” Faculty tend to agree that dual credit students should be mixed in with the general population; however, too many dual credit students can cause disruptions.

When I had classes where only 10% of the students were dual credit, they were much quieter because they were outnumbered. They were real quiet because it was mostly either full-time college students who had already graduated from high school or older students. I felt like they stepped up because they were in there with a bunch of more mature people. They eventually do latch onto the traditional students for study groups and things like that. I have never had a class on campus where the majority of students were high school students. Half and half would probably be good. That's the way I would prefer it, just mix them in there. They realize, “Hey, this is a college environment, and the expectations are raised.”

When I had almost all high school students, it was certainly more of a high school class because there were so many of their friends in there. I really didn't like it when I had all high school students. I had four older students and I felt bad for them. I had to fuss at the younger students a lot in the class where the majority was dual credit. Sometimes those classes are 80 or 90% dual, mostly from the same school. If it gets past the 60%

mark, then it's a problem. Yeah, if I have too many, if I don't have people to balance it out, it becomes more of a high school environment, especially if they know each other. When we started dual credit, when I first got here, apparently there was no limit on how many high school students there would be in a dual credit class. I felt like they were taking seats from other people.

In the summer I had a triple mix, dual credit students, traditional students, and students that are almost finished with their bachelor's. The difference between their work ethic is pretty startling. It's kind of fun for the dual credit and even some of the regular students to look at the difference and how they work.

Student Scholarship.

“I have students that have a great work ethic and others that slide by.”

Faculty witness both good and bad work habits in dual credit students.

Dual credit students, in my experience, have better attendance than the general population, [and] they turn their work in on time. Students rise to new levels of learning; I've seen that. Those who struggle at first and stick around oftentimes have, in my perception, a higher growth experience than the middle of the road students on the high school campus. I have been witnessing my dual students engaging in study groups in similar numbers to the general population. They are the best students I've had at the college. Last semester was the first time [I] ever failed a dual credit student on the college campus. It's rare for them to fail.

On the flip side, they come and they go, and they're not coming back. They think, “I can miss this class, it's no big deal.” They'll show up 30 minutes late and not think anything of it. And my big thing is

communication; “If you’re going to be late, let me know.” The duals are much more likely to miss one of the first three quizzes [and] have more of the late work. When I get those students in the second semester they are much less likely to make that mistake.

I think plagiarism is a generational thing. They don’t think it’s wrong to cut and paste a whole article off of the Internet and act like it’s theirs, I would have to go over that clearly “do not cut and paste.” They are way more prone to cheating. I have experienced a higher level of dual credit students plagiarizing.

“High school students are less prone to use the services.” Resources on the college campus are not utilized by most dual credit students.

Students are reticent to use testing and tutoring services on campus, [and] they don’t know how to use the college library. Many times dual credit students will not ask for help because I know there’s that intimidation.

They miss some of the other things that other students can come here for, like the office hours. I try to encourage people to come by my office especially the younger students. Even though I have office hours right before class, many of them are rushing just to get to the class on time and can’t see me before; I don’t know if it’s because of their schedule or because they’re shy. They might ask questions in class, but they never come by the office to ask questions. They might be in an extracurricular activity and don’t have time to stop by for office hours.

Student Preparedness.

“Some are not quite ready to be in the college environment.” Faculty find while some high school students seem better prepared, many have noticeably poor writing skills.

Younger college students or high school students definitely write worse than the older students. They tell me, “But I made an A in English.” They’ve been told they are great writers, and they’re not. It’s just awful how they write...and don’t spell well at all. Often they write like they speak. From year to year I’m amazed at how poorly students write. ... Writing is so important in the world of work. I have more students than ever that are only functionally literate. So somewhere along the line [there is a problem]... I don’t know if it’s focus on the TAKS test or texting on their phones. I had one student that said, “You know, I feel so angry at my high school teachers. Why didn’t they tell me?” People just get moved along. High schools can’t fail people anymore.

They have been tested so much on multiple-choice. They’re not prepared to show their work. We create a work-cited page. I show them an example. And they can’t match with one on the page in the handbook. Their ability to comprehend is very, very poor; they are underprepared. They are content to sit on the back row, almost afraid to ask questions and are not as likely to be forced to rise to another level.

However, I see the high school students as being better prepared ... than the majority of our other students on campus. They picked up the material much easier; I think it was because they have recently had math and their minds are trained better. They knew many concepts already. It was working very well. I attribute it to motivation. They are the best students I’ve had so far.

In my past two semesters I had an on-campus night class in history with a majority of high school students. This semester I have a class of 29 with 17 high school students. I found only a small statistical difference between the grades of the high school students and the college students, with the high school students generally having a slightly better overall average. However, the high school students generally started out lower than the college students, but by the finals had a higher pass rate. High school students have a much lower drop-out rate and seem to straighten out a bit rather than drop out [which I understand is difficult or not an option for them].

Also, high school students seem to cull themselves out of my class between semesters. Although the numbers are approximately the same, the faces are different. The lower graded ones in the fall semester ... pick someone else for the spring semester and I pick up several new students ... who do better than the ones who left!

Facilities & Technology.

“Facilities on the campus are never a problem.” Faculty and students have direct and immediate access to facilities and technology while on the college campus.

We have great facilities. This is [an] overall positive at the college campus. [Students] have everything they need here; they have the library and the computer lab if they’re willing to use it. We don’t have to fill in any requests. We have great computer labs. I can always get a lab when I want to, [and] I can always get online when I need to.

We have a better library system and learning center. I can have the library staff come in and talk with the class when I need them to. They have two tours and all sorts of other things they don’t get [on the high school campus] unless they make a conscious effort to get here.

I spend a massive amount of time with my student outside of class. That can be a real advantage when they're on the college campus. I can't do that when I'm on the high school campus. Even if they come to campus, sometimes it's very difficult for them to meet with me because they have to get back to the high school campus. That's a disadvantage of dual credit either way, perhaps not if it's an evening class.

[Dissenting Opinion:] Great technology and support, I'd say, "No" on that one.

"We do have construction noise; that has been an issue." Noise from construction is manageable.

We always have the option to move though [away from the construction noise]. I was giving an exam, and there was a lot of construction noise. I thought about complaining, but then it stopped.

Identifying relationships.

At the completion of the discussion on affinities, the researcher asked participants to indicate the direction of influence in each affinity pair using an affinity relationship table (ART).

Table 15: Affinity Relationship Table for College Dual Credit at SSCC

The College Dual Credit Teaching Experience at SSCC Affinity Relationship Table (ART)		
For each affinity pair, indicate the direction of influence by using a right arrow (>) indicating the affinity on the left influences the one on the right, a left arrow (<) signifying the affinity on the right influences the affinity on the left, or signify no relationship with <>.		
Affinity #	Influence <, >, or <>	Affinity #
1		2
1		3
1		4
1		5
1		6
1		7
1		8
2		3
2		4
2		5
2		6
2		7
2		8
3		4
3		5
3		6
3		7
3		8
4		5
4		6
4		7
4		8
5		6
5		7
5		8
6		7
6		8
7		8

#	Affinity
1	Student Behavior
2	Student Expectations
3	External Influence
4	Facilities & Technology
5	Home Turf
6	Student Mix
7	Student Scholarship
8	Student Preparation

The researcher recorded the direction of influence, if any was perceived, and the comments for each affinity pair. All ARTs for all participants appear in a single frequency table.

Table 16: *Theoretical Code Frequency Table for College Dual Credit at SSCC*

<i>Affinity Pair</i>	<i>Direction of Influence and Frequency</i>		
	<i>> Frequency</i>	<i>< Frequency</i>	<i><> Frequency</i>
1 - 2	2	12	0
1 - 3	1	7	5
1 - 4	1	5	8
1 - 5	1	8	5
1 - 6	2	8	3
1 - 7	4	4	6
1 - 8	1	7	6
2 - 3	0	6	7
2 - 4	0	2	11
2 - 5	0	4	9
2 - 6	0	4	8
2 - 7	7	3	4
2 - 8	7	2	5
3 - 4	0	1	12
3 - 5	1	4	8
3 - 6	0	2	10
3 - 7	8	1	5
3 - 8	8	1	5
4 - 5	3	4	6
4 - 6	0	0	12
4 - 7	4	0	8
4 - 8	4	0	8
5 - 6	3	1	9
5 - 7	3	1	8
5 - 8	4	0	8
6 - 7	12	0	2
6 - 8	3	0	9
7 - 8	2	9	2

Power cutoff for SSCC college dual credit model.

Eight affinities were identified in the SSCC college dual credit teaching experience, creating 28 pair combinations. As in the high school model, these 28 combinations can be perceived to work in one of two directions; A influences B, or B influences A, leaving 56 possible ways to *cast a vote* in the system. Participants indicated a perceived relationship in 182 individual cases, while 392 cases were possible [28 votes times 14 participants]. The 182 was multiplied by the relative percent of one of the 56 vote possibilities, or 1.8%. Any pair-wise relationship capturing less than 1.8% of the vote was excluded from the model. This percentage multiplied by the total votes resulted in 3.25, meaning any pair-wise affinity combination not receiving at least 4 votes was excluded from the model.

Table 17: *Combined Theoretical Interview Table for College Dual Credit at SSCC*

(Affinities in Descending Order of Frequency with Power Analysis)						
<i>Driver</i>	<i>Outcome</i>	<i>Frequency</i>	<i>Cumulative Frequency (%)</i>	<i>Relative Cumulative Frequency (%)</i>	<i>Model Power</i>	<i>Relationship Explanatory Power (%)</i>
6	7	12	6.6	1.8	4.8	6.6
2	1	12	13.2	3.6	9.6	6.6
8	7	10	18.7	5.4	13.3	5.5
3	7	8	23.1	7.1	15.9	4.4
3	8	8	27.5	8.9	18.5	4.4
5	1	8	31.9	10.7	21.2	4.4
6	1	8	36.3	12.5	23.8	4.4
2	7	7	40.1	14.3	25.8	3.8
2	8	7	44.0	16.1	27.9	3.8
3	1	7	47.8	17.9	29.9	3.8
8	1	7	51.6	19.6	32.0	3.8
3	2	6	54.9	21.4	33.5	3.3
4	1	5	57.7	23.2	34.5	2.7
1	7	4	59.9	25.0	34.9	2.2
4	7	4	62.1	26.8	35.3	2.2
4	8	4	64.3	28.6	35.7	2.2
5	8	4	66.5	30.4	36.1	2.2
7	1	4	68.7	32.1	36.5	2.2
5	2	4	70.9	33.9	37.0	2.2
6	2	4	73.1	35.7	37.4	2.2
5	3	4	75.3	37.5	37.8	2.2
5	4	4	77.5	39.3	38.2	2.2

Notes: 1) Shaded cells indicated potential conflicts in the model. 2) Table is truncated at power cutoff for readability (see Appendix C for complete table).

The power cutoff suggests that 78% of the model can be described using 39% of the relationships (22 of 56). Using this cutoff revealed one potential conflict. This potential conflict is addressed later in the chapter.

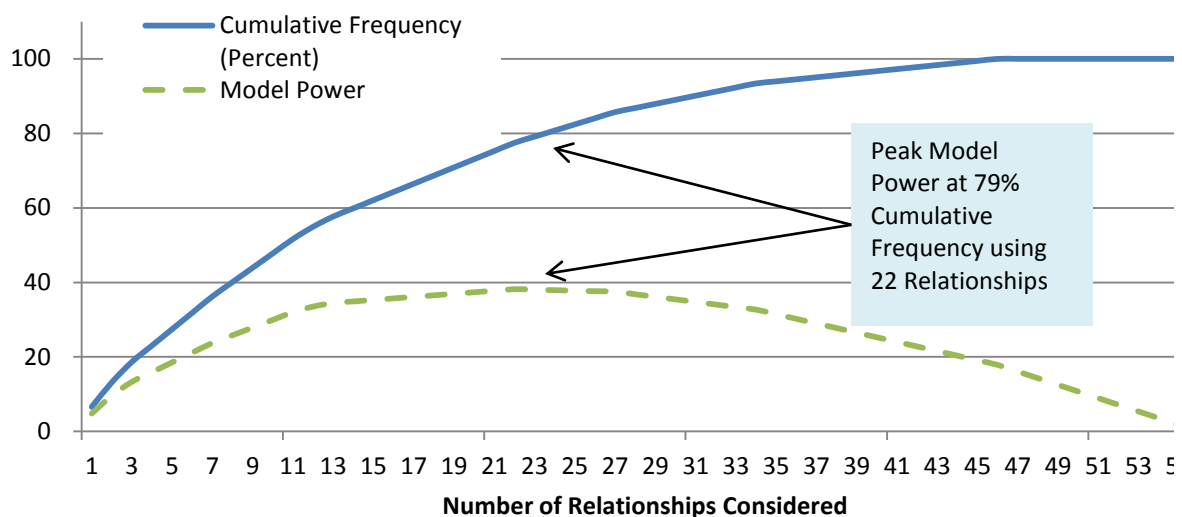


Figure 26. Power analysis chart for college dual credit at SSCC.

A table was constructed to tabulate the frequency with which each affinity influences others (serving as a driver) and the frequency with which each is influenced by other affinities (serving as an outcome).

Table 18: Driver/Outcome Frequency for College Dual Credit at SSCC

		Affinities Serving as Outcomes								Frequency: Influencing Others
Affinity #		1	2	3	4	5	6	7	8	
Affinities Serving as Drivers	1							x		1
	2	x						x	x	3
	3	x	x					x	x	4
	4	x						x	x	3
	5	x	x	x	x				x	5
	6	x	x					x		3
	7	x								1
	8	x						x		2
Frequency: Influenced by Others		7	3	1	1	0	0	6	4	

Note: Shaded cells indicated a potential conflict in the model.

Each affinity was placed in the diagram according the difference between the number of times it influenced others (driver) and the number of times it was influenced by others (outcome); this difference is referred to as the affinity's delta.

Table 19: *Affinity Delta Order for College Dual Credit at SSCC*

<i>Affinity Name</i>	<i>Affinity #</i>	<i>Frequency: Influencing Others</i>	<i>Frequency: Influenced by Others</i>	<i>Delta</i>
<i>Home Turf</i>	5	5	0	5
<i>External Influence</i>	3	4	1	3
<i>Student Mix</i>	6	3	0	3
<i>Facilities& Technology</i>	4	3	1	2
<i>Student Expectations</i>	2	3	3	0
<i>Student Preparation</i>	8	2	4	-2
<i>Student Scholarship</i>	7	1	6	-5
<i>Student Behavior</i>	1	1	7	-6

The 22 relationships, represented by arrows, connect the affinities in the cluttered system influence diagram (SID). Primary drivers of the system sit on the left and, as affinities become progressively weaker in delta, they become outcomes of the system and are situated further to the right in the diagram.

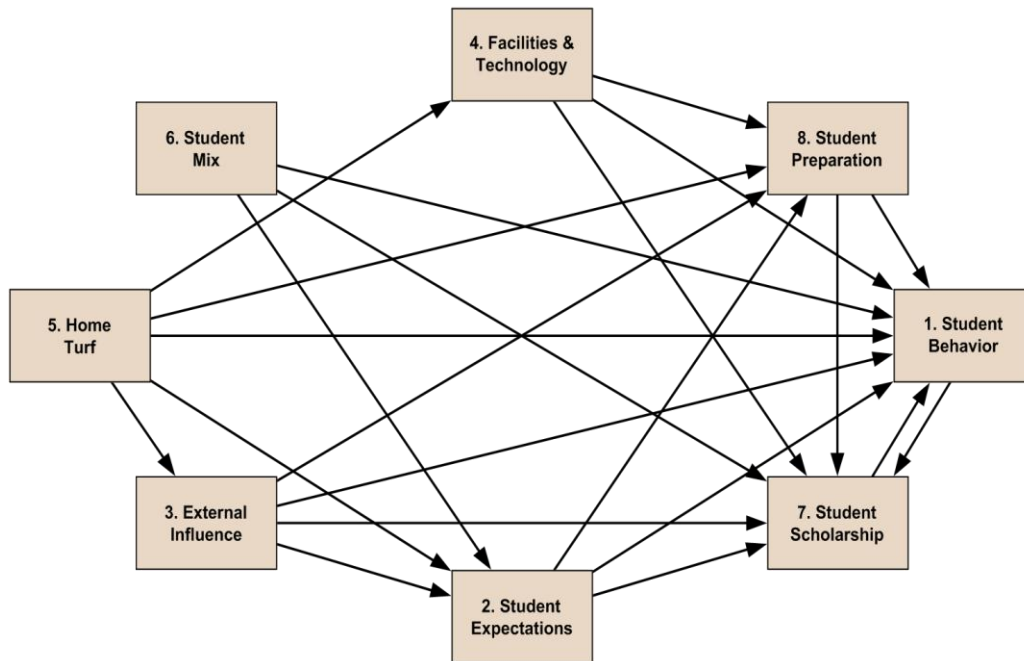


Figure 27. Cluttered SID for college dual credit at SSCC.

Describing relationships.

Each relationship is described in the words of the participants. The researcher threaded the participants' comments together to capture the group experience of how affinities relate to one another.

The effect of Home Turf.

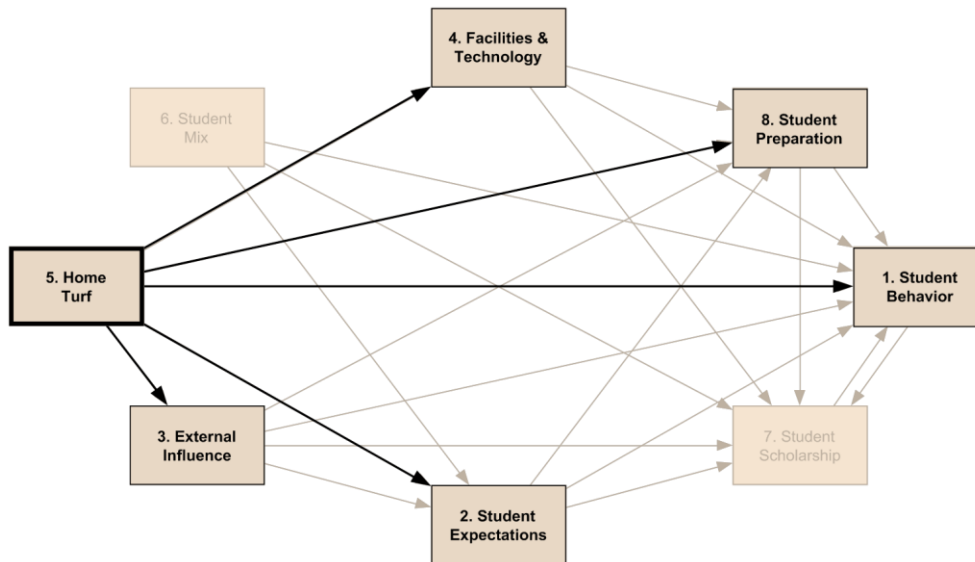


Figure 28. Home Turf for college dual credit at SSCC.

External Influence.

Teachers on their own campuses with diverse student populations find it easier to stand up to high school parents and counselors. Sometimes I hear from counselors or parents, but typically being on the college campus insulates me from that sort of thing. The faculty members can keep those external influences out as a result of home turf advantage.

Facilities & Technology.

I think there is an effect here because I really push them [students] to use the facilities [on the college campus].

[A] teacher knows how to work the equipment; [this is] much less lost class time due to the teacher fumbling around with equipment. It's wonderful to be on campus, to deal with friendly IT people who are mostly helpful, and to know where to go if something isn't working properly or you need to change classrooms. I know that I can expect excellence and how to pursue correction to problems or inadequacies.

Student Expectations.

High school students can watch older students take a serious interest in learning.

My student expectations are higher on the college campus because I know our IT, Library, Student Success Center, etcetera can and will help students if the students are proactive in helping themselves. Off campus I do not have confidence in the support systems essential to student success.

Student Preparation.

I am less willing to accept student excuses for lack of student preparation.

Student Behavior.

There is a huge correlation between location and behavior. I don't know if I have one example, but in general, I've had very, very few classroom management issues on [the college] campus. As the teacher I perceive that I have greater control over the learning environment and am empowered to remove disruptive students. We are allowed as [college] teachers to not put up with as much as we have to on the high school campus.

High school students are not on their own turf and are often intimidated by the older students at first ... [they are] no longer in their comfort zone.

Home turf made me more comfortable although I really did not see a difference in student behavior.

The effect of External Influence.

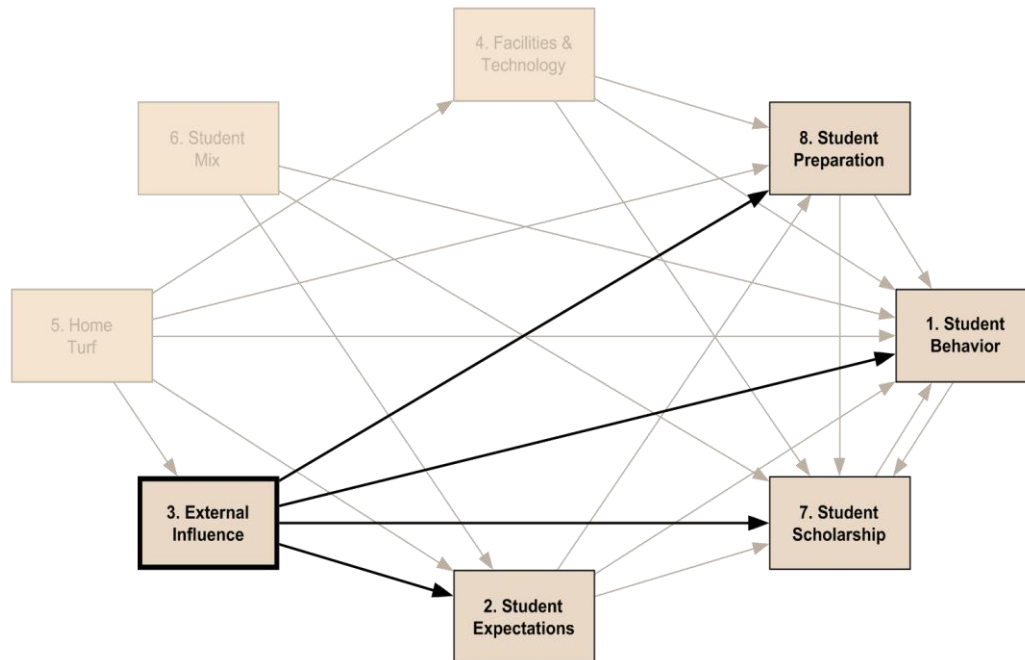


Figure 29. External Influence for college dual credit at SSCC.

Student Expectations.

External Influence fuels student expectations. [Students] still have parents and counselors asking for interim reports and trying to light a fire under students to study more.

Student Preparation.

Traditional and returning students set a higher standard to which dual credit students oftentimes respond.

For students on the college campus, there are more interferences...these students are attending another class on their time, after already putting in a full day... to compound their situation.

Student Scholarship.

The external influence of counselors and friends are pushing the socially upwardly mobile students, the upper echelon, into the dual credit classes. Parents and counselors continue to hover over high school students taking courses on college campuses. Traditional and returning students set a higher standard to which dual credit students oftentimes respond.

The past semester, I had a student named [Beth] who had spotty attendance and wasn't doing well on her essay assignments. [Beth's] mom and [Beth] came to my office, and I walked the mother through [Beth's] grades, my revision policies, how I graded, what [Beth] needed to do to be successful, etc. After that visit, [Beth] performed better in the class, and that change seemed to be a direct result of her mother's interest in her success.

Extracurricular activities in high school sometimes take precedence over academic studies.

Student Behavior.

Traditional students and returning students set an atmosphere of seriousness and, at times, directly chastise immature behavior of dual credit students.

This semester I had a young student named [Mark], and [Mark's] mom wouldn't accept that I told [Mark] I couldn't take his late paper. I fielded at least five different e-mails from [Mark's] mom, and at the end of the semester, [Mark] tried to turn in the late paper AGAIN, but only because his mom was giving him such a hard time.

I still have counselors and parents hovering, demanding progress reports, etcetera, so students aren't left to sink or swim.

The effect of Student Mix.

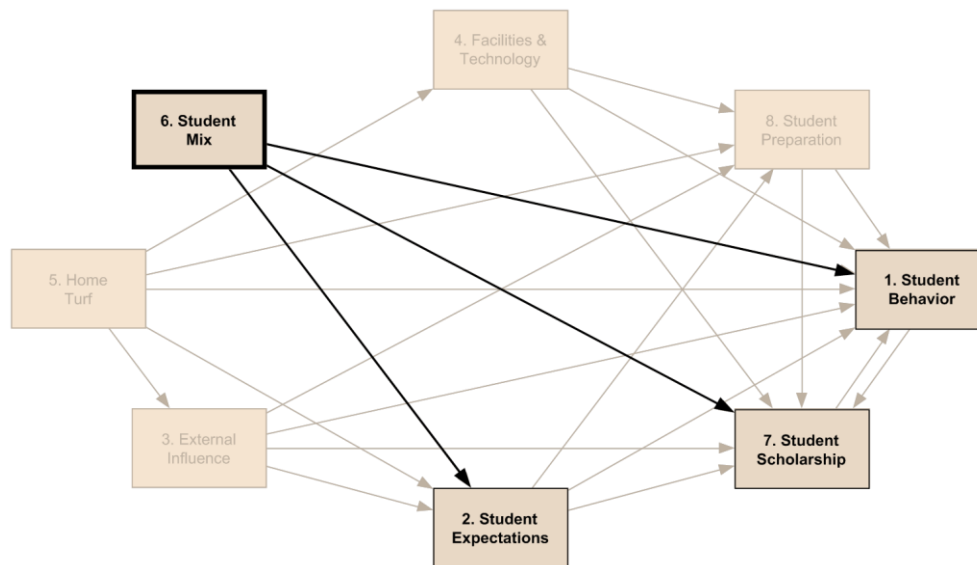


Figure 30. Student Mix for college dual credit at SSCC.

Student Expectations.

Yes, [student mix does affect student expectations] because they are forced to see other students' expectations, which influences their own. They think that they are going to have a good time with their buddies up here at the college, and the mix can stop them in their tracks. High school students, exposed to older students and other ethnicities, learn they don't know so much after all and may not make as high of grades as they did in high school.

Student Scholarship.

Yes, student mix affects scholarship. For example, if I have a homogenous class, perhaps it's composed mostly of immature dual-enrollment students; grades are lower as my classroom seems to become an extension of the high school campus. If the class is mostly adults... the older students are a bit more focused... the dual credit students seem to

“step up” in scholarship. They seem to be more mature and turn their work in on time with better quality of work.

There is definitely a relationship between student mix and scholarship on college campuses. I sometimes have campus classes where half the class consists of high school students [that’s because high school counselors are allowed to register their students early but can only take half the spots]; those classes, with a whole lot of high school students, usually don’t perform at quite the level of my classes with a higher percentage of older students. The high school students often sit together [often on the back row] and tend to be more disruptive and talkative.

Student Behavior.

A diverse class is a well-behaved class. With new students of varied backgrounds, dual credit students tend to put forward their best. Younger students don’t really want to stick out, so they do what the rest of the class seems to expect... they learn to behave like “normal” college students. I don’t usually see problems until the number of dual-enrollment students seems to exceed about 70% of the total number of students [especially from the same school] [or] try a class of ALL males. The students that are being disrupted will often do something before I do, and that’s okay with me. Usually I will stop class if I have to, but it means more coming from the other students. This can be positive or negative; either the ‘mom’ contingent can lean on the kids to shut up and learn, or there can be enough conflict to be distracting in the class.

The effect of Student Expectations.

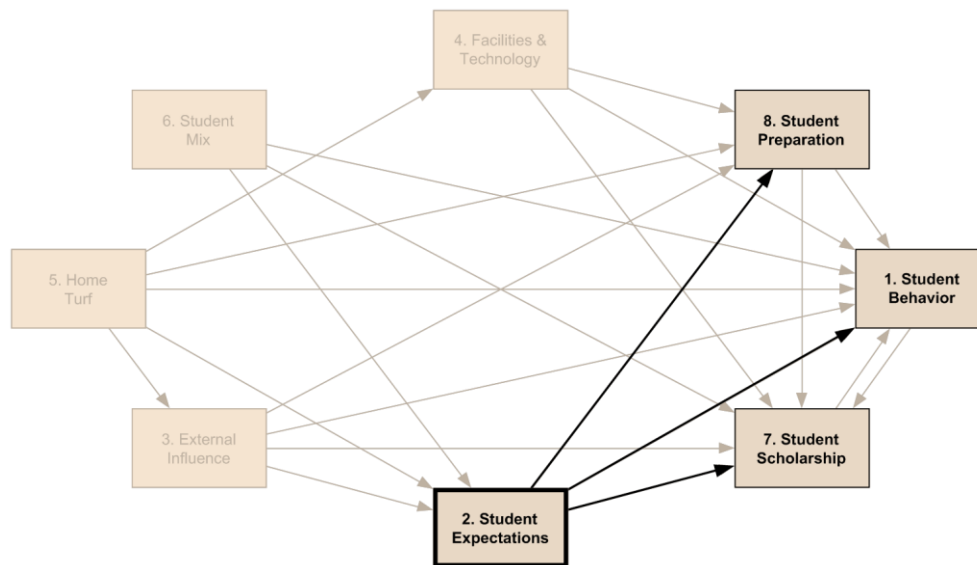


Figure 31. Student Expectations for college dual credit at SSCC.

Student Preparation.

At first, high school students think the college course will be easy and not require too much effort; [they] soon learn otherwise. Everyone is expected to come to class with questions and prepared to participate. They are then expected to complete the online assignment after having their questions answered.

Student Scholarship.

I expect everyone to achieve within their own ability levels. I think they expect to have to do more, but hope they can get away with doing what they have been doing.

When students expect challenges in their coursework, they steel themselves to meet those challenges and invest in the preparation work to succeed.

Student Behavior.

There is a greater “reality” of the college experience on the college campus that drives higher student expectations and, therefore, behavior. Classroom management sets the tone. Perhaps the college environment made them cautious, as long the number of high school students’ ratio did not reach a critical mass, which for me would be more than half of the class composition. Dual credit students are not greatly different from the 19 to 21-year-old students.

I suspect student expectations influence behavior. I’ve had many students say things like “I didn’t want to bother you,” which seems to indicate that they find college intimidating and different from high school. But there are also students who don’t seem to realize the environment has changed. Just the other day I was teaching and a student walked in almost 10 minutes late. The class was quiet except for the sound of my voice, and yet that student still came up to the front and said, “Hey, I have a question about my essay.” I was surprised that I even had to say, “Class has started now. We can talk during the break.” But sometimes dual enrollment students seem to expect for class to be casual and informal, like a high school class. I don’t know; ... it’s like they walked out of high school into my class, like nothing changed.

Sometimes, when high school students come on campus to take classes, they take advantage of the freedom to skip classes, walk out early, etcetera. In high school they would get written up and sent to the office.

The effect of Facilities & Technology.

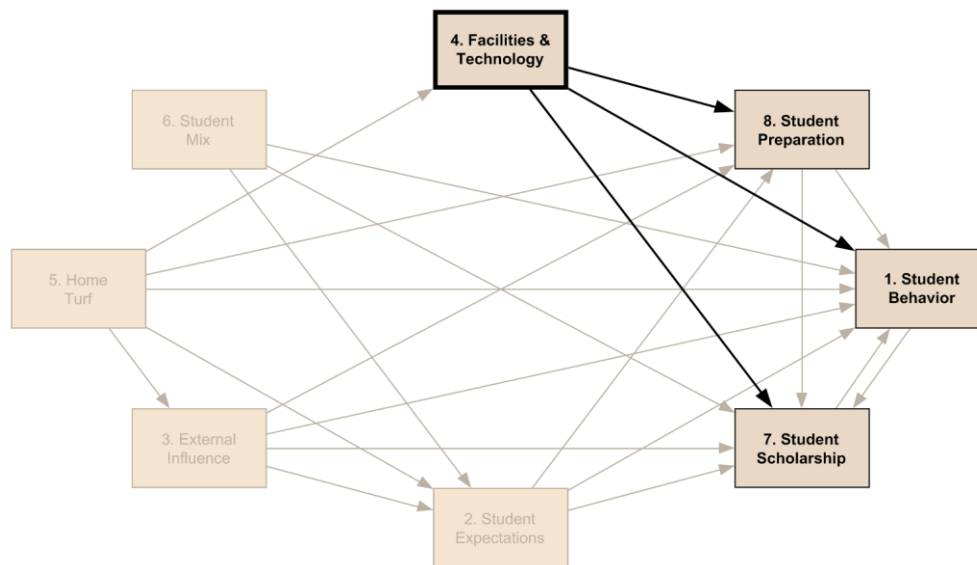


Figure 32. Facilities & Technology for college dual credit at SSCC.

Student Preparation.

Facilities and technology can influence preparation. When we are familiar with it, it is less likely to break down, and even if it does, we know what to do.

Students have access to reliable technology and strong learning services support and library to support their work... but often only spend a limited amount of time on the college campus.

Student Scholarship.

Facilities and technology can influence preparation. Because the instructor can vary the instructional methodology via different technologies, students stay more interested in the material and do better. [Also] we are familiar with it; it is less likely to break down, and even if it does, we know what to do. Students have access to reliable technology and strong learning services support and library to support their work. In the past my high school students used the learning center and now they

don't. ... [Perhaps students will] start to use our facilities now that construction is mostly complete.

Student Behavior.

Quality environment emphasizes seriousness, which translates into better dual credit behavior. High school students typically appreciate the up-to-date technology on [the college] campuses.

Yes, the room matters. I often shuffle students between two rooms [our classroom and lab]. But in the lab, that's where you notice students who aren't engaged in the class; they're the ones talking or on [social media] while the rest of the class works on the next assignment.

[Dissenting opinion:] I actually had more technology glitches while in class at the college than at a high school. The glitches caused pauses or breaks in student concentration with the unintentional *stirring of the masses*.

The effect of Student Preparation.

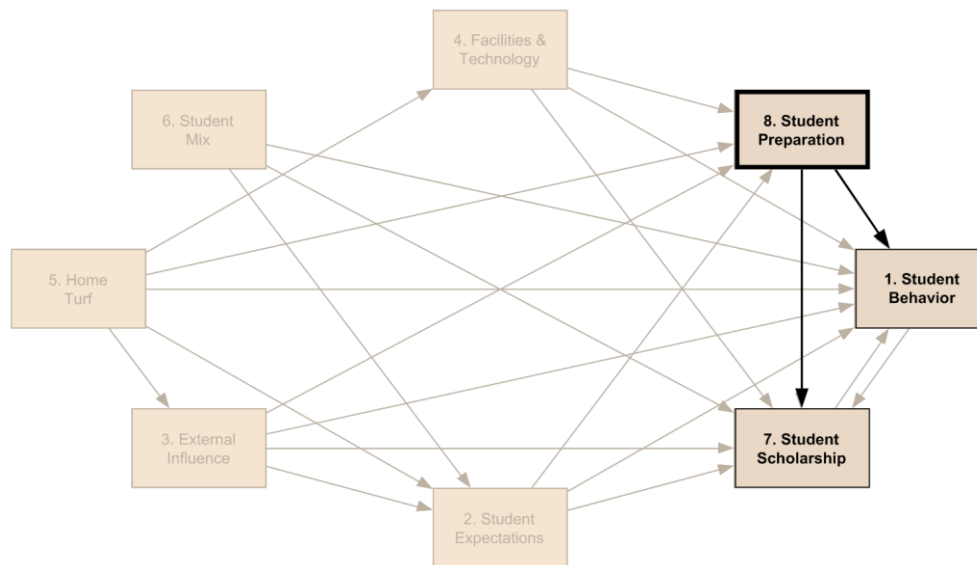


Figure 33. Student Preparation for college dual credit at SSCC.

Student Scholarship.

Preparation always goes into scholarship. Better preparation leads to better scholarship [and] better behavior I observe.

High school student often put off assignments to the last minute, don't keep up with the schedule... sometimes don't keep up with the calendar, don't take tests on time [and] ask for time extensions, which affects their grade.

Student Behavior.

The college environment tends to emphasize the importance of being prepared. Prepared students contribute positively rather than "playing." The better prepared, the better behavior I observe.

The effect of Student Scholarship.

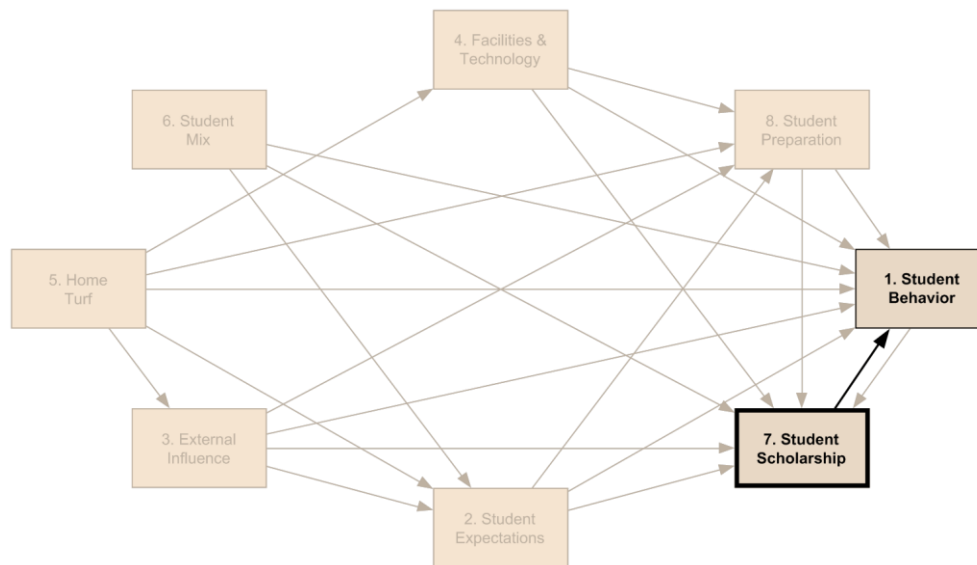


Figure 34. Student Scholarship for college dual credit at SSCC.

Student Behavior.

When dual credit students behave like college students, their intellectual level and, therefore, depth of scholarship improves. [Scholarship] provides motivation to behave.

The effect of Student Behavior.

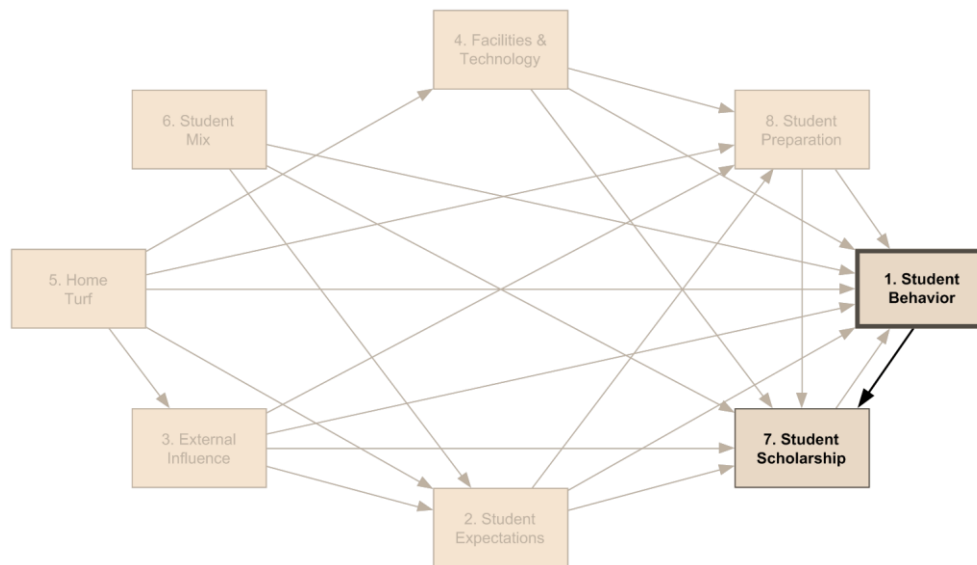


Figure 35. Student Behavior for college dual credit at SSCC.

Student Scholarship.

I'm thinking here of the success-breeds-success loop; scholarship leads to increased interest, and better behavior leads to increased scholarship, etc.

Note: The *success-breeds-success* quote in this and previous sections in the high school experience model for SSCC highlights the apparent model conflict between *Student Behavior* and *Student Scholarship*.

The High School Dual Credit Teaching Experience at LSCC

Identifying affinities.

The six affinities identified by the LSCC group, after renaming, were *Student Behavior*, *Student Personality*, *Faculty Fit*, *Student Expectations* *Facilities & Support*, and *Disruptions & Distractions*.

Table 20: *High School Environment Affinities and Related Card Comments at LSCC*

<i>1. Behavior (renamed Student Behavior)</i>	
Students not ready for class	Discipline issues
Students do not want to be here (already got acceptance letter)	Students arriving late
Rewarding when some do participate	Students are sleeping in class after lunch
Socialization	Talking students
	PDA (public display of affection)
<i>2. Personality (renamed Student Personality)</i>	
Lots of energy	Maturity level
Attentive	Active
Friendly	Lack of maturity
Consistent	Tired
How young are some of these kids?	Critical
<i>3. Faculty Fit in Organization (renamed Faculty Fit)</i>	
High School Environment.	Floater
Displaced	Intruder/outsider
Out of place	Not trustworthy by students
Dictatorial outsider	The visiting team
The enemy	Expected to pass all whatever it takes
Bigger than life savior	Social promotion
More likely to develop closer teacher-student relationship	Over respected
Quick	A staffing burden
Inflexible	Afterthought
	Not structured
<i>4. Expectations (renamed Student Expectations)</i>	
Challenging	Apprehensive
Disconnect from college	Thinking it's easier (dual course)
Kids nervous about college	Not ready/used to lecture
Knowledgeable	Not "real" college feeling among students
Expectations	Uncertainty
Unaware	Quite a few are not ready for college
Curious	

(Table 20 Continues)

Table 20, Continued

<i>5. Facilities/Technology (renamed Facilities & Technology)</i>	
Limited technology	No computer
Technology access	Limited resources
Chalkboards with nubs of yellow chalk	Smells
4' x 4' whiteboard	Restricted
Bring a bottle of hand sanitizer for extra credit (not me)	Mold smell
No library tour	No technology
<i>6. Classroom (renamed Disruptions & Distractions)</i>	
Interruptions by bell and PA	Announcements/interruptions
Loud buzzers	Vote for class president in my class
Constant interruptions	High school senior class t-shirts
Disruptive	Spontaneous
Loud	High school faculty heads in doorway
Loud	The bells and PA
Loud	Interruptible
School schedule conflicts with college	Music over intercom
A H.S. Employee won't leave (it was that teacher's room)	Intercom
Distractions	Reminders (need clarification on this one)
	PALs interruptions

Describing affinities.

Affinity descriptions are a woven set of quotes from the participants. The IQA method uses this process to tell the story of each discriminate piece of the mindmap from the point of view of those that experience the phenomenon.

Student Behavior.

“They would be in La La Land during class.” Students on the high school campus tend to have a hard time staying on task.

The discipline issues were not terribly bad, but at any opportunity they would get off track. Students seemed less interested. The thing is, you wanna love your job and share the things with them, but it is a fight to get them a little bit interested. For the most part they were not interested unless we did some kind of activity. If you get into an activity with them,

it was hard to get them back on track. A lot of times I would have to talk to them like a parent. I would have to stop class and tell them to listen, to pay attention. I had to redirect them a lot. I would have to repeat [things] two or three times before they really got it.

“They are chatty, talkative, and exuberant.” Socialization is a central theme in the behavior of high school students.

Their behavior was typical of high school students. Students behave as if they are in high school because they are on a high school campus. They approached it very casually as a rule. A lot of them did not take it seriously. There are a lot of relationships going on. The relationship of a peer group that you would see on a high school campus, they had been together all day long and in some cases years. They got distracted way too easily because they knew each other and they would just start conversations.

When they come into class, they want to continue the conversations they were having out in the hallway. There was a lot of talking that I had to control. They are chatty and pass notes, behaving like high school students. They would come in chatty after lunch, and it would take them a little bit to settle down.

[Students] felt as if they could take their phones out and use them at any time, [certainly] more than my typical students. The business with electronic devices, in general, is a problem.

“You can tell by where they sit in the classroom.” Sometimes it’s just a handful of students that can create problems in the classroom.

For the most part, students did behave very well; when I told them to do something, they generally did it. [However,] there are those few, perhaps four or five per class, they perceive that there's so much freedom they can kind of do whatever they want to. So they feel as if they're on their turf and they have a substitute teacher. They don't feel they have to be as dedicated to me because I'm not necessarily as interested in them personally as a high school teacher would be. The ones that sit in the front and the middle are engaged and perform well on their exams. [But, there are others] in the back and on the periphery that try to duck down and not be noticed. They are familiar with the room so they will go in and make themselves at home, lounge, and sleep in class. I've seen a lot of talking, giggling, sleeping, usually from the ones in the back. You would have to drag them back down and explain to them and tell them to pay attention.

“I had difficulty with their behavior, definitely.” For many faculty there are a myriad of discipline problems that interfere with teaching.

It was so tiresome to manage. There was always some kind of discipline problem. I felt like I had to discipline often. Their grades were excellent, but their behavior was not. There's always a lot more discipline that has to go on in a dual credit class. I think there is an outlet for bad behavior. You're going to have distractions. The problems I would say would be tardiness; they thought they could arrive at class any time they felt like it. Generally speaking you will continue to have students text, sleep, and come in late. I've found cheating in dual credit classes when I have not noticed it as much in my regular classes. I love the public display of affection. I've also had student putting on makeup in class.

“There are things you can do to make it less disruptive.” Faculty use different methods and techniques to seize control of the classroom.

I find that if you demand behavior from the very beginning, “This is acceptable. That is not acceptable.” I just put off an air that, “I don’t put up with it.” If they act out or need to go to the office for something, I just squash that. [We have all heard the phrase] never smile before Christmas. I certainly set clear expectations. I make a seating chart; knowing their names helps with control. I [keep the] seating chart in my mind simply to know the students, but I don’t foist that on [them]. I found in my last experience I had to give them a *three strikes and you’re out* rule. If they were disruptive or could not control themselves I would drop them or take them out of my class; so we get that settled in the first week.

I kind of allow them to remain a little bit on edge because they don’t know what college is, so I can go ahead and define it for them. I made much of the idea of kind of being a visiting scholar and let them be scared of that. Perhaps that has something to do with the way they behave. I treat it more like a workplace.

With the support of administration, the behavior is tempered a little bit. I worked with the administration, so I would know when disruptions were coming, homecoming, prom, etcetera. If I have a problem with the student, I go to the counselor and ask them to inquire into how serious the student is about being in the class; that usually takes care of it. You sometimes have to involve the registrar or the principal in talking with students.

“Usually, by the time we get to the second half of the semester everything has changed.” Mid-semester is a turning point for student behavior.

At the beginning of the semester they are much more talkative; it’s harder for them to settle down. I had to really come down hard at mid-semester. I don’t like doing that, but you could tell the difference. They

would start looking at each other to see how the others were behaving. By the middle of the semester when students were comfortable, their behavior improved. This has been a pleasant surprise with the student behavior; usually during the second half of the semester, there is a kind of rapport that I've established with the students. Students, who don't pay attention [and] don't take notes, their grades have suffered; they are more respectful, and they are paying more attention. It's a good lesson we all learn at one point or another. They are all more relaxed [and] more expressive. They are little bit more talkative [in a good way], they don't have control in the classroom like they did in the first half of the semester. [By the end] I have very good rapport with my students. They like it and feel good about it; they feel like they are in a situation where they can be more free. There are no major disturbances. Then I tell students, "I'm working with you, you work with me."

Student Expectations.

"College, in their minds, is the place you go off to *after* high school." Many students see dual credit courses on their own campus as not necessarily real.

I really think they expected this to be nothing different than the normal high school class. They compare these courses to their high school courses; it was not in their mind that they were in college. How could it possibly feel different if they're still in their own school? We had a cabinet in the back of the room with textbooks, so if a student forgot theirs, they could just get one from the cabinet. That, to me, was not realistic from a college standpoint. They had a support system that was beyond encouragement; it was enabling.

I did not feel like they treated it [the college class] with any more respect. Some students have already gotten their acceptance letter and

don't really care if they pass the class; they did not see a consequence. They were very casual and slumped in their chairs. Again, part of the high school dynamic was the expectation that most of them were going to take dual credit classes. I think many of them walked in there, and because I taught at a community college, they did not respect the class. They thought it was basically an easy course and would be able to breeze through it... easy credits. I would say that when a student takes their first dual credit class their expectations are wrong. They did not expect to have to use their books. They expect it to be simple, not *real* college. Every once in a while... students expect that this is going to be a fun time for them.

“The students were shocked when they would just get a zero if they didn't turn something in.” Dual credit students often have a difficult time adjusting to college expectations.

I had one student that was not doing her journal writing, but when she finally did, she wrote about how she made an A in AP English and did not understand why she was failing my class. She did not make the connection between not doing her work and not making A. Most of their high school classes, they admitted to me, were gimmes. They were given a few things to read and memorize and they were given As. Then they went on about their cheerleading, or did their football, or their other things. I had one student who had not handed in anything all semester; he was very respectful and nice and asked if he could turn in his work. He promised he could get it all to me by Friday. When I explained to him that the deadline was passed, and related that to his military experience, he sort of got it. But it was not related to anything he had ever heard in the past. There was an expectation of extra credit and leniency. I think it has to do with the high school teachers not being allowed to give below fifty [as a

grade on any assignment]. Not being prepared, the expectations that they have been exposed to as far as what was expected in school, period, was completely off the chart as far as what I expected. I don't think they are ready for [college work], and I don't think they recognize that this is truly a college class, so that is reflective in their emotional capacity. To the preponderance of them, the subject is alien.

“Depending on my tone, that’s college to them.” Since students, in many cases, don’t know what college is, faculty can define it for them.

[Some] don’t know what to expect. I see that across the board with our first-time-in-college students. I don’t think they even know what to expect because they haven’t been exposed to college. Students do not trust you [at] first; you have to build up trust. From the very beginning [they would ask], “How hard is this class?” or, “What percentage of the class fails?” They had heard I was very hard. “I’m worried about the class. I’m scared.” Those are the kinds of comments I would get on my survey at the beginning of the class. That’s definitely a factor; they go into it being scared of taking the class; part of that may be that a lot of them were first generation. [At] the introduction level, which is the first half of the semester, ... there’s a general amount of anxiety about what the course is going to be like and what will be expected. A lot of it has to do with the fact that students will not get grades until the mid-term. Students are expecting, I may be projecting on the students, but I think they are expecting a really sophisticated kind of a presentation from me. They may not know how to perceive of that necessarily, but I think they are expecting that, whatever that is in their mind. They expect more than what is going to occur or what they’re really going to get.

I think that they’re pleasantly surprised when they find out the work is really on them. It’s not that I don’t care, but if they failed, it

wasn't like I was going to be mad at them. They always wanted to know what they could do to do well in the class. It takes the first exam for them realize that this is the real deal. It's a big wake up call for them taking ... a subject that requires both left and right brain activity. It was a whole different world for them to wander into a high level, rigorous, ... structured course.

I consider myself versatile in how I teach, but typically I prefer lecture. I think a lot of the students as far as maturity, they haven't been exposed to lecture. While the group work is nice and has its place, I think lecture is something that is undervalued, not only in the collegiate ranks but undervalued certainly in high school because what they are given is tantamount to a worksheet or do it in a group. Many students will say, "You're one of the only teachers who lecture." To me that's shocking. We want the students to go off to a university, and that's what they're going to be experiencing [lecture]; they need to be ready and socialized to what a university setting is.

"Some of them are really trying, some are not necessarily and are just passing the time." There is a wide mix of students in dual credit courses from the perspectives of both preparation and diligence.

This particular group I was teaching had to meet some particular criteria to be in the class, not just anyone could take the class. At another high school anyone could take dual credit. The ones better focused, or about 5 to 10%, are trying to get the most out of their education. I had three years of wonderful, gung ho, hardworking students. However, one particular year these were kids that thought, "I'm going to get college credit, I'm going to do less work, I'm going to visit with my friends, have a grand old time, and make an A; because Mama said I'm an A student". I

find most kids really want to learn. If you challenge them, not intimidate them, then they really go for it.

There was a huge difference in what they expect and how they perform academically. They would hand in an essay that would have the letter *u* for the word “you.” They would not have homework ready, did not expect repercussions, and would be shocked when they had a very low grade because they had not handed anything in. At the end of the semester they would come up to me and ask, “Can you fix my grade? What can I do for extra credit?” And my response was, “I’m sorry, at this point there’s nothing we can do.” I would assign a reading, not particularly long, 90% would not have read the assignment. Almost no one took notes or printed out presentations. Their expectation is that I give them everything.

The only population I see where the expectation was different were students that were on scholarship or students that were going to go to a community college before they went off to a university; their academic performance was still really good. I was really pleased with them in terms of their performance academically.

Classroom Environment.

“It’s a real challenging environment, more so on the high school campus.”

Teaching on the high school campus requires flexibility.

It’s amazing anything ever gets taught, high school environment, high school behavior, high school attitude, high school activities. You have to be beyond understanding and be flexible to master this particular group of students in the high school environment. You have to have a sense of humor.

“It’s kind of a weird place; there’s always a tug-of-war going on all the time, there’s always something that comes up.” Administration, counselors and other teachers don’t see the college classroom as different from any other classroom on the high school campus.

The college does not take into account dual credit on the high school campus; they do not consider that when they prepare the schedules, [nor does] the high school take the college into consideration. Right now, for example, we’re debating final exam schedules; they have scheduling conflicts; I have scheduling conflicts. [Also], they wanted me to keep track of how long students were gone when they were out to go to the bathroom; I’m not doing that. Of course I would handle something like that on my own if the student was gone for a long time. I don’t need to be told to keep track. If they were late or absent, we were expected to let the high school know. I would tell them when someone was not in class. The school provided the textbooks, but I cannot count on them to distribute them on time or to everyone. I would have to send students to fetch the books. I would have to keep track of books. I wondered if they were going to expect me to break kneecaps if books were not returned.

One of the things that had been told to me in the beginning is that you don’t want to get involved with the parents. Sometimes parents do try to get involved, but I have no legal obligation to talk to them. You pull the confidentiality law. FERPA, it is gray on the high school campus. I can just talk to the students. That’s another benefit of teaching on campus; I don’t need to talk to parents.

I don’t need someone else coming into my classroom usurping my power. The counselor was a big part the problem. Counselors were constantly pulling students out of class. They would let the students get

away with things. I had a counselor that would poke their head in the classroom and yell at students if their heads were down; I handle that in my regular classes by just tapping someone on the shoulder or calling attention to it. This counselor thought they could walk into the classroom any time, for any reason ... until you put your foot down and tell them, “You have no right to be in my classrooms.” It took a little bit of that before they realized I was serious. I don’t think he was a bad person, I think he really cared. I think this was just his way of motivating students. “I thought, I don’t care if you are the superintendent; get out!” We finally had to start locking our doors.

I had a teacher tell me that I needed to hand out her handouts during the class. I didn’t feel like I had a choice, I did not want to get them in trouble. [Also], there was coach in the room, I was okay with him personally, but he distracted from the class.

“It was like cattle, like a herd, mindless.” Navigating the high school environment can be stressful.

So when I would get there it would be between periods, and I would have to walk a long way through all these high school students running through the hallway. I would get there and walk to my class among all of these high school students, and that’s just crushing. When walking through the crowd I began to think, “How did I ever make it through high school?” I’m not used to this mass group movement of people through a hallway. You would see PDA [personal display of affection]; teachers would ignore it. I saw a lot of things I would did not care to see.

“The interruptions and the bell system make it frustrating, but you get used to it.” Various types of interruptions to the class are very distracting.

Don't get me wrong, I'm a big proponent of extracurricular activities. I sponsor quite a few clubs myself; but at the end of the day, when it's time for education in my particular field, we need to be going over that, and the disruptions should be minimal. So we did have those interruptions and I did not feel it was within my realm to say no to that because we were at the high school. We had various activities. We've got PALS [Peer Assisted Learning Strategies]; I've got this extracurricular activity, early dismissal for test day, blood drives, state and government holidays, etc... someone would poke their head in looking for someone. Students would come in to do the prom king and queen stuff. The main interruption that I didn't feel like I had any power over were things like the cheerleaders or the football players would get called out to take a picture.

It was horrible; what I would count as a disruption would be anything from public announcements, standing for the pledge of allegiance, schedule changes like early dismissals or testing, all sorts of accommodations you have to adhere to. Fire alarms would be another disruption, fire drills. There were always these bells. There were bells that rang periodically, that was distracting to me but not to them. While I was teaching there would be these loud blasting announcements. They were not for my class because I was on a different...constantly changing... schedule. For about five to ten minutes we would have to wait, I could not talk over the music... it played during the entire break. I will tell you that very often they would come over the speaker and say, “Okay, all the people that are supposed to go to the pep rally, all the cheerleaders may be excused.”... [This] often occurs; especially during

seasons where they have a lot of disruptions, basketball, pep rallies; ... that was very distracting because I had cheerleaders and football players. There were a significant number of classes where they would come over the loudspeaker and tell students to get up and leave.

“The kids had no choice if they wanted to be included; but no one thought anything about them missing 45 minutes of class.” Interruptions cause loss of focus during class, which is loss of time.

The kids all had a basketball camp schedule the same day as the final, no one told me, and they all went to the basketball camp. So I had to give all incompletes and schedule the final for after the Christmas break. I thought, “When I’m on [the college] campus, class will have two and a half hours.” We’re going to only have an hour and half for the final [at the high school]. I had to split my final across two periods. Students would come in 10 to 20 minutes late coming in from PALS. Unfortunately, I built all of this lost time into my expectations.

When you’re about to get to the good point in the emphasis in your lecture, then there would be an interruption. I want the students coming and not thinking about anything else; it’s hard to focus on what we’re lecturing on. Any interruption can bring them out of the focus and back to their high school environment. Ultimately these things get in the way of educating students.

Faculty Fit.

“We were this *thing* that caused them a lot of extra work.” Oftentimes college faculty feel they are a burden to public school administrators.

Dual credit is just one of many components going on at the high school. You have to make sure you’re not a burden on the staff at the high school. I felt like the administration saw us as another unpleasant task they had to deal with.

Your class meets on Monday and Friday, [or] it’s one hour on this day and it’s two and a half hours the next time you come out. Institutionally, the way faculty were placed in their classrooms certainly felt disorganized.

Unless you went and approached someone for help, there was nothing. The secretary of attendance would assist me if I need to find out why someone did not show up for my class, even followed up with specific student reasons or written excuses. The librarian was very nice and helpful. It helped that I taught a class in the library. She saw me all the time. I always felt like I belonged when I was around her. If I needed anything it was just a matter of asking, and they would accommodate me.

“I kind of felt like the enemy.” Faculty are sensitive to their odd fit in the high school environment.

There was some jealousy on the part of other [high school] faculty on the high school campus. I think they felt trapped and resented that I could get away and was being held up so much higher. I did hear that some of the dual credit faculty were not necessarily well received because that cut down the number of students for the AP teachers. I can see why we would not necessarily be welcome. There was always this feeling of,

they would come in and say, “You need to do this,” like I was a high school teacher. I was like, “I’m not a high school teacher,” not that there’s anything wrong with being the high school teacher, but I’m not a high school teacher. “I’m here to teach a college class, and I’m not going to do all your high school bidding.” [The high school teachers would say], “Have them fill out this form; have them do this; have them do that.” I don’t have to do that at the college level. “If you want your high school stuff done, figure it out.” I never really talked to any of the teachers except my experiences with the football coach, which was for him to give me a dirty look and leave. I don’t think his opinion was positive of me being there. There is a certain feeling like we are stepping on other peoples’ toes.

“I was on loan there.” Often times faculty do not feel welcome on the high school campus.

I definitely had this outsider feel. At first they did not know me, and I felt like an outsider coming into an organization that I was not familiar with, and they were not familiar with me. From the moment that I walked through the door going through this sea of people to getting in the classroom and feeling like this was not my environment, I felt like an outsider, definitely not part of the group. On the high school campus I felt much more isolated. I never felt like any part of a culture. I did not belong there. But after four semesters of doing it, they got to know me and my pattern. I did not feel like an outsider in later semesters.

The principle could recognize me by sight. It seemed as if I was tacked on, almost like a substitute teacher at the high school; that was a feeling I had. I just showed up to my class and left. I came down and did my job. I would be given safe passage.

I knew a number of key people by first name, and I maintained a good relationship with them, including the head librarian, the desk librarian, and the counselor, but no one else knew my name. You have to be aware you're in that situation; then [you] try to be inclusive, understanding... You need your space, but you need to understand what's going on around you too. That's probably why I would go a little bit overboard trying to fit in. You don't go in there and say, "I need twenty copies of this." You ask for permission. I had no trouble making friends and acquaintances at the high school. At the other high school everyone was terrific. You build rapport with the administration. I went to graduations and performances to try to show that solidarity, but it never really happened. You certainly had to be flexible. Get over there and meet the people. I worked very hard at fitting in at the high school.

"I think students were little suspicious." It is unclear to students how college faculty fit into their environment.

Students are little unsure about your fit into the organization. Those students kind of know that they can use that to pressure faculty to give them a second chance. The unspoken thing, that dual credit is important, does play a part. Do you have final say over the student? It did take time to earn their trust. I congratulated them all on being district champions and having a good football team; it meant a lot to them, and it doesn't take that long.

Student Personality.

"Overall they are a good group of kids." Most dual credit students are full of enthusiasm and creativity.

Overall they were friendly. They were pleasant in general. They're funny. But they know they're good, they're smart, [and] they're in the class.

They're all over the map; some have lots of energy, and some want to nap. If you can build the right atmosphere, get them moving, they have a lot of energy. There is a refreshing enthusiasm...an excitement; they're involved in a way the college students are not. I give them a general concept where they come up with a creative presentation. They were required to integrate media, political satire, and PowerPoint. They used their wit, their humor, their personality, and their intellectual ability. I was fascinated at how they excelled.

There is some inattentiveness; I think it's because they don't really want to be there. I think many of them are apprehensive and suffer from low self-esteem, [and] they did not participate. For some, this is just passing time.

"It's just a different world." Many dual credit students do not move out of their high school mentality.

They are 17; I keep going back to that. There is a little bit of an immaturity there. Maturity level, again we are dealing with high school students. They're very mature one moment and the next moment there like, *ahhhhh*.

They just have a high school mentality, generally speaking, juvenile behavior. High school kids come to high school with high school thoughts. Students are more interested in what they saw on television or who broke up with whom. The boys were noticing all the girls. Girls were more engaged and responsive. High school students are younger and have no real life experience or basis on which to apply and understand this

information. The majority of students are not living an adult, real-world life. Some of them want attention; they are desperate for it. They need stroking and approval.

“A lot of them want be cool and fit in.” In order to fit in, high school students alter their behavior.

I see some students work and go to school, but they play that down to fit in; they don't want to stick out as different. When I ask a question, sometimes I have to really wait for someone to say something. They don't want to look smart; they want to be cool. So they behave as if they are not engaged, bored, disrespectful; that's really them trying to be cool.

“Students are unwilling to approach me.” High school students tend to be more muted during class discussion.

Students' personalities are typically muted on the college campus [as opposed to the] high school. They are not as free to be expressive... if anything, their personalities generally tend to be reserved. They don't feel as comfortable with themselves and their normal personality, at least in the beginning of the semester. They exhibit unassuredness in their behavior. They are not typically overly engaged; they don't ask lot of questions. Perhaps a little more reserved, also a little bit more energetic. They seem to project a false personality, not really being themselves because they're in a different situation.

Facilities & Support.

“The building and classrooms felt very much like high school.” The high school environment is typically not conducive to teaching a college course.

When we taught in the high school, it was horrible. The school smelled of either cafeteria food or mold. Generally, in most of the experiences I have had, the facilities have been poor to a fair. No keys to room, access problems. Generally the resources on the high school campus [are lacking]; the high school classes don't have what is needed for whatever innovative type of technology I'm going to use or that I would be using on a college campus. When you teach dual credit, you must make some adjustments. They are not getting the same thing. It was not the best environment... if I needed anything I needed ask for it.

“So I always had plan B ready.” Modifying assignments is necessary due to lack of facilities.

For example, my students are required, in a regular classroom, to do a massive book report. Dual credit students don't have access to the books... on the high school campus. For students to get to the college library would take more than a thirty-minute drive. I have to find different assignments for them to do. It's always a problem because you do have to modify a certain amount.

When you're on the high school campus with a whole group of the same class and you tell them they need to get to the library to work on the research paper, and they say they can't... should I penalize them for that? I cannot require that they leave the high school campus, so I'm changing the way of teaching when I make accommodations for that.

On the high school campus I may have a TV that's too small or may not have a projector. There was no computer, so any PowerPoint or video clips were not possible. I did not have access to the online library or the Internet. At the high school, some of the web sites are blocked; the facilities are older; there might not be enough computers for all the

students. The high schools are a lot more strict on what they will allow; like if I want to show a YouTube, I can't, and that inhibits me from being the best I can be. If I want to show some type of film pertaining to the subject, I had no access to that. So, it's typically lacking for the majority of my experience.

The thing on the high school campus is you don't have office hours. They aren't really going to come see you in your office because you don't have one.

“At the high school it was pretty much whatever I can drag in or hook up; that was my technology.” With the absence of technology on the high school campus, college faculty either changed lessons or brought technology with them.

It took extra thinking and processing to figure out how to make the class work. I had to redo lectures every time for this school because there was no technology to support what I wanted to do. If you wanted technology, you brought it with you; ... it wasn't set up for you.

Sometimes I used the cart with a projector and computer.

“Because my room was another teacher's room, there were a lot of things left in the room by that teacher, and they had ownership of the classroom.” Faculty feel uncomfortable when sharing space with a high school teacher.

One year I had great students, but they had me in a teacher's classroom; it was the teacher's office as well, so she was always there. She never bothered me; she never said anything; it was just a bizarre situation. Every once in a while students would look over toward her and comment and say something about the classroom or whatever. When I first started teaching there in 2007, I had to share a classroom with the

football coach. This particular high school has an intense football team. This coach did not want to share his classroom with me. It was not hostile, but the space I had to work with, as far as chalkboard space, was three feet by four feet. It was hard to set up the projector and screen in a way that did not infringe on the teacher's domain. [I] was told not to touch the desk, not to touch the wall, not to touch this, not to touch that.

“You’ll be in this class today; you’ll be in that class tomorrow.” Faulty find it difficult to become familiar with the environment when they do not have a permanent classroom.

The environment at the high school is usually one in which ... there are a lot of distractions in the classroom, largely because I’m not always familiar with the classroom. The facility was not accommodating to the number of students or the way I wanted to handle the class. The room was crowded, and students would leave their backpacks in the middle of the aisle because there was nowhere else for them to put them. Finally I was moved to another room where another teacher was teaching a dual credit class, and the facility was better. There is usually some kind of distraction with the facility, how to arrange the room, how to work the technology, etcetera. Classrooms were marginally adequate.

They just put you in any old room. One time I was in an auditorium; the next time I was in a teacher’s room during their off period. One semester I taught they had me in a big utility type room; every once in a while they would cart a bunch of computers in there while I was teaching. I’ve had to teach in a library, just an open space... every time there was library tour for another class, we would have to leave. One time I was put in a fourth grade classroom, and the technology was *uhhhg*. Eventually they moved me from the fourth grade classroom to a science

classroom. I taught in a room where they taught chemistry and probably several other subjects. I was teaching in what was like a theater or auditorium. We were in the back media room of the library, so we were out of the main foot traffic area. When we had a power outage once, we were stuck in the library.

Recently some of those things have changed... the facilities were much better because they built a new classroom building. Last year I taught at the new one [high school]; it's so nice. There is a separate facility for the dual credit classes on the high school campus. We now teach at a college / ISD joint facility. The facilities were perfectly comfortable, and I was provided what I needed; it's very nice.

Identifying relationships.

At the completion of the discussion on affinities, the researcher asked participants to indicate the direction of influence in each affinity pair using an affinity relationship table (ART).

Table 21: *Affinity Relationship Table for High School Dual Credit at LSCC*

The High School Dual Credit Teaching Experience at LSCC		
Affinity Relationship Table (ART)		
For each affinity pair, indicate the direction of influence by using a right arrow (>) indicating the affinity on the left influences the one on the right, a left arrow (<) signifying the affinity on the right influences the affinity on the left, or signify no relationship with <>.		
Affinity #	Influence <, >, or <>	Affinity #
1		2
1		3
1		4
1		5
1		6
2		3
2		4
2		5
2		6
3		4
3		5
3		6
4		5
4		6
5		6

#	Affinity
1	Student Behavior
2	Student Personality
3	Faculty Fit
4	Student Expectations
5	Facilities & Support
6	Disruptions & Distractions

The researcher recorded the direction of influence, if any was perceived, and the comments for each affinity pair. All ARTs for all participants appear in a single frequency table.

Table 22: *Combined Theoretical Interview Table for High School Dual Credit at LSCC*

Affinity Pair	Direction of Influence and Frequency		
	> Frequency	< Frequency	<> Frequency
1 - 2	0	9	2
1 - 3	0	11	0
1 - 4	0	9	2
1 - 5	0	5	6
1 - 6	0	8	3
2 - 3	2	3	6
2 - 4	6	1	4
2 - 5	0	5	6
2 - 6	1	5	5
3 - 4	5	2	4
3 - 5	1	3	7
3 - 6	6	1	4
4 - 5	1	4	6
4 - 6	2	5	4
5 - 6	8	0	3

Power cutoff for LSCC high school dual credit model.

Six affinities were identified in the LSCC high school dual credit teaching experience, creating 15 pair combinations. These 15 combinations could be perceived by participants to work in one of two directions; A influences B, or B influences A, leaving 30 possible ways to *cast a vote* in the system. Participants indicated a perceived relationship in 104 individual cases, while 165 cases were possible, 15 votes times 11 participants. The 104 is multiplied by the relative percent of one of the 30 vote

possibilities, or 3.3%. Any pair-wise relationship capturing less than 3.3% of the vote was excluded from the model. This percentage multiplied by the total votes was 3.46, meaning any pair-wise affinity combination not receiving at least four votes was excluded from the model.

Table 23: *Theoretical Code Frequency Table for High School Dual Credit Teaching Experience at LSCC*

<i>(Affinities in Descending Order of Frequency with Power Analysis)</i>						
<i>Driver</i>	<i>Outcome</i>	<i>Frequency</i>	<i>Cumulative Frequency (%)</i>	<i>Relative Cumulative Frequency (%)</i>	<i>Model Power</i>	<i>Relationship Explanatory Power (%)</i>
3	1	11	10.6	3.3	7.2	10.6
3	7	10	20.2	6.7	13.5	9.6
4	1	9	28.8	10.0	18.8	8.7
5	6	8	36.5	13.3	23.2	7.7
6	1	8	44.2	16.7	27.6	7.7
2	4	6	50.0	20.0	30.0	5.8
3	6	6	55.8	23.3	32.4	5.8
3	4	5	60.6	26.7	33.9	4.8
5	1	5	65.4	30.0	35.4	4.8
5	2	5	70.2	33.3	36.9	4.8
6	2	5	75.0	36.7	38.3	4.8
6	4	5	79.8	40.0	39.8	4.8
5	4	4	83.7	43.3	40.3	3.8

Note: Table is truncated at power cutoff for readability (see Appendix D for complete table).

The power cutoff suggests 84% of the model can be described using 43% of the relationships (13 of 30). Using this cutoff alleviated the model from any relationship conflicts.

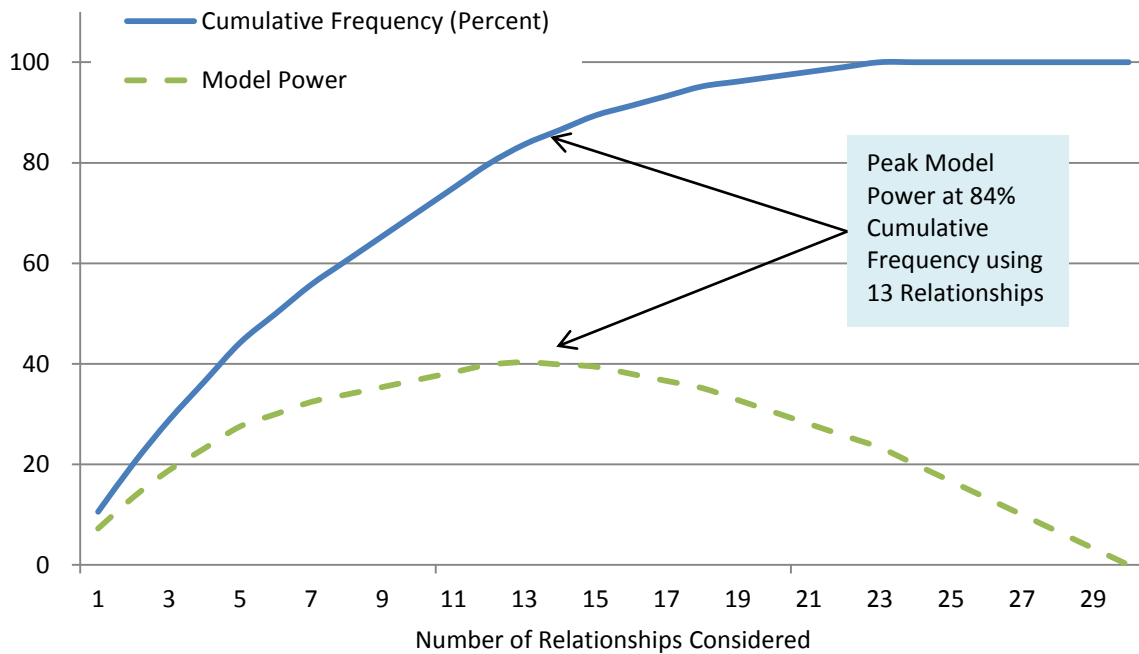


Figure 36. Power analysis for high school dual credit at LSCC.

A table was constructed to tabulate the frequency with which each affinity influenced others (serving as a driver) and the frequency with which each was influenced by other affinities (serving as an outcome).

Table 24: Driver/Outcome Frequency for High School Dual Credit at LSCC

		Affinities Serving as Outcomes						Frequency: Influencing Others
Affinity #		1	2	3	4	5	6	
Affinities Serving as Drivers	1							0
	2	x					x	2
	3	x			x		x	3
	4	x						1
	5	x	x		x		x	4
	6	x	x					2
Frequency: Influenced by Others		5	2	0	2	0	3	

Each affinity was placed in the diagram according to the difference between the number of times it influenced others (driver) and the number of times it was influenced by others (outcome); this difference is referred to as the affinity's *delta*.

Table 25: Affinity Delta Order for High School Dual Credit at LSCC

Affinity Name	Affinity #	Frequency: Influencing Others	Frequency: Influenced by Others	Delta
Facilities & Support	5	4	0	4
Faculty Fit	3	4	0	4
Classroom Environment	6	3	2	1
Student Personality	2	1	2	-1
Student Expectations	4	1	4	-3
Student Behavior	1	0	4	-4

The 13 relationships are represented by arrows, connecting the affinities in the cluttered system influence diagram (SID). Primary drivers of the system sit on the left and, as affinities become progressively weaker in delta, they become outcomes of the system and are situated further to the right in the diagram.

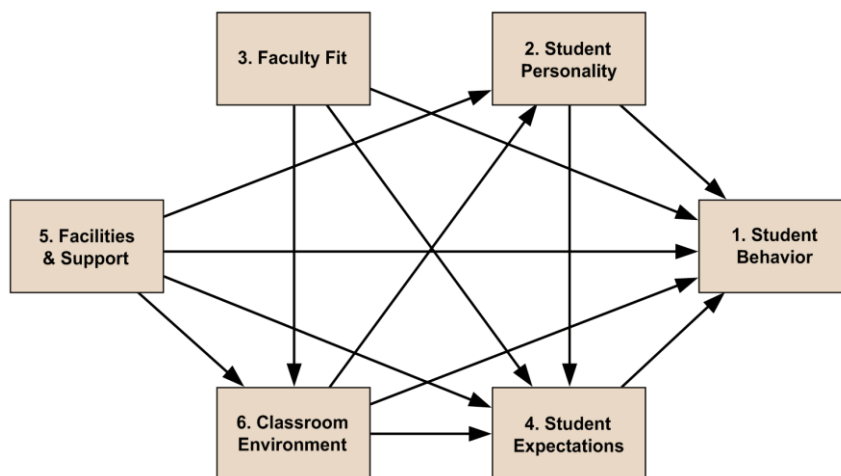


Figure 37. Cluttered SID for high school dual credit at LSCC.

Describing relationships.

Each relationship is described in the words of the participants. The researcher threaded the participants' comments together to capture the group experience of how affinities relate to one another.

The effect of Facilities & Support.

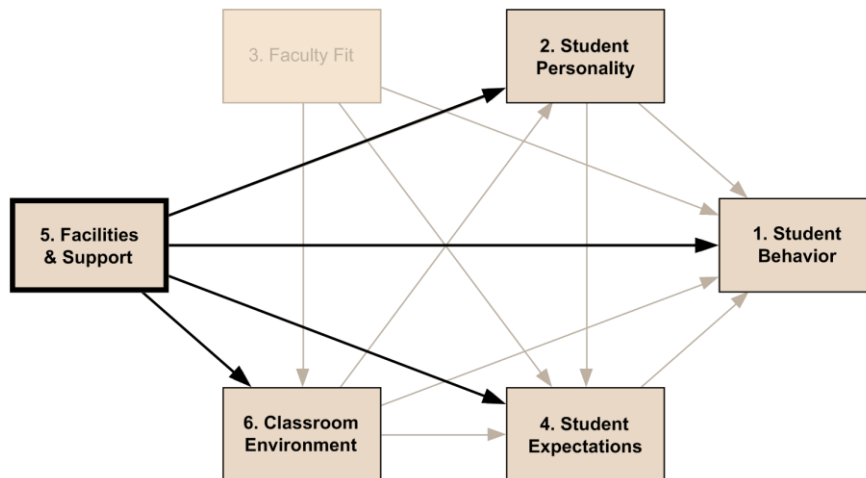


Figure 38. Facilities & Support for high school dual credit at LSCC.

Classroom Environment.

In the high school, lack of facilities/support can drastically reduce instructional effectiveness and harm classroom environment.

It does impact my class if I come in and chairs are rearranged or there are notes [on the board] from the last student council meeting that says, “Do not erase.” These aren’t big things; we usually figure out something else to do. It would be nice if I was in a bigger room; ... over crowdedness affects the class. The lack of facilities affects the environment. A bit more support or visibility of the administration, I think that would make a difference. If I’m fumbling around with some of the things that I need for class or don’t have the support then the environment

changes completely. On the high school campus, it's pretty easy for the facilities to affect the environment.

At the beginning you have 26 students, and at the end you have 26 students. Students don't drop on a high school campus. This makes a difference in classroom environment. As the semester wears on, the class does not get smaller, as it typically does on a college campus. [Students] are not allowed to drop; they did not get to make that decision. That alone makes a difference and how they approach their studies. They are the ultimate captive audience, even though some of them maybe should drop. After about two or three weeks there's nowhere else to go; they cannot filter back into their junior or senior English class. I'm not saying we need to abolish the system. The train has left the station and we're on it. If we're really serious about something other than the money and the numbers, we need to really take a hard look at this. What are they missing by rushing through this? I don't think we have been doing this long enough to know. Despite the taglines, I'm afraid the institutions are not about what's best for students. I like to think that individuals in the institutions care, but when we do things like this on a wholesale basis, it's questionable. There are elements of this that are great, and it's great for some students, maybe 5% of the high school students. We are currently at more like 15 to 20% of the high school population. Some of these [students] we bring up; others are being drug along by the hair.

Student Personality.

I can remember some things when we would have problems. I would always have students being helpful, not apathetic. You would always have someone say, "I'll go get them for you," or "I'll go get the librarian to open the door." There was never a sense of, "Oh good, we get a walk."

Again, because those facilities are so reminiscent of the high school ...a seat that they've always been in before... they seem to bring their same personality and behavior into the classroom. They act more like high school students than a typical college student would. Facilities probably affect the personality more.

Student Expectations.

Their prior experience with high school, that facility they are in, and their experiences there [impact student expectations]. Because they are not going into a new facility, all of their habits and things they are accustomed to tend to just continue to play out in a college course, which winds up being inappropriate for them and is not enough. I think they come with a preset notion of what the class should be like. I think that facilities not being there lower the expectations.

If I don't have the appropriate tools to demonstrate what I'm talking about, even though they've read the information, they will not be able to understand the application or analysis if I cannot demonstrate in a way that I'm used to or [if I] can[not] make it clearer for different learning styles.

I see very little relationship. In unique situations the lack of instructional support might cause students to take a lackadaisical approach and cease to prepare for class.

Student Behavior.

When I have to bring everything and remember everything ... it does have an impact on them. I don't think it means they behave badly, but I do think it changes the dynamic of the classroom. I'm less the authority figure. For example, typically my room was unlocked, but when it was locked I didn't have a key. That showed I was not the one in

charge. If things aren't working or the faculty member is not getting the support they need, I think that reinforces, within the students, that this is not something valuable or something they need to respect.

If the facilities are not conducive to learning... it's just the same as their high school. It was a classroom that they were familiar with, and they made themselves at home. I think, again, they're doing the same old patterns of learning that they have had in their high school. It's the same pattern, and it's due to their facilities. When the facilities aren't accessible, it makes it difficult when things don't go according to plan. And I still have to go in and set up a projector and materials.

Facilities affect student behavior. Usually this happens when there is a lack of support or facilities. I think greater support from the administration would change the status perception about me and make a positive difference.

The effect of Faculty Fit.

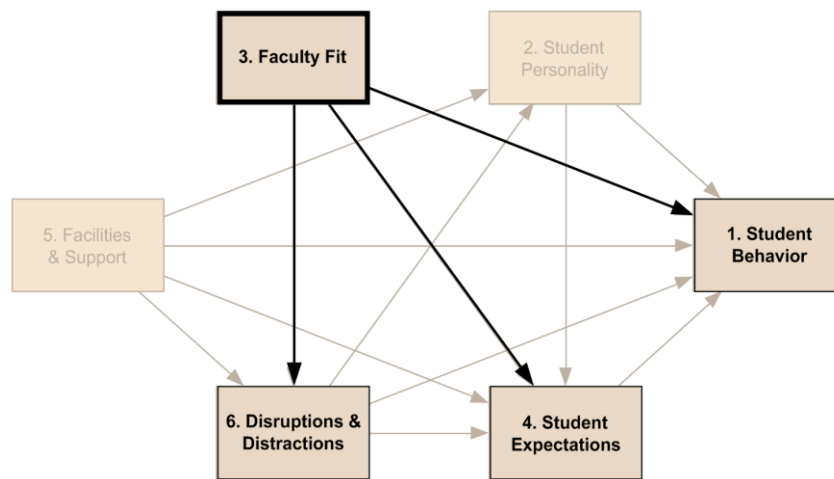


Figure 39. Faculty Fit for high school dual credit at LSCC.

Disruptions & Distractions.

Classroom environment can affect how faculty members perceive their fit in the organization. As a general feeling, feeling out of place [in the environment] as an instructor, somehow that's going to come out in my instruction. If I'm not comfortable in that environment, then it's not good for anybody. If it's not my classroom; the classroom environment is impacted by things like, "I assume we have chalk; every other time we had chalk, but now I don't." Students probably thought they could get by with this or that because of my lack of fit. If, for that day, my class becomes a storage room for old yearbooks then [it] affects if I can do group work or where we sit in the room. I can't ask for [a] room change easily. Sometimes the environment is neutral ground for both of us. Sometimes the environment is their environment. Classes taught at the high school result in college faculty members being nomads with no teaching area or location that they can claim as their personal location/home base. [I] feel banished to Siberia when teaching at the high school campus. They are basically considered as intruders invading the private territory of high school faculty members. They are on an island with no reliable

instructional support (AV equipment, screens, chalk and erasers, etc.). The high school informal organization clearly sends the message that the heathen, college faculty member infidels are unwelcome. Faculty members must learn and develop high school survival skills if they are to accomplish the mission of educating dual credit high school students.

I always get the bad schedule having to teach dual credit, therefore the students will pay for my mistreatment by the organization; take it out on the students.

Student Expectations.

It's possible there is a connection here. For example, I went in with some hesitation. I was so unfamiliar. I wasn't receiving a lot of help. I was a part of all that. I was an outsider coming in. I probably behaved in a way because of that, which might have affected their performance.

Students don't understand that once you pass a deadline you can't turn an assignment in any more. I think they feel that I'm not really part of the faculty members and that the counselor that use to poke his head in...has power to change grades. So I think in the end they feel like I won't really fail them; they won't be allowed to fail.

I think they expect me to be well educated, [and] if the fit in the organization is uncertain, that can play a role in their expectations.

Student Behavior.

I think they're a little unsure of what your fit is. Do you have final say over the students? They know I'm not part of that staff, and they are only going to see me for that little portion of time during that week. I do think it affects their behavior in the class because I'm not part of their world. They know you're an outsider coming in. I don't think they worry

about how I perceive them. I think the students are a lot smarter than we give them credit for; they know that perhaps they can get counselors to pressure faculty members to give them a second chance. The hierarchy, the unspoken reality that dual credit is important and the faculty member is there because of dual credit, that definitely plays a part.

When class is interrupted and they see that as, “Oh good, we get to quit.” That is a direct reflection of how I fit in on that campus. I’m an outsider, and they know there’s nothing I can do about it. They watch me knowing I’m kind of helpless. I guess I could make a stink but people that have, have had real problems. I’m not the only, exclusive authority figure in the classroom.

Because of experience you can handle behavior, [and] if you’re organization backs the faculty then you have fewer discipline problems. College faculty members with minimal teaching experience and/or serious personalities will resort to military-style discipline and demand perfect behavior in the classroom. Students will rebel and exhibit disruptive behavior. More tolerant faculty members will relax and interact more freely with students and create an atmosphere of mutual trust resulting in better student behavior and an enhanced learning environment.

Fit affects student behavior primarily. I had students prepare themselves consciously for when I came into the classroom, kind of distancing themselves emotionally and getting onto other students that are not behaving appropriately. As time has gone on, that has dwindled a little bit.

If they feel I’m not in an official capacity, sometimes I feel like a substitute teacher, like I’m not a real teacher, then I feel like they feel they don’t have to do what I say.

The effect of Disruptions & Distractions.

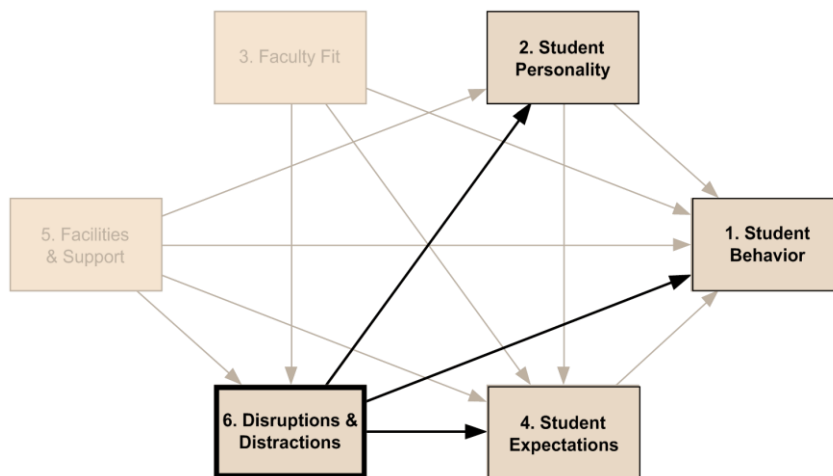


Figure 40. Disruptions & Distractions for high school dual credit at LSCC.

Student Personality.

The personality they bring to the classroom certainly affects the environment because it's associated with behavior. Some students tend to mimic other students; they see their classmates behaving and focused and ... see their peers doing well and they want to do well also. They know each other outside the classroom ... for years, ... which does make a difference in the classroom environment, i.e. how we work together as a whole, how they're working groups.

I can see certain personalities as the catalyst. I can also see how the environment can hinder or enhance a particular personality. Student personality directly correlates with classroom environment. Psychologically it's so similar, but they are the same person that they are in high school, rather than going through that transformation that some people do when they go to college.

Student Expectations.

We had a situation where, if students forgot their books there was one stored in the classroom; that takes an element of student responsibility away. One of our high schools buys their kids' books. That creates an unrealistic idea of what college is. They don't know that they don't know. In mass, everyone gets taken care of. I don't think they are bad people because they don't bring a paper clip, but no one has held them accountable. Successful classroom skills will create an environment that gives students the incentive to prepare. Prepared students will give the professor the incentive to create a successful classroom learning environment.

I think of how the classroom is set up or how modern, or not modern, it affects the classroom environment itself. It was their own environment, and I think they didn't take it seriously. This is what they're accustomed to, so going in, the expectations may be low. I don't think they were interested in being prepared. The environment is more disruptive when the students are not prepared.

Student Behavior.

I definitely think the behavior of the students change[s] when they know there might be interruptions or there are interruptions; then the students hold back. If we are trying to have a spirited discussion and people are called out or we stop to let someone else come in, then we lose that feeling of a community of learners, where everything is acceptable...it's hard to get back in that frame of mind. If the environment is such that other people hear us, then students may not be as receptive to [participating]; I think discussions or groups are where this really matters. [Students] think they can leave and go check in with their counselor or their cheerleader sponsor because this is downtime. In fact, I

consider it a part of active learning what we're doing. I see that environment as being interruptible; that costs, and possibly in the back of people's minds, that does impact student behavior.

The classroom environment established by the college professor is the most significant variable in student behavior and student success. Faculty have to develop an environment of mutual trust and respect. Faculty must be willing to hear, discuss, and demonstrate respect for student opinions and values. Faculty have to create an atmosphere in which students respect the professor and recognize the importance of maintaining a professional learning environment. It definitely helps if the professor has the ability to inject humor into the learning activities. Experienced, self-confident faculty with good people/soft skills are the ideal match for dual credit instruction. Faculty must be willing to say, "That is an excellent question, but I have no idea what the correct answer is. Let me do my research and share what I find with you." The ability to make a subject that is considered boring, exciting is a gift or talent that is essential for success in a dual credit classroom.

All of the disruptions and all of that, ... you get out of your groove when you're teaching, [and] you hear the buzzers. Then you have to stop. Meanwhile they start talking, because what else are they going to do? And I don't even blame them for talking, but I have to calm them down again. So it affects behavior from that perspective.

Just by the nature of them being on their home territory, I think when they went into my classroom it was almost like downtime, like it was a break from their normal schedule. "This is a college classroom, not your free period."

The effect of Student Personality.

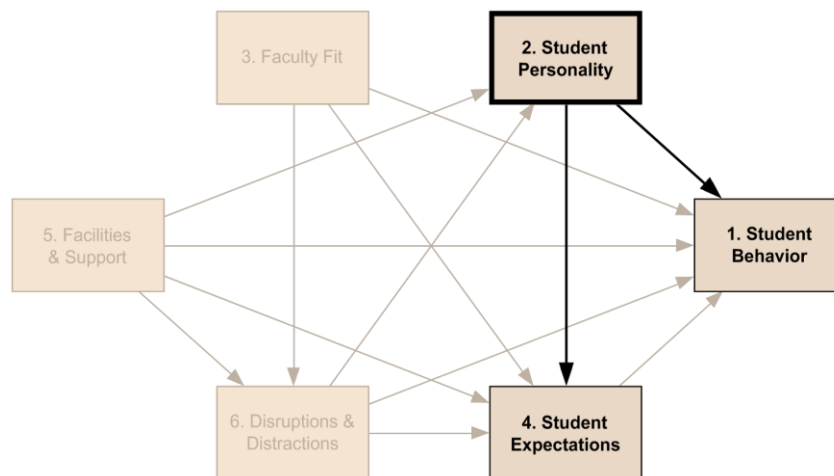


Figure 41. Student Personality for high school dual credit at LSCC.

Student Expectations.

The students are serious about the expectations; that's going to show through their personality. Some personalities are to take things more seriously and some are always out to lunch and may never be prepared. Student personality/ maturity and academic focus directly determine student preparedness. Students with motivated, success-oriented personalities will prepare properly for all classroom assignments. I think when a student has a more outgoing attitude they expect college to go well and the class to go well. If I have a student that's kind of negative then they tend to have a negative expectation of the outcome of the program.

Student Behavior.

I do think there's a correlation because I do think when we have a vivacious cheerleader, top student, a popular kid, or leader at school they're very comfortable; they're with a group of students that they all know. More in a negative sense, they're so confident in a class that they are cocky and are able to act out a little bit more because they know their audience. I think that's a personality thing on a high school campus.

Student personality does affect behavior. Many of the students that I teach right now at the high school have these really engaging personalities and are very funny or popular. ... A lot of them want to be cool and fit in. That kind of personality turns into disruptive behavior or not always acceptable kinds of behavior. Students with immature personalities will be late to class, disruptive in class, and perform poorly on homework and studying...students who act a little elitist, their behavior is to be very outspoken and challenge the professor. If I see bad behavior I tend to assign that to personality; kids that are more outgoing are going to chat.

If I ask a question, sometimes I have to really wait for someone to say something. They don't want to look smart. They are going for that, "I'm too cool for this kind of thing." It can come off as disrespectful, but they are really just trying to be cool.

The effect of Student Expectations.

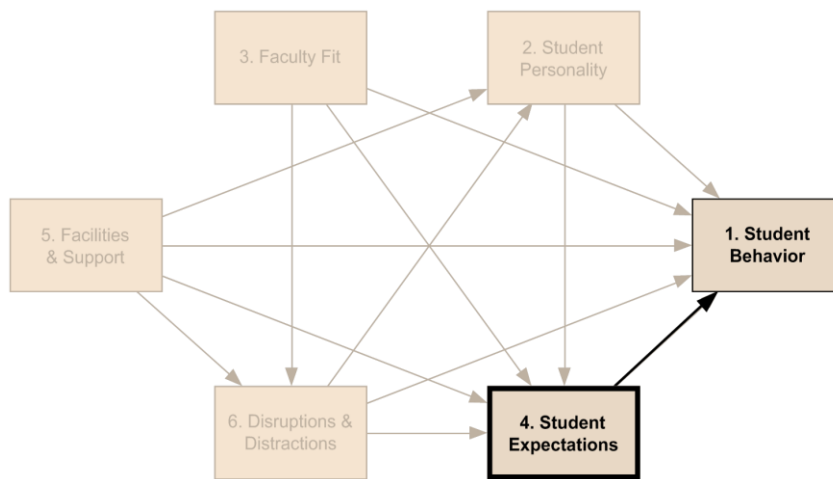


Figure 42. Student Expectations for high school dual credit at LSCC.

Student Behavior.

Because they are in a high school setting, their expectation is what it always has been. They don't know what the expectations are, or they have lowered expectations. Their expectations are incorrect; that's probably a better way to put it. So their behavior is that of being lackadaisical, not caring, or not turning in work and that of appearing bored or sleeping in class. They don't understand the expectations or [realize] that they're going to have to master this material and be able to do it. I think if they realized what the expectations were they might snap to that a little bit, maybe. I think they slowly start to get it, but it's very turtle-paced. If students come and are expecting the class to be easy and then they find out it is not then they can't act out in class. Or perhaps the opposite, they may shut down, and [have the attitude], "I won't do anything." Student expectations affect behavior, at least for the first half of the semester.

There is generational knowledge of dual credit now in the high schools. Students that know students who have been in dual credit, so

rumors go. The longer dual credit has gone on, the more I see it happen this way; the students know if they don't do their work they may have a fallback, as the counselor is going to call them in and they'll figure out a way to make it up... and you'll hear about it. I think the students play off of that from a preparation standpoint. Students who do not prepare at the college level will tend to be lost in class, and exhibit a higher tendency to misbehave.

It's not exactly the same way it would be in college, even though we tell them it is. If I'm having to explain to a counselor or principal or a parent how well they are doing or if they are not doing well in class, then they come to class more prepared or with their book.

If the students are properly prepared, which I can see between the juniors and seniors we have this year [because] the juniors went through an orientation class and the seniors did not. A special dual credit orientation was instituted because they [dual credit students] were having trouble getting faculty members to go to this high school because the student behavior was so disruptive.

The College Dual Credit Teaching Experience at LSCC

Identifying affinities.

The six affinities identified by the LSCC group, after renaming, were *Student Behavior*, *Student Personality*, *Faculty Fit*, *Readiness & Performance*, *Facilities & Support*, and *Classroom Environment*.

Table 26: *College Environment Affinities and Related Card Comments at LSCC*

<i>1. Behavior (renamed Student Behavior)</i>	
Those who need extra help do not always try to get it. Would rather fail	Want to turn work in late
Willing to meet after class to discuss grade – conference	Want to turn in late work
Much more respect from students	Discuss little
Participation without being silly	Reluctant to use help facilities
Students are serious/concerned about grades	Everyone has textbook (usually)
Discussion	Don't want to draw attention to HS status
Students are ready to go (lecture/take notes)	Other obligations more important
Absent	Ask for extra credit
Typically "invisible"	Show up late/leave early
Want to have excused absences	Won't read
Whining (but don't put up with it)	Excuses
Prepared	Reluctant towards group work
	Students afraid to talk in class
<i>2. Personality (renamed Student Personality)</i>	
Act shy	Eager young minds
Allow peer pressure	Independent students
Aware	Friendly students
Respectful	Apathy
<i>3. Faculty Fit into Organization (renamed Faculty Fit)</i>	
Freedom	(faculty at) Center of attention
Campus events	Rewarding – former students come to visit
Office Visits/Hours	Enjoyable
On schedule	
<i>4. Preparedness (renamed Readiness & Performance)</i>	
Skills lower than traditionals on some issues	Students not really prepared
Retention is a problem	Not familiar with technology
Many types of students	Usually high achievers
Students not prepared	10% A and ready students

(Table 26 Continues)

Table 26, Continued

<i>5. Facilities/Support (renamed Facilities & Support)</i>	
Student groups/organizations	Technology is part of activity
Computer labs	Plugged-in
Access to office and use of technology, podium, etc.	Library
Counselor/1st generation	Writing center
	Access to facilities
<i>6. Classroom Environment</i>	
Distracting attire	College Sweatshirts
Fun	Established
Not that many disruptions from outside (people/administration)	Quiet classroom
In control	Less disruptive
Relaxed	Engaging
Orderly	Respected by students
	Cell phones

Describing affinities.

Affinity descriptions are a woven set of quotes from the participants. The IQA method uses this process to tell the story of each discriminate piece of the mindmap from the point of view of those that experience the phenomenon.

Student Behavior.

“When I have them on the college campus, there is a kind of invisible waterfall that they walk through.” Most students in a class on the college campus seem better behaved and more willing to learn.

Generally speaking I would say behavior is a little different, well very different, in terms of what I have been exposed to. On the college campus my students were very serious... much better behaved; there are not discipline problems. They adhere to the behavior of the classroom. They are no longer able to get away with the same behavior. It's easier on a college campus because there's much more of a formal kind of response. When dual credit students are on the college campus they're more likely to

engage you. Also, in the summer, it worked really well. Again, that's a lot different because students taking classes in the summer are students that want to be there.

Students were serious about passing the class, and they participated. They're concerned about getting credit and what extra things they could do. Their concern was that their course would be on the transcript showing that the class was completed.

After about two weeks, when they got comfortable, everybody participated in class. In general, students engage with me, talk about theory, and ask questions. It's a very interactive class. The majority of the class was there on time and ready to learn. They are very delightful actually. I get more participation out of my dual credit students than I do my traditional students. In afternoon and evening classes dual credit students are a lot more lively and engaging. This can be a good thing or a bad thing; they can drive some of the older students batty. [However], often they sit in the back of the class and try to take a nap, but I'll wake them up. They are going to do the minimum they need to do and get out of it what they want.

The technology that students have access to tends to cause a problem with cell phones and texting. I had a student texting right in front of me. Cell phones are a big problem, [and it] escalates every semester. I know I cannot stop them from texting and behaving in that way. Cell phones are going to be on in any class; you just don't allow it. I may have to put policy in writing.

Every once in a while we'll have a student who feels like they've gone to another planet where there are no consequences. So it's like you let them loose, and they go nuts; that's not typical. I think the problem is that they were at school all day together and that translates into, "I'm still

in high school.” Only once on campus did I ever ask a student to leave. They came back to class next time and never made a comment, other than to be respectful after that.

“Many times we actually wind up with about 75% dual credit.” The ratio of dual credit to non-dual students sometimes influences the overall behavior of the class.

The mature students set better examples, challenge them [dual credit students] when their behavior is not proper, and challenge them when they question the requirements of the course, the rigor of the subject, etcetera. I think if you had a 50/50 mix that might be better. It’s supposed to be 51/49 now; that’s the policy. The closer to 50/50 we get, the more focused the students and the more they pattern themselves after the older students. Ideally you would have 75% adult students and 25% dual credit students. Based on my experience when it was a little bit more balanced, not just dual vs. non-dual, but even students from different high schools, I think it worked a little bit better. When I had just a handful of dual credit students in my regular college class, that [mix] worked better. However, if the mix is up to half and half, a lot of them know each other, so you have much more of a feel of a fully dual credit class; in that situation they talk a lot more, and it’s more like a high school environment. I find them a little more disrespectful, leaving class early; there’s more texting going on in class. Usually the traditional or older students are on one side of the room and the dual credit [students] are on the other side of the room; sometimes you can use that to your advantage; it can be an interesting dynamic.

In some cases traditional students didn’t necessarily like having to take classes with dual credit students. They don’t have the same interests; they’re not focused and will play if you let them. It’s not a good mix with the older, more mature students. The adults are very focused and very

serious, and they resent having those dual credit students in those classes. I've had some older students come unglued. I quote one of my students, "If you'll sit down, and shut up, and read the book, you'll pass the class, moron."

But now what I've seen is big segments of my regular class being dual credit. When they're in these bigger groups, I see a little bit of an attempt to revert back into what they were allowed to do back in high school. For example, students will want to hand work in late because they were absent, and when they are not allowed to, they don't understand why it's not accepted. They might have missed class for something like a dental appointment, and I'll explain to them that they made a zero on the assignment. They don't argue it, or I don't have parents calling me, but there is pushback from a behavior standpoint that, "I'll just do whatever."

I had a completely dual credit class on the college campus; it was one of the best classes, so there are some positives. Usually, I would wait about three to five minutes before I would enter the room to let them get settled. On your way to the classroom, you could certainly hear that the classroom was louder than a traditional college class. The students were definitely rowdier. Once we got settled in and started lecturing, it was fun.

[On the other hand], I had a dedicated on-campus dual credit class. I had trouble with that class; I don't think they were screened appropriately. Honestly because they were an entire group of students that were together all day, and in some cases knew each other since kindergarten perhaps; they would walk across the street together. Them just being together, they still had the whole dynamic going on, the familiarity with one another ... in a slightly less familiar environment for them. Maybe it was a little bit better in terms of disruptions, but to be honest, I'm not sure if it was with them being better or if I just felt like I was in a less chaotic environment.

If I have dual credit students on campus, and if there are only a few in the class, I don't typically know who they are.... I won't even know that they are high school students. On the college campus, if they don't dominate the culture, they will behave and perform like anyone else. It's also better if they are from different high schools.

These dual credit students, having them sprinkled in from different high schools and with the general population, that's what I consider the most conducive environment.... I completely cannot tell the difference.

In some classes the population was still overwhelmingly dual credit. I think what it comes down to, what was happening, they were putting too large of a percentage of dual credit students in the class. If the dual credit students dominate the culture, they are not nearly as focused. If they are mixed in my general population, I see absolutely no difference.

“I treat them like any other students and the syllabus is the contract.”

Oftentimes faculty do not know who dual credit students are in the class until later in the semester; they is nothing that clearly identifies them.

I don't think there's a reason to notice behavior of dual credit students on the college campus. I don't think there's that much different than the overall experience that I had with my regular college classes. There is nothing to indicate that you can pick them out. I cannot tell the difference; they are mature; they fit right in. They blend in, do their presentations; they perform just as well. I don't know they are dual credit until I get the sheets asking for their progress. They are typically invisible [to non-dual students]. Eventually the kids would figure it out [from the] cheerleader outfits and letter jackets.

I do not try to look at my roster and see who is dual credit and who is not. It is only after they have mentioned it to me or in looking at the

grades on the first exam [that] I may come across the fact that they are dual credit. Sometimes, when I report grades back to the high school at mid-semester, I'm surprised to find out that a student is dual credit.

Faculty Fit.

“You can teach any way you want.” When teaching on the college campus faculty feel more comfortable.

I know the classroom I'm going into; I'm familiar with it before I walk in there; I have my entire semester centered around what is going to happen in the classroom. There is a complete degree of control and comfort with the classroom environment. The interesting thing about lectures is students encounter the classroom environment in terms of how I arrange lectures and everything around that environment. I have a way of negotiating that situation, that environment. Here I can be the active teacher who talks to my class.

I'm totally ready to go on the college campus; there's no question about it. It's my turf; going away takes that away from me. There are no distractions that I'm not engaged with or aware of. It's not that big a deal individually, but cumulatively it adds up to being stressed and rushed and feeling out of control [on the high school campus]. Maybe control is the right word; I'm much more in control when I'm here on the college campus.

Of course I would rather teach on the college campus; that is much more comfortable to me, emotionally as well. I'm familiar with the campus. Being on campus feels like being at home. It's not as crowded, so you can go through the halls without feeling like we're herding cattle. I'm not as rushed. I don't have to be on top of my game to the point that if I forgot one minor thing that's going to screw up the next two hours. It

doesn't have to be in the bag, that goes in the car, that goes to the school, on the right time schedule. It's definitely much more relaxed. I'm more comfortable. I'm not trying to keep up with my purse because it's in my office; that makes a difference. If I forget something, I can just run back to my office and get it. I can print something in my office for them if I need to... on the high school campus we just don't do it that day.

“I'm Professor and nobody disputes my title.” There is no question as to the professor's fit in the college environment.

Certainly the hierarchy is clearer. You understand where everyone is. Students see that [hierarchy]. I know that ... I'm an important person here. I fit really well. I feel like I belong. I certainly don't feel like an outsider. I feel much more connected ... on the community college campus.

People are generally easy to work with. We have so many friendly people that work here. People want to help and people are excited that a new person is there. It's a good place to work, fine, [actually] great. I get a lot of support at the college. I love that we have so many opportunities to get involved and so many alternate activities for student success, like being an adviser to an organization, participating in a faculty symposium, or participating in campus events. I'm very involved with my department. I'm involved in many committees. I know I'm involved, I know people rely on me here. People know my name; I'm a member of a bigger community, either in my department or administratively. It's common knowledge that we are all invested in student success. There's a great camaraderie between us, faculty and staff.

I had a mentor on the college campus, and any questions I had I could ask her. She gave me a tour of the college and showed me

everything. My department chair has always been supportive; he listens to what we have to say. Our department is very strong.

Facilities & Support.

“The facilities on the college campus are seen as a positive.” On the college campus I have the facilities and support I need to teach my classes.

There’s this big institution where you get your degree and I’m part of this, and we are all connected to that through these facilities; I think the students pick up on that. The facilities on the college campus not only give you comfort but also give you freedom to move around and accomplish different types of teaching. There’s no question you can use the facilities as the macro version of what they’re doing in the micro classroom.

Anything I did not have on the high school campus, I did have on the college campus. We’ve always had very good facilities and classrooms. I love my facilities. I love my classroom. I can just go into my classroom here, and everything is set up for me and I know it’s gonna work. [It is] definitely much better than when off campus. I am familiar with where classes are and facilities are. We are still a little cramped on the college campus, but otherwise I’m completely satisfied with our environment. [However], often it was too hot or too cold. Just today, the classroom was extremely hot. The desks are not the most comfortable; even the student evaluations mention that. That distracts from the learning process.

I can access information on the college campus that I cannot on the high school campus... I had Internet access. Everyone has a smart podium and every room has a document projector, all the things I need to

teach. In recent years they have been willing to help us add the media we need in the classroom.

“The best thing for on campus students is that they have access to many resources.” Students and teachers on campus have access to the college library and computer lab.

I can utilize facilities that I have complete access to, like the library. So when I teach dual credit, the one extra credit assignment I give them is to go on the college campus to see the library. Our library staff is very supportive; whenever we want to take students and show them around, they're very helpful. [Students] got a tour of the library on the first day. Sometimes, especially new students, they need to meet with a librarian so they can be walked through the process a little bit more. They get to poke around the library. I can give students a library assignment, tell them to go to the library, do this or that, and report back to me...we are right there and can go in groups. If it's off campus, even if it's at an early-college high school, they don't have that library option. With my on campus classes, I take them to the library, [and] we have a library orientation. Students have access to the library and to the writing center. We have a wonderful writing center on campus; you can turn your work in online and have them check it for you; there's nothing remotely like that on the high school campus; the same thing with computer labs. The computer labs are good on the college campus, and the support people are there to help you. We have a student success center. We have study groups specifically for [my subject]. Yes, we have a lot of support here.

They have access to my office when they're on campus, much better than when we're on the high school campus. If I have an evening class, I will purposely have office hours after class. Although that's a

perennial issue now with email, they just consider that an office visit ...
uhhhg.

A student that comes on campus gets to be a part of the college environment. Student groups and organizations are not accessible to dual credit on the high school campus. If you're a successful student, and you want to, you can come to my office, go to student get-togethers, and other things we do on campus for students. For students that are on campus, I post on my [course web] page when student organizations are going to meet. On the college campus students will seek you out and let you know what's going on. Students miss out ... if they're not on our campus.

Student Preparedness.

“I see the attitude of, ‘I’m an A student, I should be making A’s. Why are you not giving me A’s?’” Many students are not academically prepared for college classes; they think classes are too hard and it is the teacher’s job to accommodate them.

Students still come not knowing what they need to be successful. It’s not that I can’t engage them; it’s, what am I doing to engage them? I can get them to do a ten page paper, but they’re just going to go through the motions and do an adequate job. I find many want to get the credit and get out. I see a lot of apathy; that’s training from high school where they get a C for not doing a damn thing. That’s not to say they can’t make A’s. They seem today, not confrontational, but they will look at me as if they wonder why I am not accommodating them. They’ll say, “I missed the assignment. Is there any way you can give it to me or give me your notes?” The expectation of dual credit students is that I’m there to make it easy for them to pass the course. They’re just checking off the boxes, getting nothing out of it from a scholarly standpoint. That to me is probably the biggest fault I have with teaching dual enrollment.

They would say things like, “My teachers at the high school gave me everything. She gave us the handouts,” and then they asked, “Do we really have to read this book?” Some still thought of this as a high school course and that I would give them everything. They want to be told what will be on the test. And this is not a *what-will-be-on-the-test* class. They don’t understand that the responsibility is on them to read everything and decipher what is important. I would have some sleeping in class and then ask me to go back and cover the material again. They would want to make up work at the end of the semester. The students expected to have points given to them. Students say, “This class is too hard.” I say, “Why is it too hard?” They say, “You said all this in the lecture, but it wasn’t on the test.”

I tell them the final is comprehensive and that worries them. I tell them, “Print the outline, read the chapter, and make notes while you go over the outline; then when you come to class and listen to the lecture it will make more sense,” but they still might not be able to connect the two. My dual credit students do engagement stuff so well because they’ve been brought up on *do a project with a poster, do a dramatic reading*, things that are high on the student engagement scale, but perhaps not on the academic rigor scale. I don’t mind doing those things if after that they can write me a persuasive essay on why the activity was beneficial to them. Most of my dual enrollment students can do the project beautifully; they cannot then sit down and do the critical thinking, analysis, and persuasion that I would like to get them to do.

They would challenge me on my attendance [records] and whether they had turned something in or not. Many times I have to show them what their grade will look like with the zeros for what they don’t turn in; it scares the [&%#!] out of them.

“Again, it’s that 10 to 20% is what you get that is good and the other stuff is like ‘wow, geez, really?’.” Faculty’s first impression of dual credit students, when having a conversation, is that they seem prepared; however, they often discover writing and grammar skills are lacking.

Across the board they are smarter than your average kid, a better prepared kid than your average high school student that is not in dual credit; they’re probably a step above that. The students seem smarter on the surface, and they hope to God you don’t ask some question because they don’t want to be embarrassed in front of the college students. So they sound witty and make jokes in the course of a discussion, but then, when I see them individually on a writing assignment, their skill level it is very retarded compared to what I expected, based on what I saw on the surface. Their writing is not as sophisticated as their personality when they come across in a speaking situation. That does not seem like a maturation issue; otherwise, they would not be able to carry off the bombast of their personality. Generally speaking students at the college for the very first time are not ready. The writing, the grammar, the level of thought, the depth of thinking is not as profound or deep as it was when I first started teaching nine years ago. I think they’re just as prepared as anyone else; some are phenomenal, and some are not. Everyone is kind [of] on the same level. Dual credit students are just like traditional students, not particularly well prepared. There is a higher ability to think critically. They’re really on top of things, very attentive, usually taking lots of notes, not typically disruptive.

Their reading skills were not up to par, and you could tell by the way they responded on short answer questions. Writing is pathetic, spelling is extremely bad, subject-verb agreement, I don’t know how they mastered the reading and writing test component to get into the class.

How is that even fair of me to say to them, like I would say to a traditional freshmen, “Remember back in your junior year in high school when you did your big research paper?” ... they don’t know what I’m talking about because that didn’t happen. They don’t have that solid background that I think is just crucial. I think they are missing something that they need. It begs the question, if they aren’t [missing something], we should take a look at what they are doing in high school. I used to be able to think, “They’ve gone through this process at least a couple of times even if they don’t remember the fine details of it.” That is no longer the case. And then I think, “They didn’t write their junior and senior year in high school.” They are a lot more technologically illiterate than we give them credit for; they know how to text message, but they may not know how to use learning tools, and the first time it doesn’t work, they quit.

Teaching to the test and always letting students know what’s going to be on the test is not preparing them to be in college. I think standardized testing and No Child Left Behind, like so many government initiatives, has done us a great disservice. I wonder, “Are these really the students that ought to be in a college class?” This is way, way too early in my opinion. Students are not prepared.

“They just throw all kinds of stuff on the paper and hope something sticks.”

Many dual credit students do not listen in class and tend to have poor writing skills.

They write the few words that are on the board, but they don’t understand what they’ve written because they don’t listen to what is being said and take it in context. Retention of material is always a problem. The one paper I have them write ... I’m doing more correction on simple sentence structure, grammar, and punctuation. The essays that I have seen from 2002 moving forward have progressively gotten worse. They did not do too well if you compare them to the average, traditional student.

They don't understand that deadlines are deadlines. I have students using the excuse of not having a good computer for not turning in their work. I have had some students come to class without having done their project [and the students that] did poorly on the first test... I have not seen them since.

Student Personality.

“Dual credit students have much more of a freedom about accepting new ideas; that's most of them; I've noticed that more and more.” Most dual credit students are respectful and excited to be on the college campus, and open to new ideas and cultures.

I've noticed that dual credit students tend to be much more respectful of other cultural attitudes, and so their personality is softened and reserved, open, willing to accept other cultural experiences and attitudes. The general population of students, in comparison, has no way of looking at the world analytically; they are much more black and white. I find most of the dual credit students on campus are respectful and ... very polite. They are normal and good and want to be good. I enjoy having them in my classroom. High school students today, this was not the case when I was in high school, they come from a place where they do get a lot of cultural awareness training. In a sense high schools, I think, attempt to promote social acceptance.

Most of them come serious minded, ready to work, and they appear to be more engaged by observation. They are excited to be here ... motivated, and confident. I'm always glad to see them in my class because I'm expecting them to be attentive and the high performers. Most of them seem to take it more seriously as a college class. Instead of

accepting it as it is, ... they will go ahead and challenge me, and it makes for better discussion ... beyond the information presented.

It's still novel enough as a concept I think, it's still *gee whiz, cool*. It's almost like when you were on year book and got to go off campus when other students didn't; it was like we had a pass. I think they like that from a personality standpoint, that they are included. Not that they wear it on their sleeve, but on the inside it does make them perhaps try a little bit harder.

“Student personality is reserved, muted.” Some dual credit students are intimidated being on the college campus; this tends to mute their personality.

In general their personality on campus is shyer. I'm just now getting my students to talk and we are in October. Dual credit students, while on campus, do tend to be more timid, however, a lot more attentive. It's different because the peer pressure is different. In high school it's more a matter of “Don't embarrass yourself.” On the college campus it's not wanting to solicit any kind of unwanted access to a world that they're not familiar with. We said personalities were muted earlier, but maybe completely off personality wise on the college campus. They're really kind of shut off.

They are very intimidated at this point. I think they feel like, “Everyone knows more than I do,” so their personality is not going to blossom in the classroom. I have a student right now who writes great papers and wants to talk after class, but will not react to anything during class. ... The instructor is the only one they have a connection with. ... Dual credit students on a college campus don't trust everybody and everything around them so much; they tend to not want to get together with students they don't know. It's hard to get them to interact with

someone they normally wouldn't; they're younger, there's that look-up-to-the-older-person mentality. When I get them to form study groups, I may have to initiate that for them, or they may just stay together when they are in the classroom. I tried to give them opportunities stand up in front of the class and present. A lot of them are nervous about giving their presentation. I would try to help and reassure them; everyone gets nervous.

Classroom Environment.

“[Students are] ordered, controlled, and normally respectful.” Typically the classroom environment on the college campus is more controlled and comfortable for faculty.

My classroom environments are wonderful. I'm more comfortable in that environment because I'm more familiar with that. To me this environment is the norm. I have complete control over the environment; I'm in control of the class. No one interrupts class when I'm on the college campus. My policy is more general about being courteous, encouraging students to consider other people and be thoughtful toward their classmates and me. “I expect you to be adults and courteous to others.”

[On the other hand], I have had people come in and repair equipment in the middle class. That's an issue with classroom availability; we're bursting at the seams, and there's no other time for them to fix it. I had a bad experience with a [colleague's] class of dual credit students on the college campus; the students were running up and down the halls.

Identifying relationships.

At the completion of the discussion on affinities, the researcher asked participants to indicate the direction of influence in each affinity pair using an affinity relationship table (ART).

Table 27: *Affinity Relationship Table for College Dual Credit at LSCC*

The College Dual Credit Teaching Experience at LSCC		
Affinity Relationship Table (ART)		
For each affinity pair, indicate the direction of influence by using a right arrow (>) indicating the affinity on the left influences the one on the right, a left arrow (<) signifying the affinity on the right influences the affinity on the left, or signify no relationship with <>.		
Affinity #	Influence <, >, or <>	Affinity #
1		2
1		3
1		4
1		5
1		6
2		3
2		4
2		5
2		6
3		4
3		5
3		6
4		5
4		6
5		6

#	Affinity
1	Student Behavior
2	Student Personality
3	Faculty Fit
4	Readiness & Performance
5	Facilities & Support
6	Classroom Environment

The researcher recorded the direction of influence, if any was perceived, and the comments for each affinity pair. All ARTs for all participants appear in a single frequency table.

Table 28: *Theoretical Code Frequency Table for College Dual Credit Teaching Experience at LSCC*

Affinity Pair	Direction of Influence and Frequency		
	> Frequency	< Frequency	<> Frequency
1 - 2	0	7	4
1 - 3	0	9	2
1 - 4	3	7	1
1 - 5	1	6	4
1 - 6	0	7	4
2 - 3	0	4	7
2 - 4	4	6	1
2 - 5	0	3	8
2 - 6	2	5	4
3 - 4	7	1	3
3 - 5	3	3	5
3 - 6	8	1	2
4 - 5	1	5	5
4 - 6	4	1	6
5 - 6	9	0	2

Power cutoff for LSCC college dual credit model.

Six affinities were identified in the LSCC college dual credit teaching experience, creating 30 pair combinations. These 15 combinations could be perceived by participants to work in one of two directions; A influences B, or B influences A, leaving 30 possible ways to *cast a vote* in the system. Participants indicated they perceived a relationship in 107 individual cases, while 165 cases were possible, 15 votes times 11 participants. The 107 is multiplied by the relative percent of one of the 30 vote possibilities, or 3.3%. Any

pair-wise relationship capturing less than 3.3% of the vote was excluded from the model. This percentage multiplied by the total votes was 3.57, meaning any pair-wise affinity combination not receiving at least 4 votes was excluded from the model.

Table 29: *Combined Theoretical Interview for College Dual Credit at LSCC*

<i>(Affinities in Descending Order of Frequency with Power Analysis)</i>						
<i>Driver</i>	<i>Outcome</i>	<i>Frequency</i>	<i>Cumulative Frequency (%)</i>	<i>Relative Cumulative Frequency (%)</i>	<i>Model Power</i>	<i>Relationship Explanatory Power (%)</i>
5	6	9	8.4	3.3	5.1	8.4
3	1	9	16.8	6.7	10.2	8.4
3	6	8	24.3	10.0	14.3	7.5
3	4	7	30.8	13.3	17.5	6.5
2	1	7	37.4	16.7	20.7	6.5
4	1	7	43.9	20.0	23.9	6.5
6	1	7	50.5	23.3	27.1	6.5
5	1	6	56.1	26.7	29.4	5.6
4	2	6	61.7	30.0	31.7	5.6
6	2	5	66.4	33.3	33.0	4.7
5	4	5	71.0	36.7	34.4	4.7
2	4	4	74.8	40.0	34.8	3.7
4	6	4	78.5	43.3	35.2	3.7
3	2	4	82.2	46.7	35.6	3.7

Note: Table is truncated at power cutoff for readability (see Appendix E for complete table).

The power cutoff suggests that 82% of the model can be described using 47% of the relationships (14 of 30). Using this cutoff alleviated the model from any relationship conflicts.

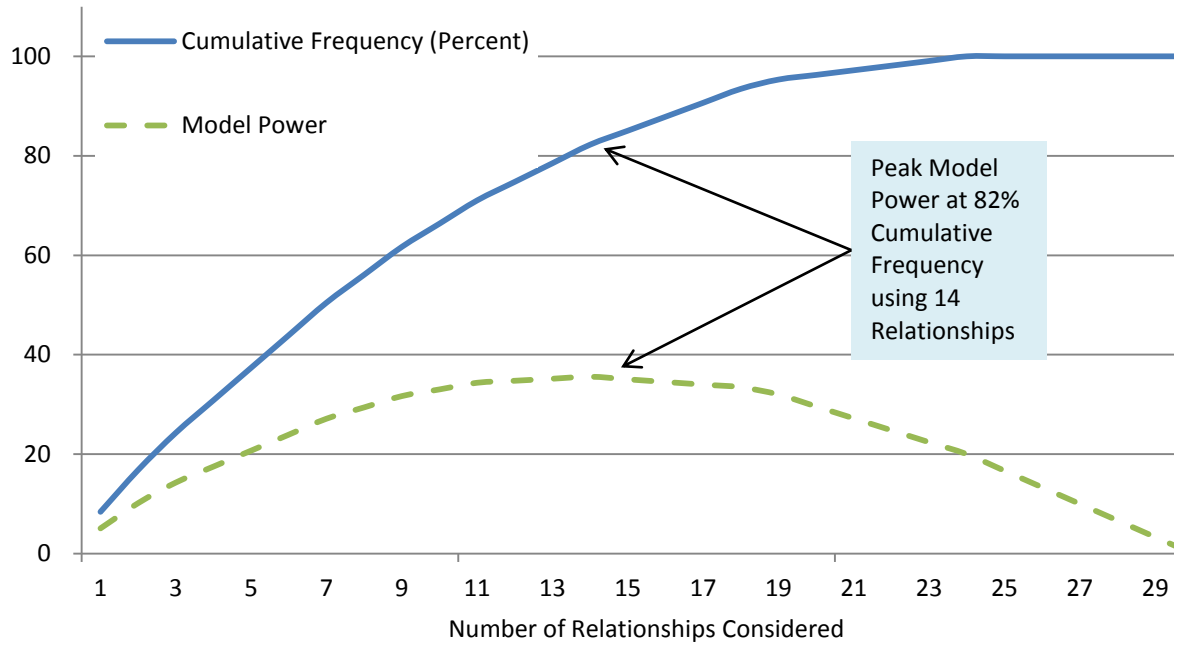


Figure 43. Power analysis for college dual credit at LSCC.

A table was constructed to tabulate the frequency with which each affinity influences others (serving as a driver) and the frequency with which each is influenced by other affinities (serving as an outcome).

Table 30: Driver/Outcome Frequency Table for College Dual Credit at LSSCC

	Affinity #	Affinities Serving as Outcomes						Frequency: Influencing Others
		1	2	3	4	5	6	
Affinities Serving as Drivers	1							0
	2	x			x			2
	3	x	x		x		x	4
	4	x	x				x	3
	5	x			x		x	3
	6	x	x					2
Frequency: Influenced by Others		5	3	0	3	0	3	

Note: Shaded cells indicate potential conflict.

Each affinity was placed in the diagram according to the difference between the number of times it influenced others (driver) and the number of times it was influenced by others (outcome); this difference is referred to as the affinity's *delta*.

Table 31: Affinity Delta Order for College Dual Credit at LSCC

Affinity Name	Affinity #	Frequency: Influencing Others	Frequency: Influenced by Others	Delta
Faculty Fit	3	4	0	4
Facilities & Support	5	3	0	3
Readiness & Performance	4	3	3	0
Student Personality	2	2	3	-1
Classroom Environment	6	2	3	-1
Student Behavior	1	0	5	-5

The 14 relationships are represented by arrows, connecting the affinities in the cluttered system influence diagram (SID). Primary drivers of the system sit on the left and, as affinities become progressively weaker in delta, they become outcomes of the system and are situated further to the right in the diagram.

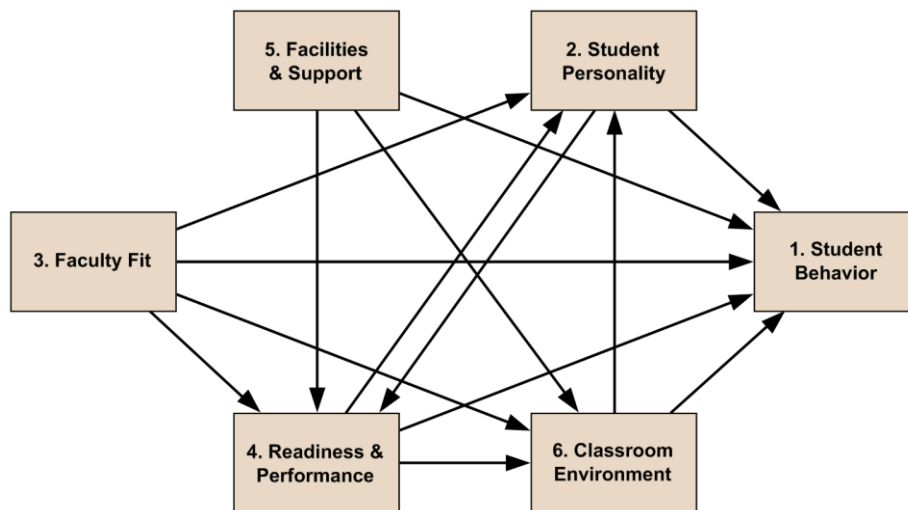


Figure 44. Cluttered SID for college dual credit at LSCC.

Describing relationships.

Each relationship is described in the words of the participants. The researcher threaded the participants' comments together to capture the group experience of how affinities relate to one another.

The effect of Faculty Fit.

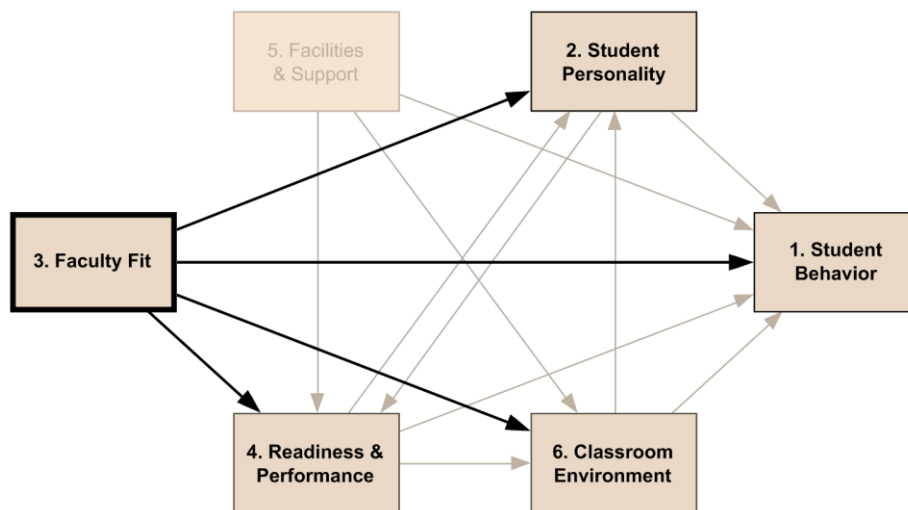


Figure 45. Faculty Fit for college dual credit at LSCC.

Readiness & Preparedness.

My feeling, that I fit, probably evokes from them a desire to be prepared and probably evokes a higher expectation from me. It's a bit Machiavellian of me to say, but fear is a good motivator. Because you're college professor teaching x class at x level there is an expectation of the preparedness a student will have coming into the class. They have a sense that because I am a full-time faculty member, they have to be prepared. High school kids see me as an active part of this organization, and I think it does impact their expectation or preparedness.

Student Personality.

Faculty members' experience and teaching skills will directly affect student behavior. Dual credit students here on campus definitely see me as high up on the tier of this organization... so they do tend to be more respectful. I'm able to give off the vibe of what a college professor is supposed to be from a collective consciousness definition.

Classroom Environment.

Wherever the professor fits in the academic arena can affect the environment of the classroom; I've seen it. I can either modify or rely on the classroom environment because of my fit in the organization. Professors that are higher up in the ranks have a different atmosphere in their classrooms; I think that it just comes from teaching a long time.

Fit definitely affects the environment. I know that classroom. I know the machinery. I know the system. So I felt much more comfortable. Fit gives me control over [the environment]. Where you are in the organization as a professor, you can definitely influence the environment with your personality.

Student Behavior.

The students' behavior is different because this is my comfort zone. Faculty members feel a little less threatened on campus; feel more at home. That fit is apparent. I'm the one that tells them where things are as opposed to the other way around [on the] high school campus; I know where things are [here]. It did make a difference because I went in with much more of a sense of authority. I knew that classroom; I had been there many times. I wasn't having to try to figure out the machinery. I didn't look lost, so they took me more seriously.

Where I fit in as college professor on a college campus could affect student behavior if they don't feel like I am giving them what they want. For example, I gave a review sheet and it wasn't as detailed as what they were used to getting at the high school. That upset the students, and they said they felt lost.

How I feel connected [to the college campus] will affect the way students react and behave. There's no doubt about that. For example, I can point to my office; that's a pretty important staple of the overall organization, it is present, physical, and there, right down the hallway. I am a presence on the college campus, and they behave according to that.

Because I'm well established at the college as an English professor and there are even pictures of me on the wall at the writing center, the students are like, "You're [the] person on the wall." I think I'm very well established, so they are very likely to do what I say. They're much more likely to behave; I'm the professor. On the high school campus, there's a sense that they can go talk to someone else and overrule you. On a college campus, while that's still possible by having to talk to the chair and then talk to the dean, they are more intimidated, not that I want them to be intimidated.

I am kind of making an assumption, I don't really have any evidence of it, but the more comfortable I am in the organization, the better relationship we are going to have in the class. As I get more comfortable, they get more comfortable, and they are just more engaged.

This was my second semester teaching on the college campus and a lot of the faculty members did know me. My mentor and the other faculty members in the organization made me feel welcome.

The effect of Facilities & Support.

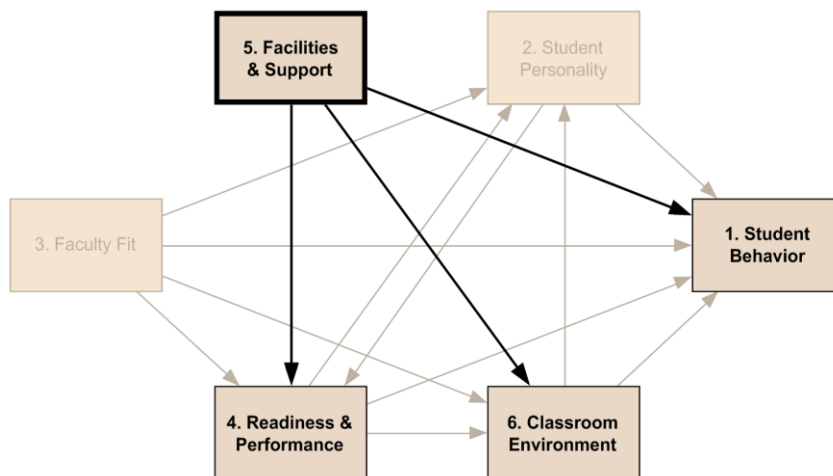


Figure 46. Facilities & Support for college dual credit at LSCC.

Readiness & Performance.

A lot of the students come, and they're not familiar with any of the facility's workings. They don't know how to register, didn't know where to find anything; they don't know how to use a computer; there is a gap there. That has to do with being prepared in an academic setting. They don't have it because have not ever had to do it. They come thinking they're prepared, and they realize they're not prepared because they can't do all these things, and they have to learn them or they're not going to be successful.

Because of the more positive effect of facilities and support, students have higher expectations. It helps certainly, the resources that are offered to students. Those that want to make the most out of their education would utilize those facilities.

They have to be a *college student* and have to make a conscious effort to get to campus or they don't participate. Having the facilities that we have here, like the writing center in the library, gives them fewer excuses. They have to be here, and if they have conflicts and can't be,

they don't try to [take the course] and the other thing [extracurricular activity]. If they can't or won't [attend class], they have to face the consequence of possibly getting a lower grade or failing.

I think when they walk onto the campus and a different facility than their own. ... Something as simple as the décor in the room makes a difference. I do think that affects their preparedness in a positive way. On campus it becomes a function of how savvy the dual credit students are as to utilizing the support services available to them.

Classroom Environment.

Facilities and support are going to affect the environment for sure, based on the premise of what is available to us on the college campus. We negotiate the classroom environment based on that access. If we had some kind of problem, like the projector went out, but I can just walk across the hall and use another classroom. My classes have priority here. I think positive facilities will help the classroom environment.

I look at the environment in regard to the layout, the chairs, and desks and how that accommodates the students; this is a small influence. I think if you have an older classroom or a brand new classroom, it's a totally different experience as far as the environment's concerned. So I do think facilities have an impact on classroom environment.

Student Behavior.

Most dual credit students have a disconnect with the college campus. In reality, they are still connected to the high school campus/culture.

Their behavior is more traditional, what you would think of as respect for *the teacher*.

The effect of Readiness & Performance.

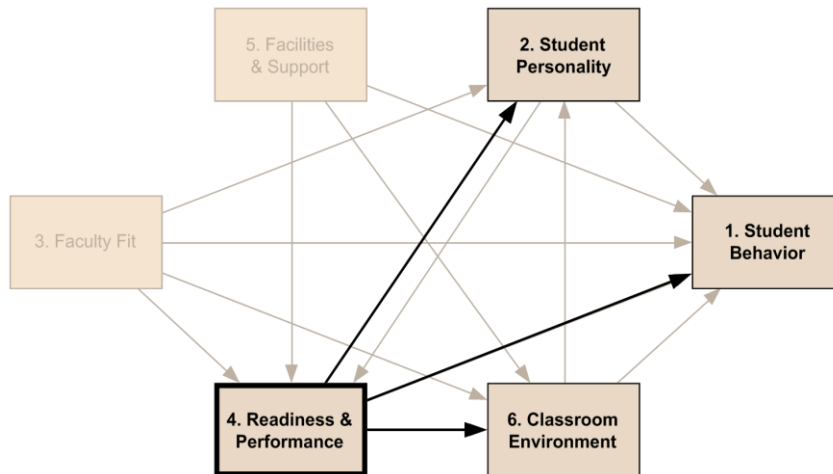


Figure 47. Readiness & Performance for college dual credit at LSCC.

Student Personality.

Dual enrollment kids in a college classroom are different from the scattered ones [dual students taking courses independently]; [the latter] see it as an honor or privilege.

Recently I had four dual credit students in a class on the college campus. It was summer and they're all looking for [a] good time. They made a lot of good friends. It was like summer camp. That expectation was there [at] the beginning, and their personalities were unleashed.

If they are academically prepared, they tend to have a better personality, if not; they're more outspoken or defensive. Again, if they don't feel they are prepared, they'll be shyer and not willing to take a risk by answering questions. A lot of them feel they are prepared, even over-prepared because they've gotten their A in AP and they think, "Oh, this is just the community college;" I get that a lot, especially from bigger groups of dual credit students when they come in together. I get this feeling that they are just hanging out at the community college until they're going off to the university next year, so this is going to be a blow-

off class, so there's a lack of respect and the lack of taking an assignment seriously. Overconfidence or under confidence, depending on who they are, does affect their personality.

Classroom Environment.

It's a small impact because dual credit students are usually a small part the class, but is still there. I had some students that were prepared and some were not prepared and did not take it seriously.

Successful classroom skills will create an environment that gives students the incentive to prepare. Prepared students will give the professor the incentive to create a successful classroom learning environment.

Student Behavior.

I typically see the dual credit students on the college campus as better prepared than those on the high school campus. They are the scattered few coming from different schools to be in a college English class. That's more of a "I want to do this; I haven't been forced to do this". I do think they act differently on a college campus when they come as an individual as opposed to coming in mass. I think their level of preparedness coming into class is different. There's not this idea of "Everyone else is doing it, or not doing it." Again, we are talking about breaking up cliques.

The younger students see that the older students come in prepared and are not gabbing or bouncing around... the maturity level of the older student is a modeling behavior for the younger students. My students that are academically prepared behave much better than those that are not. The ones that are not are the ones who tend to be discipline issues. It's very similar to when I taught high school. Even with new lessons, something brand new where I have no expectation of prior learning, it's still the

same. The ones who are academically prepared are willing to participate and learn new material; those that are not prepared put up a roadblock. Students who do not prepare at the college level will tend to be lost in class and exhibit a higher tendency to misbehave.

In my experience a lot of the students are under prepared, not any different from my general population of students. Somewhere between one-third and one-half of all of our students are required to be in remediation. Even the ones who pass the placement tests ... are not prepared in terms of what's going to be required of them, sometimes it's just emotionally. Dual credit students are just as prepared as any other, not well.

I had one student who was getting really low grades, and he came by my office. He had just graduated from high school [and] had completely no idea what kind of work it took to be successful. He was not prepared for the rigor even though he had passed the placement tests.

Perhaps if they feel they are not prepared, they tend to be shy and not talk a lot; this is not poor behavior. Their expectations are that they are in this new environment and there will be some kind of life changing experience. Their behavior is conditioned and focused to receive that.

The effect of Classroom Environment.

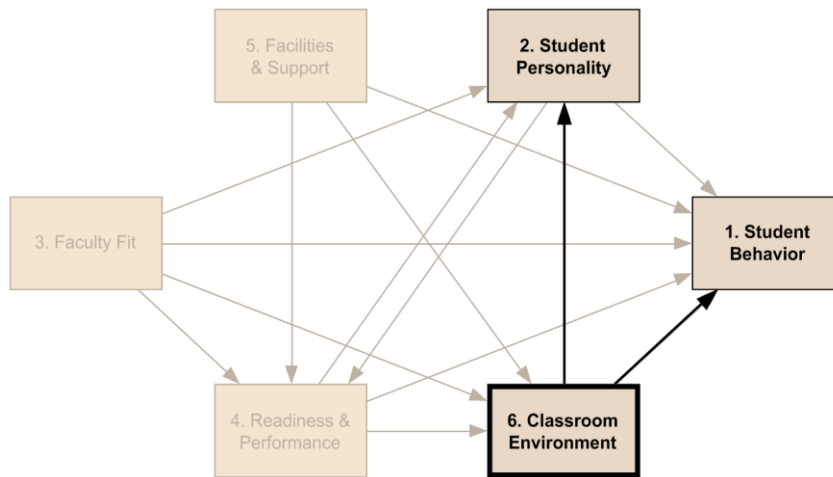


Figure 48. Classroom Environment for college dual credit at LSCC.

Student Personality.

Student personality directly correlates with classroom environment. Because it's not every single day [the class meets], they have to be on top of things because they're not just going to see me tomorrow or before or after the next class. We only have two days a week. It makes them more aware.

I think certain class environments certainly bring out student personality. For some reason, at the college, their personality is amplified. Some are more vocal or less vocal, and the environment can bring that out or hinder it. For example, if they're outspoken, on the college campus they're even more outspoken.

Student Behavior.

They're walking into my environment, a real college environment. It's autonomous; if I'm in charge, people don't interrupt me in the middle of my class to fix the speaker or projector. I don't have announcements. We don't have planned fire drills during busy class times. The classroom

environment is not impacted by things out of my control. I can make that our little enclosed meeting for the length of the class. If the environment is friendly and warm then they're more willing to participate. Until you set that up, there's definitely a wall there. How it is presented to them, that's what they're going to react to.

The classroom environment, established by the college professor, is the most significant variable in student behavior and student success. Faculty members have to develop an environment of mutual trust and respect. Faculty members must be willing to hear, discuss, and demonstrate respect for student opinions and values. Faculty members have to create an atmosphere in which students respect the professor and recognize the importance of maintaining a professional learning environment. It definitely helps if the professor has the ability to inject humor into the learning activities. Experienced, self-confident faculty members with good people/soft skills are the ideal match for dual credit instruction. Faculty members must be willing to say, "That is an excellent question, but I have no idea what the correct answer is. Let me do my research and share what I find with you." The ability to make a subject that is considered boring exciting is a gift or talent that is essential for success in a dual credit classroom.

The effect of Student Personality.

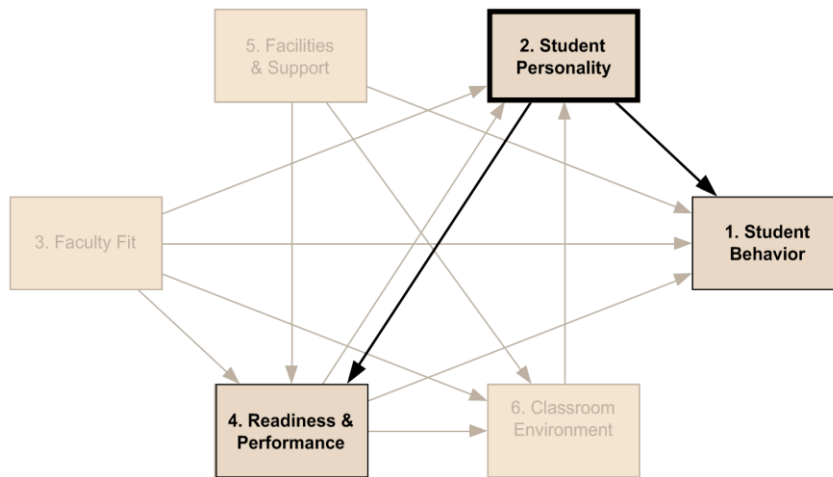


Figure 49. Student Personality for college dual credit at LSCC.

Readiness & Performance.

Student personality, maturity, and academic focus directly determine student preparedness. Students with motivated and success-oriented personalities will prepare properly for all classroom assignments. Since personality affects behavior, students that approach the class more seriously, I think they will be much better prepared for college.

Student Behavior.

I think their personality drives their behavior. If they tend to be quieter then they tend not to make any noise at all, or if they are more outspoken, then they tend to become more of a discipline issue as time goes on. Students with immature personalities will be late to class, disruptive in class, and perform poorly on homework and studying. Goal-driven students are more likely to ask questions, not sleep. Students that are more conscientious are going to be more successful, as a general rule.

At least initially I see a cautious optimism. “I don’t know what I’m doing here. I’m not going to act out. I’m going to kind of stay

neutral. It seems like everyone thinks I'm a college student." If I can capitalize on that during the first couple of weeks and don't treat them any differently, then they pick up on that and don't act differently. Their behavior is muted because they are on the college campus. I think they hold themselves in check at least for a few weeks.

Glasser's Seven Deadly and Seven Caring Habits

In the final analysis of data, participants' transcripts were reviewed for occurrences of William Glasser's seven *deadly* and seven *caring habits*. Glasser contends higher levels of learning are more likely to exist in the presence of the seven *caring habits*. Conversely, the seven *deadly habits* are more likely thwart higher learning. Evidence of Glasser's habits in the participants' comments was quite sparse. Threaded text is presented here from all participants at both SSCC and LSCC.

High school dual credit teaching environment.

Caring habits.

Accepting.

In terms of just general scholarship I have to say a lot of the students were interested in being there. They were able to stay on a more mature level. We talk a lot about a lot of abstract ideas about truth and nature and man.

Encouraging.

When you do make a difference, especially when you're talking about someone that's in a lower socioeconomic status, you can share that there is hope and that if you put your mind to it [you can] get an education; that's when you feel like you're doing a good job.

Respecting.

I certainly set clear expectations. I have very good rapport with my students. I have a seating chart in my mind, simply to know the students, but I don't foist that on the students.

They're a little bit more talkative; they don't have control in the classroom like they did in the first half of the semester. ... Usually during

the second half of the semester, I'm experiencing this right now, there is a kind of rapport that I've established with the students. They are all the more relaxed. They become more expressive. Then I tell students, "I'm working with you, you work with me."

Trusting.

Students do not trust you first; you have to build up trust. But after that we became more like friends. If you challenge them, not intimidate them, then, they really go for it. Again, part of it is a trust relationship. You expect them to push their own boundaries, which they are a little hesitant to do. I find most kids really want to learn. You have to put them in a safe environment.

Deadly habits.

Complaining.

Other than one particular incident at the bigger high school, where I walked out and didn't come back until the next class, I did not have too many issues. I was so upset because I recall thinking, "I do all this work and they're just talking. " Finally I said, "If you all don't want to listen, I'm not going to waste my time." I walked out and I told my division chair, "I'm not going back." The counselor had them call me and email me. I had never done that before, but they just pushed my last button.

Sports and extracurricular conflicts, that is the main thing that we have to deal with. It's the hardest thing for them to wrap their head around. They say, "But we're in high school." There is no excused absence. High school functions are not excused absences.

Criticizing.

I tell them, “You have been in a system for 10 to 12 years that rewards marginal performance; in college marginal performance will fail you; that’s a really hard transition to make. Now, coming to class and not making trouble is not enough to advance you. Marginal work is not acceptable at the college level.” Some of them get it right away, and some of them never get it all.

Punishing.

You have to confront them. “This is inappropriate in here [and] if you continue I will insist you leave.” I tell them they have to obey the rules. I have the seating chart for each class; this is on both the high school and college campuses. It starts with wherever they are sitting. But if I had problems I’ll move them; I try to handle it that way before running someone out of class. I kicked a kid out of a class one time, [and] they asked where they were supposed to go. I said, “I don’t care; just don’t come back 'till tomorrow.”

If they don’t do the work, I don’t have a problem not passing them. I’m not going to beg them to do the work [and] tell them 10 times, “Don’t forget to read this chapter.” If they act out or need to go to the office for something, I just squash that. I treat it more like a workplace. I made much of the idea of kind of being a visiting scholar and let them be scared of that. Perhaps that has something to do with the way they behave.

They were familiar with the room, so they would go in and make themselves at home, lounge, and slept. They are chatty and pass notes, behaving like high school students. I felt like I had to discipline often. Overall my experience was not pleasant.

Reward and Control.

At the high school I would say I had a lot of disruptions; there was a lot of talking that I had to control. I make a seating chart; knowing their names helps with control. Students seemed less interested. I had difficulty with their behavior, definitely. If I have a problem with a student, I go to the counselor and ask them to inquire into how serious the student is about being in the class; that usually takes care of it. [Sometimes], if someone's behaving improperly, I tell them to leave the class.

Usually, by the time we get to the second half of the semester everything has changed. Students who don't pay attention, don't take notes, their grades have suffered; they are more respectful and they are paying more attention.

Threatening.

Students behave as if they are in high school because they are on a high school campus. [Expectations are set] if you demand behavior from the very beginning; "This is acceptable. That is not acceptable." At one high school I did have some behavior issues at first, but then I came in and stood my ground, and I let them know that I had no problem taking them out of classes. [Students wanted to know] if I did kick them out of class, then, "Where would we go?" [I'd say], "I don't care where you go; that's not my problem;" that kind of shocked them. They thought, "Oh my gosh." They realized this was serious stuff.

I found in my last experience I had to give them a *three strikes and you're out* rule. If they were disruptive or could not control themselves, I would drop them or take them out of my class, so we get that settled in the first week. With the support of administration... involving the registrar or the principal in talking with students, ... their behavior is tempered a little bit.

Never smile before Christmas. ... Put the fear of God in them.

I make sure my demeanor and my dress was very severe.

College dual credit teaching environment.

Caring habits.

Respecting.

I had one student that was working two jobs and paying for the class herself. She would read everything I recommend to her. I thought that was pretty awesome, but her parents said, “You are going to have to take ownership of this yourself if you want to do it,” and she did. Stories like that make this job rewarding. They are the best students I’ve had at the college; they are respectful. I like to have them in my class. I had an older student come up to me and say, “Thank you very much; they [dual credit students] were being very disrespectful.” I think it’s important for older students to have that respectful atmosphere.

Supporting.

When I’ve taught in high school I arrived in the morning, had class, and I left. I ... have contact with students on the college campus where they come by sometimes. There’s definitely more of a relationship formed on our campus.

Deadly habits.

Criticizing.

I think it's a mistake to tell everyone that they are college material [meaning four-year college/university material]. I think we have arrived at the point where everyone at least needs community college under their belt though, especially since the quality of education in K through 12 is so piss poor. In fact we've all been making comments about the students are getting dumber across the board. I don't know who's really responsible for that, the school board, the fact that we want students have good self-esteem even though they can't add or subtract.... I had a couple of students that sat on the back row that had very strong personalities. Because I act like a nice person, they took that for me being weak. They constantly challenged me. I eventually had to take one of them out in the hall and gripe them out.

Punishing.

The most problems I have with students is [them] talking while I'm talking and rude behavior from the high school kids. Just overall in my classes, I'm amazed at students who just get up and walk out before class is over. I really need to crack down on that. I make a seating chart. If they get clannish or talkative, move them. If you have a problem, move them; if it continues, kick them out of class. I don't have a problem kicking students out of a class.

Threatening.

I really didn't like it when I had all high school students... it was certainly more of a high school class because there were so many of their friends in there. I had to fuss at the younger students a lot in the class where the majority was dual credit.

Chapter V – Interpretation

This chapter addresses the overriding question of this study, “What could this study reveal about the dual credit teaching experience from a system perspective?”

With data collected, analyzed, and reported, each of the four systems was ready to be finalized. The line between reporting and interpreting, though gray, was crossed when the experiences of many participants was finally described as group reality. Once systems were revealed they were compared to one another, inferences were made, and suggestions for further inquiry were offered.

Systems Revealed

In each of the four systems examined, the identical process was used to reveal what is referred to as the clean system influence diagrams (SIDs). The cluttered systems, to this point, had already been simplified somewhat through the use of the power cutoff, which eliminating relationships identified in low frequency. The next step, a recursive process to remove many of the arrows in the diagram, takes a very large step in simplifying the systems so they may be more useful in analysis. The principle at work here is quite simple and results in something quite elegant.

Every system has a unique, simplest representation, topologically speaking... Redundant links are removed according to their delta...

Redundant links are those between two affinities in which, even if removed, a path from the driver to the outcome can be achieved through intermediary affinity. ... Thus, by eliminating links that skip over

mediating affinities, we achieve a simpler, more interpretable mental model – one that has optimum explanatory power. (Northcutt & McCoy, 2004)

Physical arrangement of the clean SID is interpretation. Moving the affinities to positions; left or right, top or bottom, closer or further from one another; is, in a sense, an exercise in esthetics. The purpose of this arrangement is to communicate to the reader how the model flows, what is cause and what is effect. However, the model created through the protocol can only have one particular structure. The researcher can give the model nuance, but he/she cannot change its affinities or relationships, which are defined by and belong to the group.

Finally the researcher illuminates the clean SID with timbre, or mood. Each affinity in each model was given a simple timbre value of positive, negative, or neutral. Timbre of an affinity was determined by examining each participant's comments about each individual affinity and assigning the positive, negative, or neutral rating. The ratings were averaged and any affinity with an average timbre rating at or above .33 was considered positive, the range between .33 and -.33 was considered neutral, and any affinity at or below -.33 was considered negative.

Assigning timbre was, without question, a major step in interpretation of the mindmaps developed in the study. Three examples of comments and timbre ratings are given here.

The following set of participant comments describing *External Influence* on the college campus was rated by the researcher as neutral in timbre:

You still have some of that external influence. Usually the parent email now and again before the class starts, asking what's involved in the class. [They want to know] what will the student have to do; that's just general information that I can share with [the parents].

The following participant set of comments describing *Faculty Fit* was rated by the researcher as positive in timbre:

I know the classroom I'm going into; I'm familiar with it before I walk in there. I have my entire semester centered around what is going to happen in the classroom. There is a complete degree of control and comfort with the classroom environment. I have a way of negotiating that situation, that environment. ... So I'm totally ready to go on the college campus. There's no question about it. There are no distractions that I'm not engaged with or aware of.

The following set of participant comments describing *Readiness & Performance* was rated by the researcher as negative in timbre:

The essays that I have seen from 2002 moving forward have progressively gotten worse. I think standardized testing and No Child Left Behind, like so many government initiatives, has done us a great disservice. Generally speaking students at the college for the very first time are not ready. The writing, the grammar, the level of thought, the depth of thinking is not as profound or deep as it was when I first started teaching nine years ago.

In reality, the great majority of timbre ratings in this study were easily assigned. In a few cases the decision was much harder and, the researcher simply had to rely on his judgment.

The process for refining all four models was identical and is explained in greater detail for the SSCC high school dual credit teaching experience.

The high school dual credit teaching environment at SSCC.

The cluttered SID for the SSCC high school dual credit teaching experience represents all the affinities and relationships defined through the interviews, with the exception of those relationships eliminated by the power cutoff. Therefore the diagram simplification process started with the original 26 relationships.

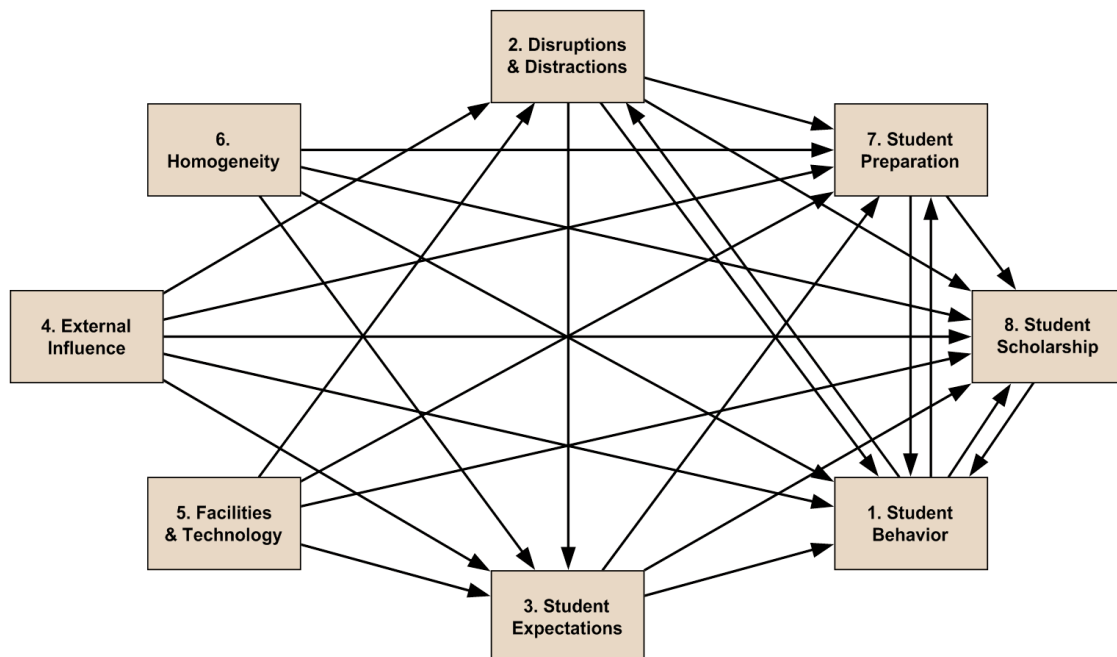


Figure 50. Cluttered SID for High school dual credit at SSCC.

Starting with the highest delta affinity, *External Influence*, and progressing in delta order, each link was examined to find alternate paths. This process began by examining the relationship to the affinity furthest away from *External Influence*, that being *Student Scholarship*. The link from *External Influence* to *Student Scholarship* was removed because an alternate path existed through *Disruptions & Distractions*. This elimination process continued until the only remaining connection from *External Influence* was to *Disruptions & Distractions*. In the original cluttered SID *External Influence* drove four other affinities directly; this influence is now viewed through intermediating affinities. Although the four aforementioned relationships still exist, they are represented by the remaining relationships. This same process continued forward through the model for each affinity until all forward redundant links were removed.

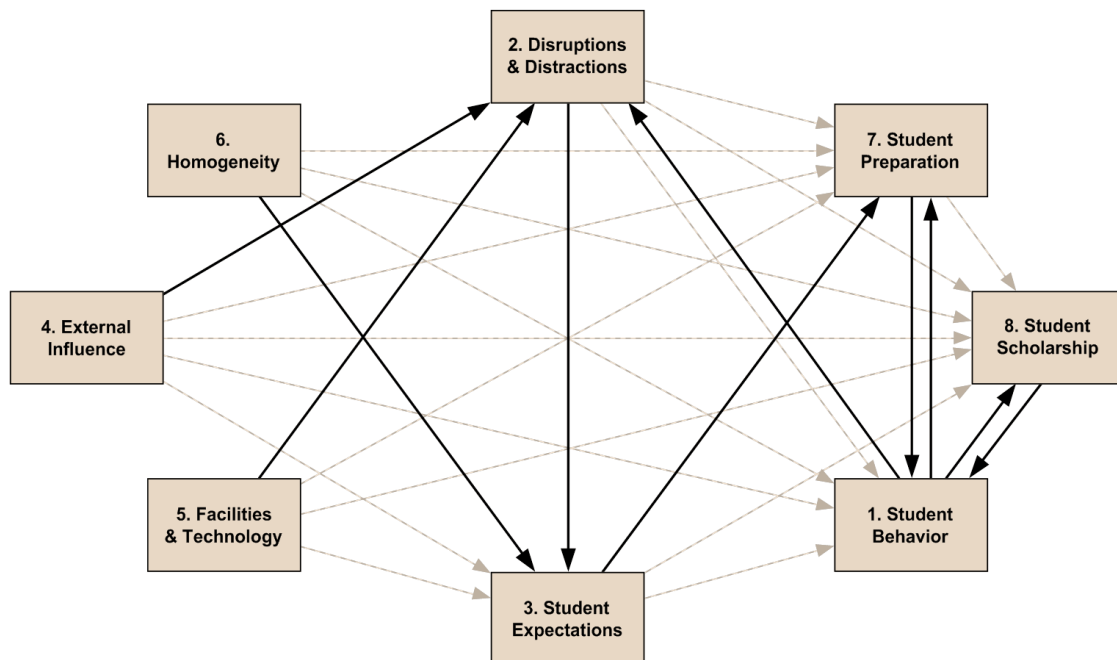


Figure 51. Uncluttered SID for high school dual credit at SSCC (with conflicts).

With the forward relationship elimination process (recursion) complete, the model conflicts were then addressed. One of the original three conflicts, *Disruptions & Distractions* to *Student Behavior*, was resolved in the forward recursion process when the link from *Disruptions & Distractions* was removed because a link existed through other affinities, *Student Expectations* and *Student Preparation*; this removal allows the link from *Student Behavior* to *Disruptions & Distractions* to legitimately remain in the final representation of the model. With two remaining conflicts in the uncluttered SID, the researcher recursed through the model in the exact reverse order of the forward recursion. This second pass through the model allowed for the removal of the relationship arrow from *Student Behavior* to *Student Preparation* because an alternate path could be found through *Disruptions & Distractions* and *Student Expectations*; this deletion alleviated the second of three original conflicts. No resolution for the final conflict between *Student Scholarship & Student Behavior* existed. No other path to get from *Student Behavior* to *Student Scholarship* or vice versa could be found. The arrows remain in order to show the conflict and suggest further questioning might be needed to resolve the issue.

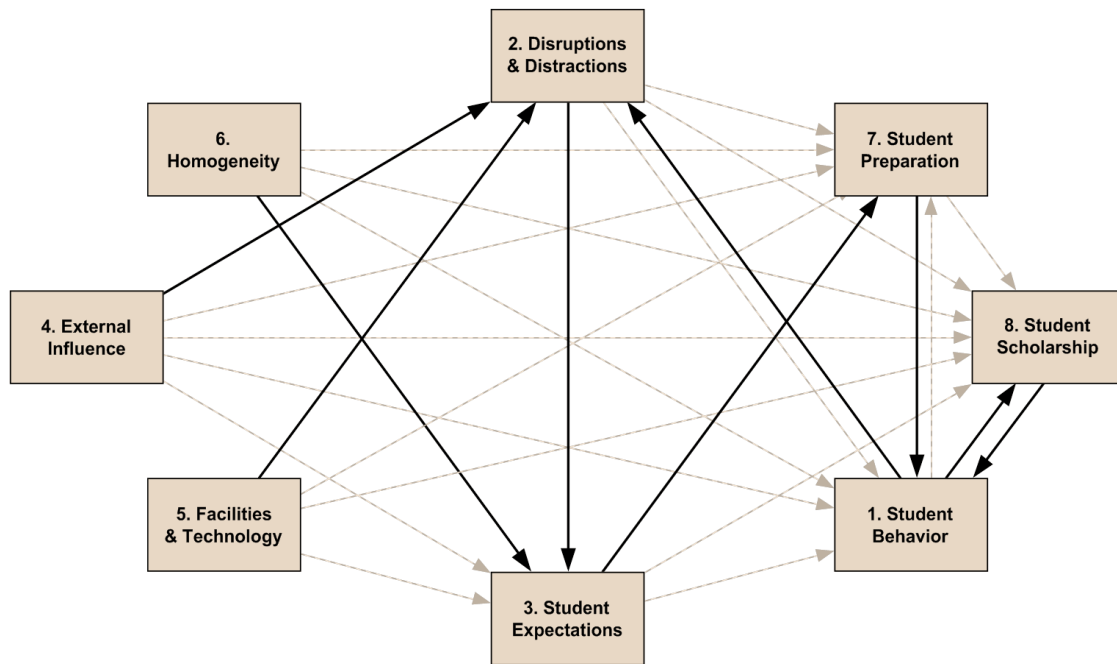


Figure 52. Uncluttered SID for high school dual credit at SSCC (conflicts reconciled).

“Here, then is the central theorem of IQA representation: Given any set of affinities and a set of binary unidirectional relationships among these, there exists one, and only one, Uncluttered SID” (Northcutt & McCoy, p. 180).

The uncluttered SID was rearranged for readability without changing any of the remaining connections. The clean SID relies on the reader to see relationships in the system through mediating affinities. For example, the reader must recognize *External Influence*’s impact on *Student Scholarship*, *Student Behavior*, *Student Preparations*, and *Student Expectations* through its relationship with *Disruptions & Distractions*. Despite simplifying the model through the removal of redundant links, all 26 original connections were still represented. *External Influence* can be recognized as a primary driver of the system by its physical location in the diagram and by the fact that no other affinity has influence on it.

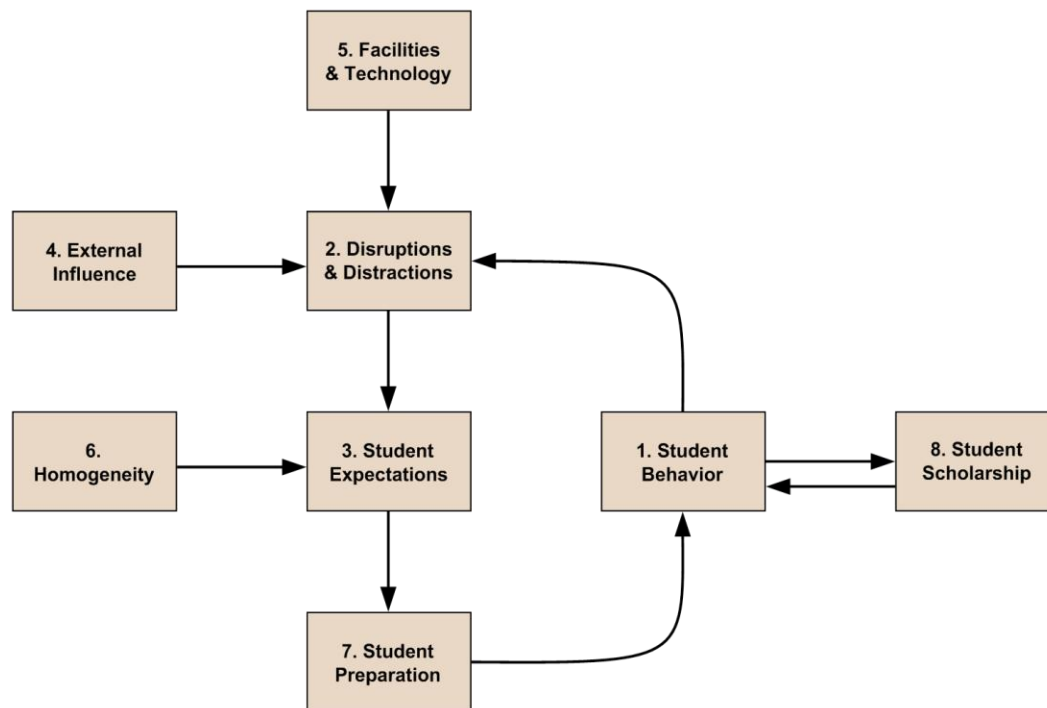


Figure 53. Clean SID for high school dual credit at SSCC.

The clean SID reveals *External Influence, Homogeneity, and Facilities & Technology* driving a loop of *Disruptions & Distractions, Student Expectations, Student Preparation*, and *Student Behavior*, all feeding ultimately into *Student Scholarship*.

The final step in preparing the model was to assign timbre to the system affinities. Each affinity for each of the 14 participants was given a timbre rating by the researcher.

Table 32: *Individual Participant Affinity Timbre for High School Dual Credit at SSCC*

<i>Affinity</i>	<i>Participant</i>													
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>
<i>External Influence</i>	(-)	(-)	(-)	(-)	()	(-)	(-)	(-)	(-)	(-)	()	(-)	()	(-)
<i>Homogeneity</i>	()	(+)	()	(-)	(-)	()	(+)	()	()	(+)	()	(-)	()	(-)
<i>Facilities & Technology</i>	(-)	(+)	()	()	()	(-)	(+)	()	(-)	(-)	()	(-)	(-)	(-)
<i>Disruptions & Distractions</i>	(-)	(-)	(-)	(-)	(-)	(-)	(-)	()	(-)	(-)	(-)	()	()	(-)
<i>Student Expectations</i>	(-)	(-)	()	(-)	(-)	()	(-)	()	(-)	()	()	()	(-)	(-)
<i>Student Preparation</i>	(+)	(-)	(+)	()	(-)	()	(-)	(+)	(+)	(-)	(+)	(-)	(-)	()
<i>Student Behavior</i>	(-)	(-)	(+)	()	(-)	(-)	()	()	(-)	(-)	()	(-)	(-)	(-)
<i>Student Scholarship</i>	(-)	(+)	(+)	()	()	()	(-)	()	(+)	(+)	()	(-)	(-)	(-)

Legend: (+) = Positive, () = Neutral, (-) = Negative

The overall rating for each affinity in the group system was then derived from the individual ratings.

Table 33: *Cumulative Group Affinity Timbre for High School Dual Credit at SSCC*

	<i>Positive (+)</i>	<i>Neutral ()</i>	<i>Negative (-)</i>	<i>Overall Timbre</i>
<i>External Influence</i>	0	3	11	(-)
<i>Homogeneity</i>	3	7	4	()
<i>Facilities & Technology</i>	2	5	7	(-)
<i>Disruptions & Distractions</i>	0	3	11	(-)
<i>Student Expectations</i>	0	6	8	(-)
<i>Student Preparation</i>	5	3	6	()
<i>Student Behavior</i>	1	4	9	(-)
<i>Student Scholarship</i>	4	5	5	()

Timbre was then assigned to the affinities in the clean SID to tell a more robust story about the group experience. This last addition finalized the model representing the SSCC dual credit teaching experience on a high school campus.

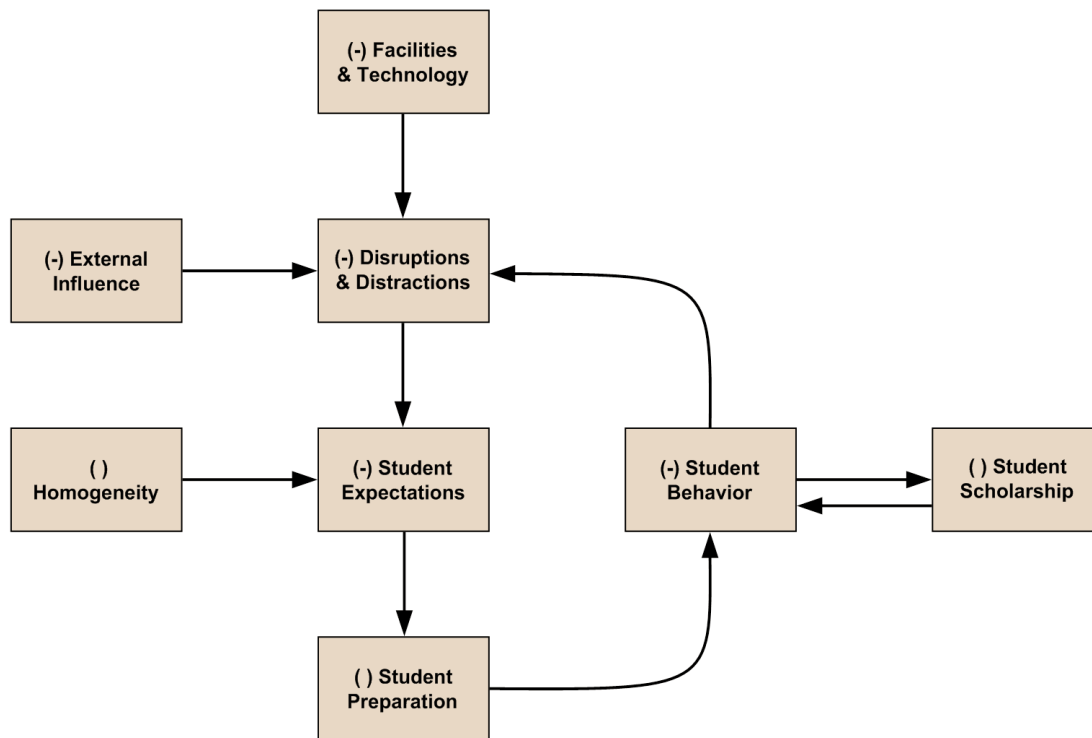


Figure 54. Clean SID with timbre for high school dual credit at SSCC.

The clean SID with timbre assigned reveals an overall negative experience for faculty teaching dual credit classes for SSCC on the high school campus. Five of the eight drivers in the system were seen as negative. These negative drivers are weighted more heavily in the front of the system. Four of the five most influential affinities have negative timbre.

The college dual credit teaching environment at SSCC.

The cluttered SID for the SSCC college dual credit teaching experience represents all the affinities and relationships defined through the interviews, with the exception of those relationships eliminated by the power cutoff. Therefore the diagram simplification process started with the original 22 relationships.

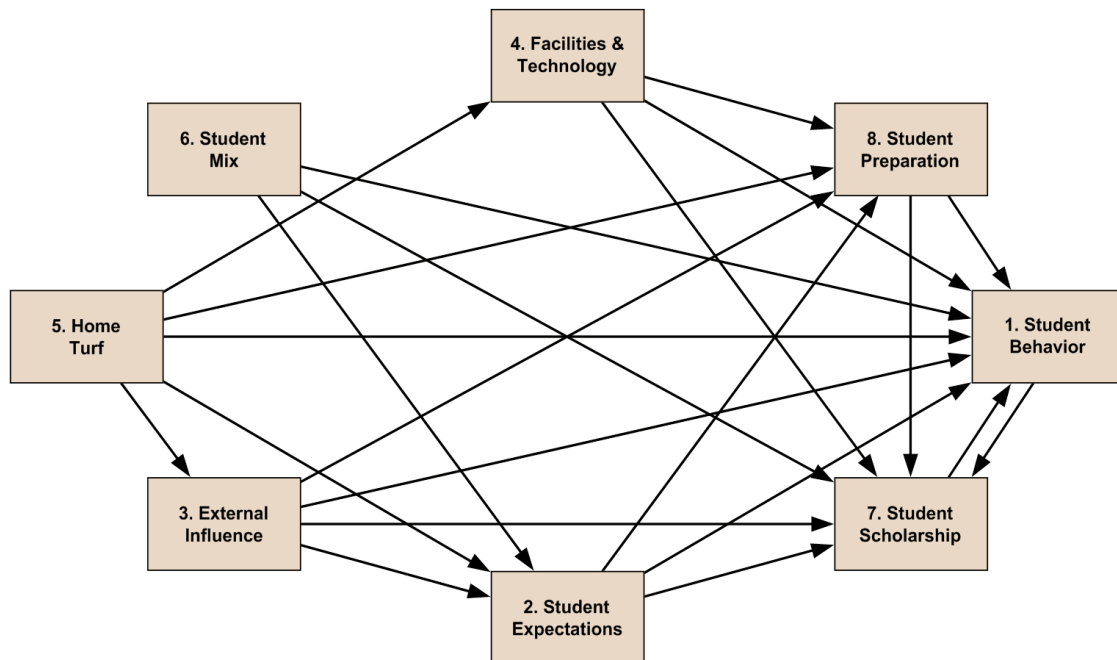


Figure 55. Cluttered SID for college dual credit at SSCC.

Progressing through the model, redundant links were removed. Starting with the highest delta affinity, *Home Turf*, and progressing in delta order, each link was examined to find alternate paths. This same process continued forward through the model for each affinity until all forward redundant links were removed. Backward recursion in this model was not required because the only conflict in the system was between *Student Behavior* and *Student Scholarship*, directly conjoined without a path back into the model. This process resulted in the uncluttered SID.

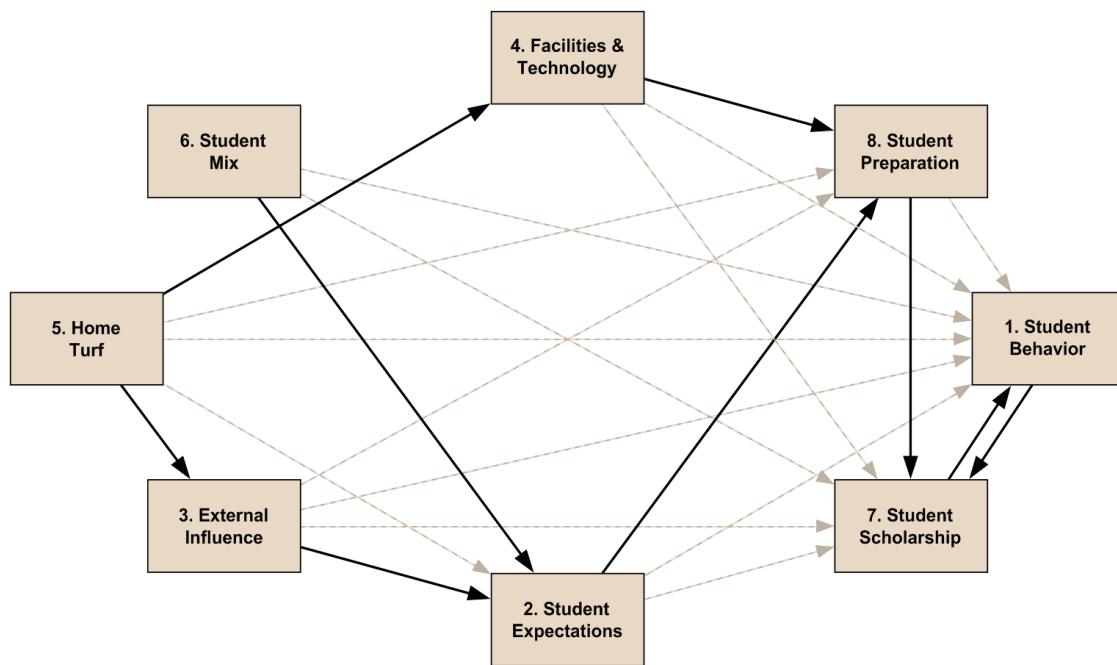


Figure 56. Uncluttered SID for college dual credit at SSCC.

The uncluttered SID was rearranged for readability. The clean SID, while simplifying the model through the removal of redundant links, maintains representation of all 22 original connections.

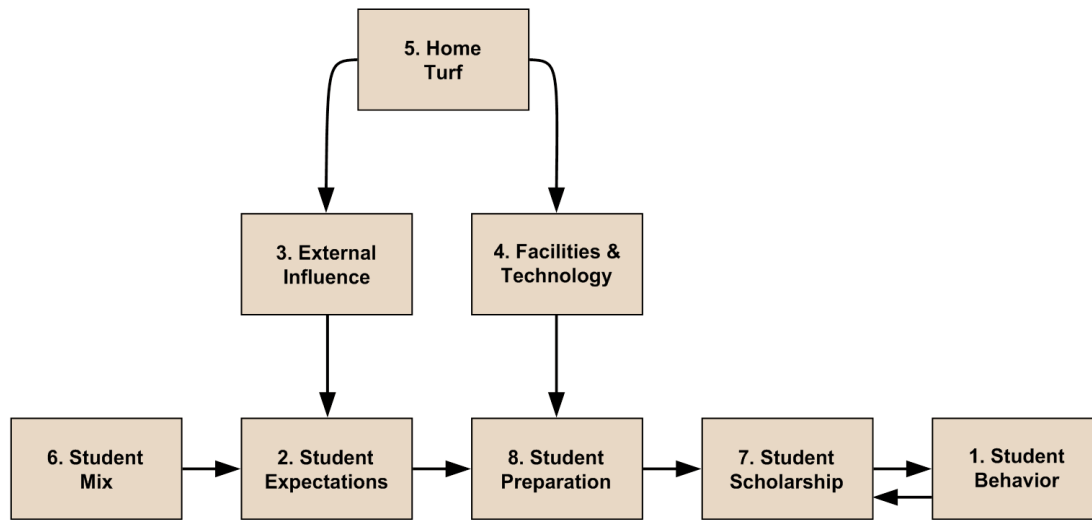


Figure 57. Clean SID for college dual credit at SSCC.

The clean SID reveals *Home Turf* and *Student Mix* feeding into the intermediate affinities *External Influence*, *Student Expectations*, *Facilities & Technology*, and *Student Preparation*; these affinities, in turn, drive the final outcomes of *Student Scholarship* and *Student Behavior*.

The final step in preparing the model was to assign timbre to the system affinities. Each affinity for each of the 14 participants was given a timbre rating by the researcher.

Table 34: *Individual Participant Affinity Timbre for College Dual Credit at SSCC*

<i>Affinity</i>	<i>Participant</i>													
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>
<i>Home Turf</i>	(+)	(+)	(+)	(+)	(+)	(+)	(+)	()	(+)	()	()	(+)	(+)	(+)
<i>Student Mix</i>	()	(-)	()	(+)	()	()	()	()	()	()	()	()	(+)	(+)
<i>External Influence</i>	()	(-)	()	()	()	()	(-)	(-)	()	()	(-)	(-)	(-)	(-)
<i>Facilities & Technology</i>	(+)	(+)	()	(+)	()	()	()	(+)	(+)	()	()	()	(+)	(+)
<i>Student Preparation</i>	(-)	(-)	(+)	()	(+)	(-)	(-)	(+)	(+)	(-)	(+)	(-)	(-)	(-)
<i>Student Scholarship</i>	(-)	(-)	(+)	()	(+)	()	(-)	(-)	()	()	()	(-)	()	()
<i>Student Expectations</i>	(+)	(-)	()	(+)	()	()	()	()	()	()	()	()	(+)	(+)
<i>Student Behavior</i>	(-)	(-)	()	(-)	(-)	(-)	(-)	()	(+)	()	()	(-)	(-)	(-)

Legend: (+) = Positive, () = Neutral, (-) = Negative

The overall rating for each affinity in the group system was then derived from the individual ratings.

Table 35: *Cumulative Group Affinity Timbre for College Dual Credit at SSCC*

<i>Affinity</i>	<i>Positive (+)</i>	<i>Neutral ()</i>	<i>Negative (-)</i>	<i>Overall Timbre</i>
<i>Home Turf</i>	11	3	0	(+)
<i>Student Mix</i>	3	10	1	()
<i>External Influence</i>	0	7	7	(-)
<i>Facilities & Technology</i>	7	7	0	(+)
<i>Student Preparation</i>	5	1	8	()
<i>Student Scholarship</i>	2	7	5	()
<i>Student Expectations</i>	4	9	1	()
<i>Student Behavior</i>	1	4	9	(-)

Timbre was then assigned to the affinities in the clean SID. This last addition finalized the model representing the SSCC dual credit teaching experience on a college campus.

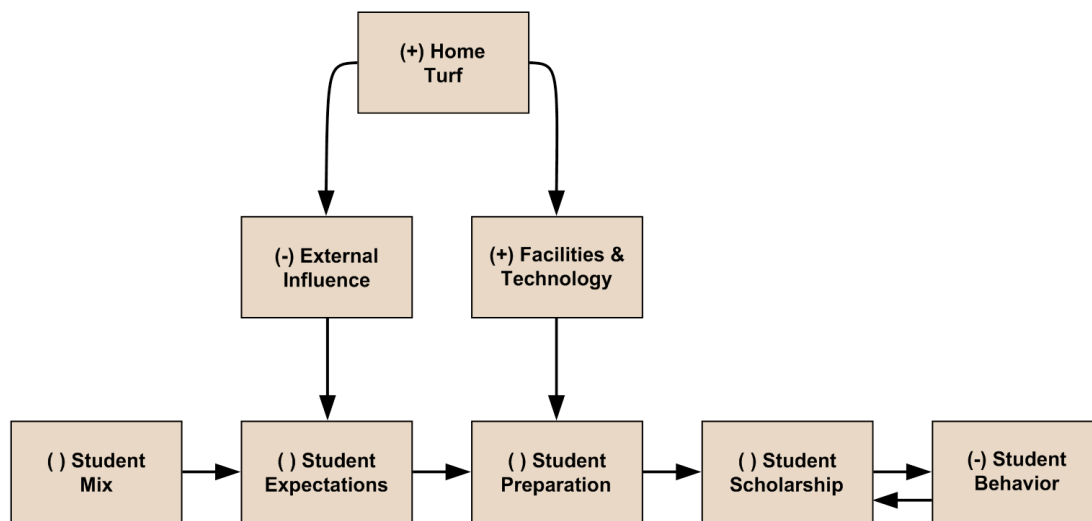


Figure 58. Clean SID with timbre for college dual credit at SSCC.

The clean SID with timbre assigned for the college dual credit teaching experience at SSCC has a fairly neutral tone overall. Two of the three primary drivers in the system, *Home Turf* and *Facilities & Technology* were seen by the group as having positive impact on the system. *External Influence*, which also has major influence in the SID, has an overall negative rating. The final outcome of the system, *Student Behavior* was seen by the group as negative as well.

The high school dual credit teaching environment at LSCC.

The cluttered SID for the LSCC high school dual credit teaching experience represents all the affinities and relationships defined through the interviews with the exception of those relationships eliminated by the power cutoff. Therefore, the diagram simplification process started with the original 13 relationships.

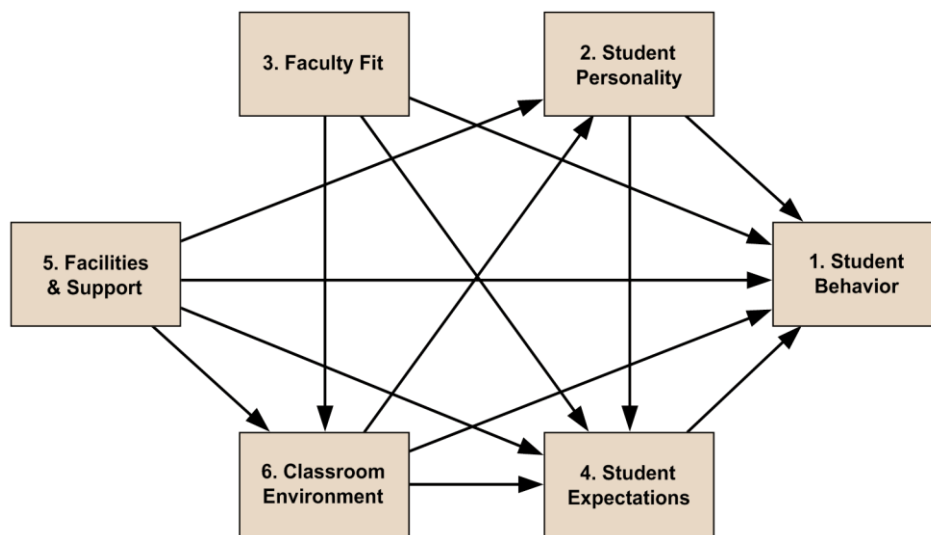


Figure 59. Cluttered SID for high school dual credit at LSCC.

As in previous models, redundant links were removed. Starting with the highest delta affinity, in this case *Facilities & Support*, and progressing in delta order, each link was examined to find alternate paths. Backward recursion in this model was not required because no conflicts existed. This process resulted in the uncluttered SID.

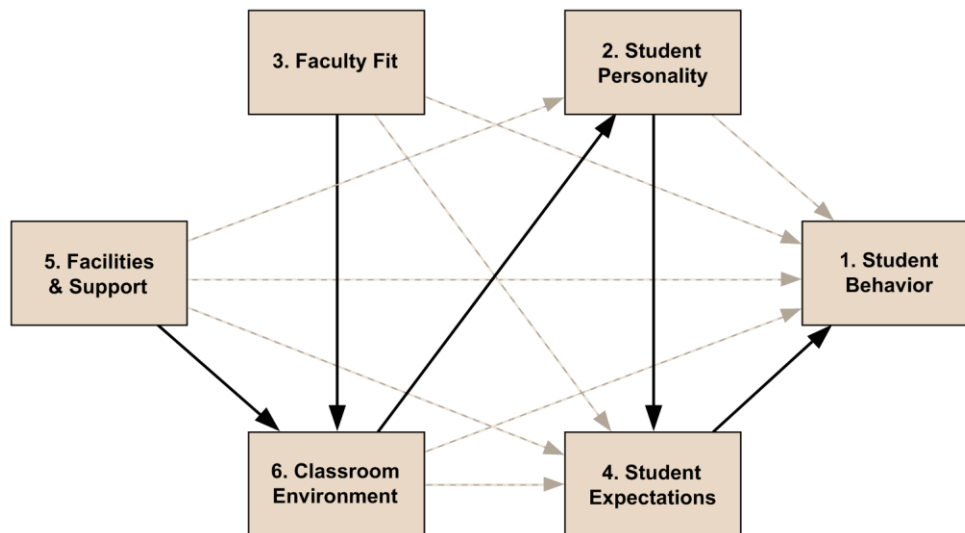


Figure 60. Uncluttered SID for high school dual credit at LSCC.

The uncluttered SID was rearranged for readability. The clean SID, while simplifying the model through the removal of redundant links, maintains representation of all 13 original connections.

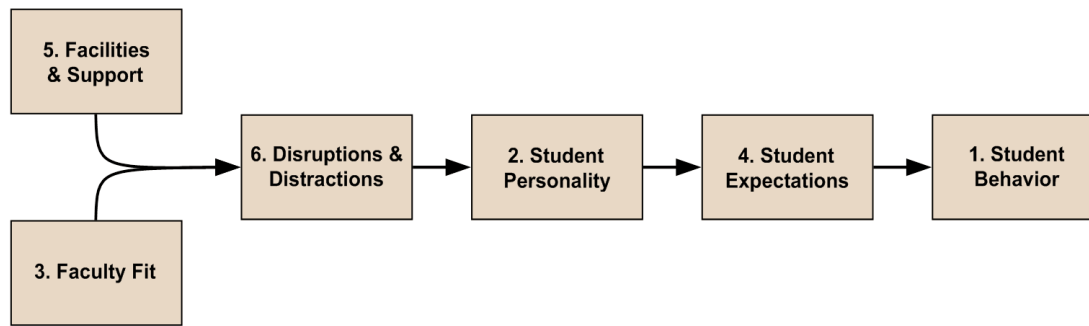


Figure 61. Clean SID for high school dual credit at LSCC.

The clean SID reveals *Facilities & Support* along with *Faculty Fit* driving the remaining affinities in a linear fashion, those being *Classroom Environment*, *Student Personality*, *Student Expectations*, and *Student Behavior*.

The final step in preparing the model was to assign timbre to the system affinities. Each affinity for each of the 11 participants was given a timbre rating by the researcher.

Table 36: Individual Participant Affinity Timbre for High School Dual Credit at LSCC

Affinity	Participant										
	1	2	3	4	5	6	7	8	9	10	11
<i>Faculty Fit</i>	(-)	(+)	(-)	(-)	(-)	(-)	(+)	()	()	(-)	(-)
<i>Facilities & Support</i>	(-)	(-)	(-)	(-)	(-)	(+)	(+)	()	(-)	(-)	(-)
<i>Student Expectations</i>	()	(+)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(+)	(-)
<i>Student Personality</i>	(+)	(-)	(-)	(+)	()	()	(+)	(+)	()	()	(-)
<i>Classroom Environment</i>	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	()	()	(-)
<i>Student Behavior</i>	()	(-)	()	(-)	(-)	(+)	(-)	(-)	(-)	(-)	(-)

Legend: (+) = Positive, () = Neutral, (-) = Negative

The overall rating for each affinity in the group system was then derived from the individual ratings.

Table 37: Cumulative Group Affinity Timbre for High School Dual Credit at LSCC

<i>Affinity</i>	<i>Positive (+)</i>	<i>Neutral ()</i>	<i>Negative (-)</i>	<i>Overall Timbre</i>
<i>Faculty Fit</i>	2	2	7	(-)
<i>Facilities & Support</i>	2	1	8	(-)
<i>Student Expectations</i>	2	1	8	(-)
<i>Student Personality</i>	4	4	3	()
<i>Classroom Environment</i>	0	2	9	(-)
<i>Student Behavior</i>	1	2	8	(-)

Again, as in other models, timbre was assigned to each affinity in the clean SID, completing the model representing the LSCC dual credit teaching experience on a college campus.

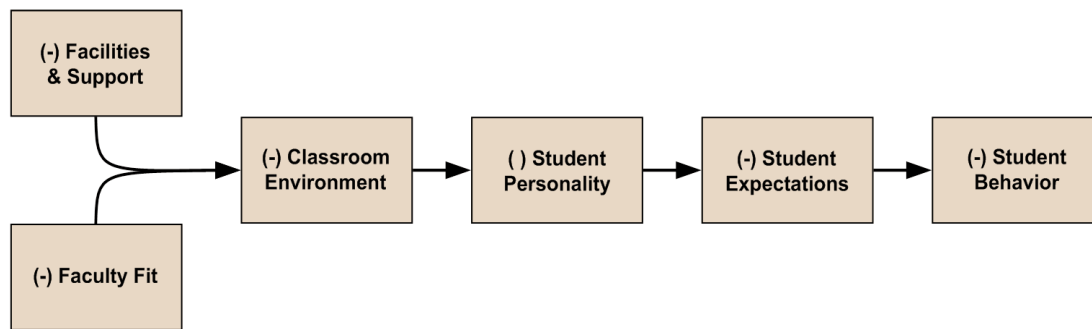


Figure 62. Clean SID with timbre for high school dual credit at LSCC.

The high school dual credit teaching experience at LSCC is overwhelmingly negative from the group perspective. Five of the six affinities in the final SID are negative in timbre. *Student Personality* is the only non-negative affinity in the model.

The college dual credit teaching environment at LSCC.

The cluttered SID for the LSCC college dual credit teaching experience represents all the affinities and relationships defined through the interviews, with the exception of those relationships eliminated by the power cutoff. Therefore, the diagram simplification process started with the original 14 relationships.

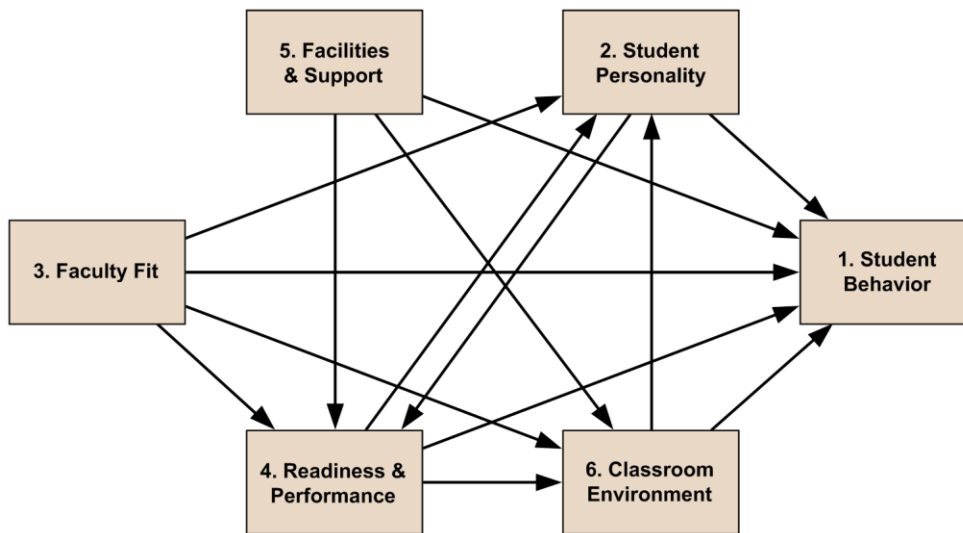


Figure 63. Cluttered SID for college dual credit at LSCC.

Redundant links were removed starting with the highest delta affinity, *Faculty Fit*, and progressed in delta order. Backward recursion in this model was not required because the only conflict, the link between *Student Personality* and *Readiness & Performance*, was resolved in forward recursion when the link from *Readiness & Performance* to *Student Personality* was removed because an alternate path was found through *Classroom Environment*. This process resulted in the uncluttered SID.

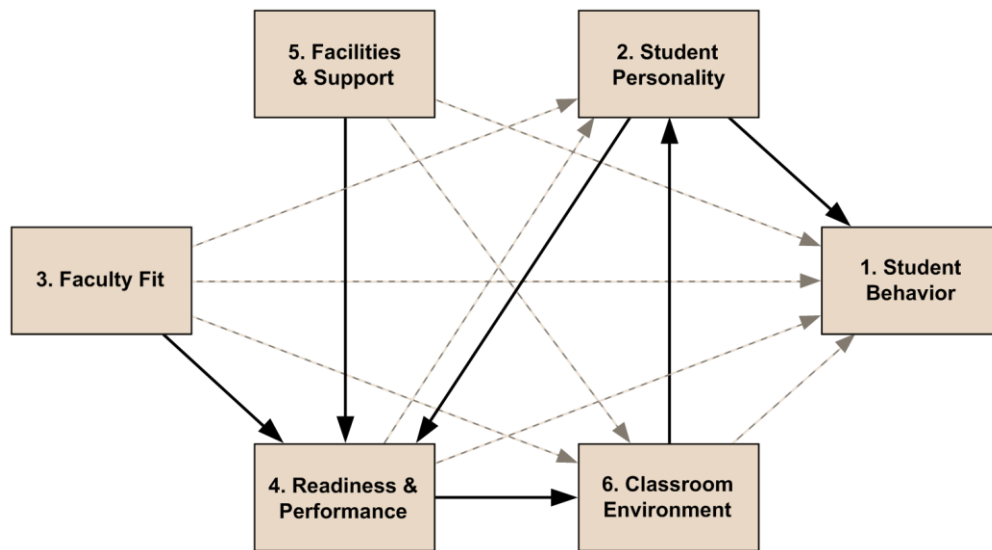


Figure 64. Uncluttered SID for college dual credit at LSCC.

The uncluttered SID was rearranged for readability. The clean SID, while simplifying the model through the removal of redundant links, maintains representation of all 14 original connections.

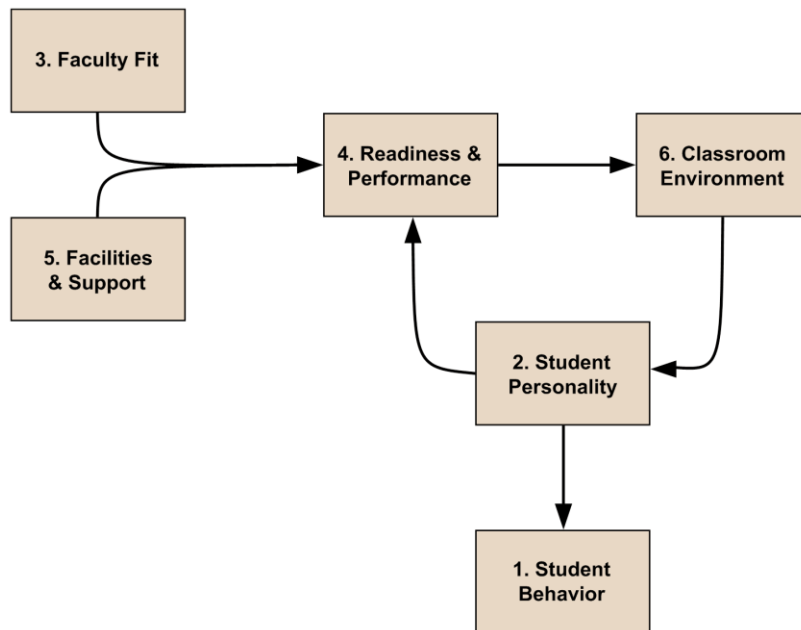


Figure 65. Clean SID for college dual credit at LSCC.

The final clean SID has *Faculty Fit* and *Facilities & Support* as input into a cycle of *Readiness & Performance*, *Classroom Environment*, and *Student Personality*, which ultimately drive *Student Behavior*.

In the final step of preparing the model, the researcher assigned timbre to the system affinities. Assigning overall affinity timbre, again, started with rating the experiences of each of the 11 participants.

Table 38: *Individual Participant Affinity Timbre for College Credit at LSCC*

<i>Affinity</i>	<i>Participant</i>										
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>
<i>Facilities & Support</i>	(+)	(+)	(+)	(+)	(+)	(+)	(-)	(+)	(+)	(+)	(-)
<i>Faculty Fit</i>	(+)	(-)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
<i>Classroom Environment</i>	()	(-)	(+)	()	(+)	(+)	()	()	()	(+)	(+)
<i>Student Personality</i>	(+)	()	()	()	(+)	()	(-)	(+)	(-)	(+)	(-)
<i>Readiness & Performance</i>	(-)	(-)	(-)	(+)	()	()	(-)	(+)	(-)	(+)	(-)
<i>Student Behavior</i>	(-)	()	()	(-)	()	(+)	(-)	(+)	(+)	(-)	()

Legend: (+) = Positive, () = Neutral, (-) = Negative

The overall rating for each affinity in the group system was then derived from the individual ratings.

Table 39: *Cumulative Group Affinity Timbre for College Dual Credit at LSCC*

<i>Affinity</i>	<i>Positive (+)</i>	<i>Neutral ()</i>	<i>Negative (-)</i>	<i>Overall Timbre</i>
<i>Facilities & Support</i>	9	0	2	(+)
<i>Faculty Fit</i>	9	0	2	(+)
<i>Classroom Environment</i>	5	5	1	(+)
<i>Student Personality</i>	4	4	3	()
<i>Readiness & Performance</i>	3	2	6	()
<i>Student Behavior</i>	3	4	4	()

Finally, the researcher recorded all affinity timbre ratings on the clean SID, completing the model representing the LSCC dual credit teaching experience on a college campus.

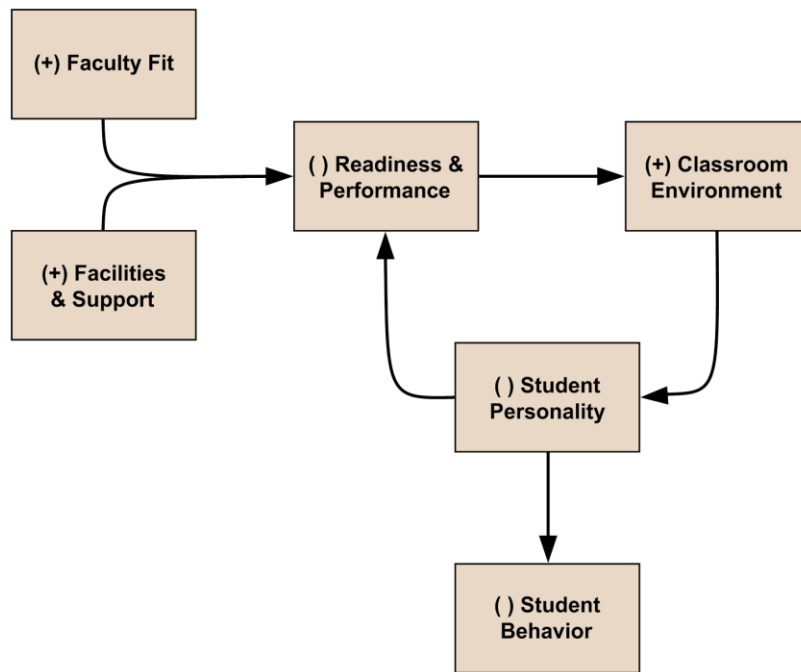


Figure 66. Clean SID with Timbre for college dual credit at LSCC.

The clean SID shows an overall positive experience driven by *Faculty Fit* and *Facilities & Support*. In the center of the model a loop between *Readiness & Performance*, *Classroom Environment*, and *Student Personality* is revealed. The final outcome of the system is *Student Behavior*.

Comparing Systems

This section addresses the research question: “How are the models defined by faculty different (if at all)?”

The researcher offered four comparisons of systems:

- The high school dual credit teaching environment at SSCC as compared to the college dual credit teaching environment at SSCC;
- The high school dual credit teaching environment at LSCC and the college dual credit teaching environment at LSCC;
- The SSCC and LSCC high school dual credit teaching environments; and
- The SSCC and LSCC college dual credit teaching environments.

Affinities in the comparison diagrams are rearranged for the reader to easily view differences and similarities between systems. However, none of the rearrangements represent structural change.

High school dual credit versus college dual credit at SSCC.

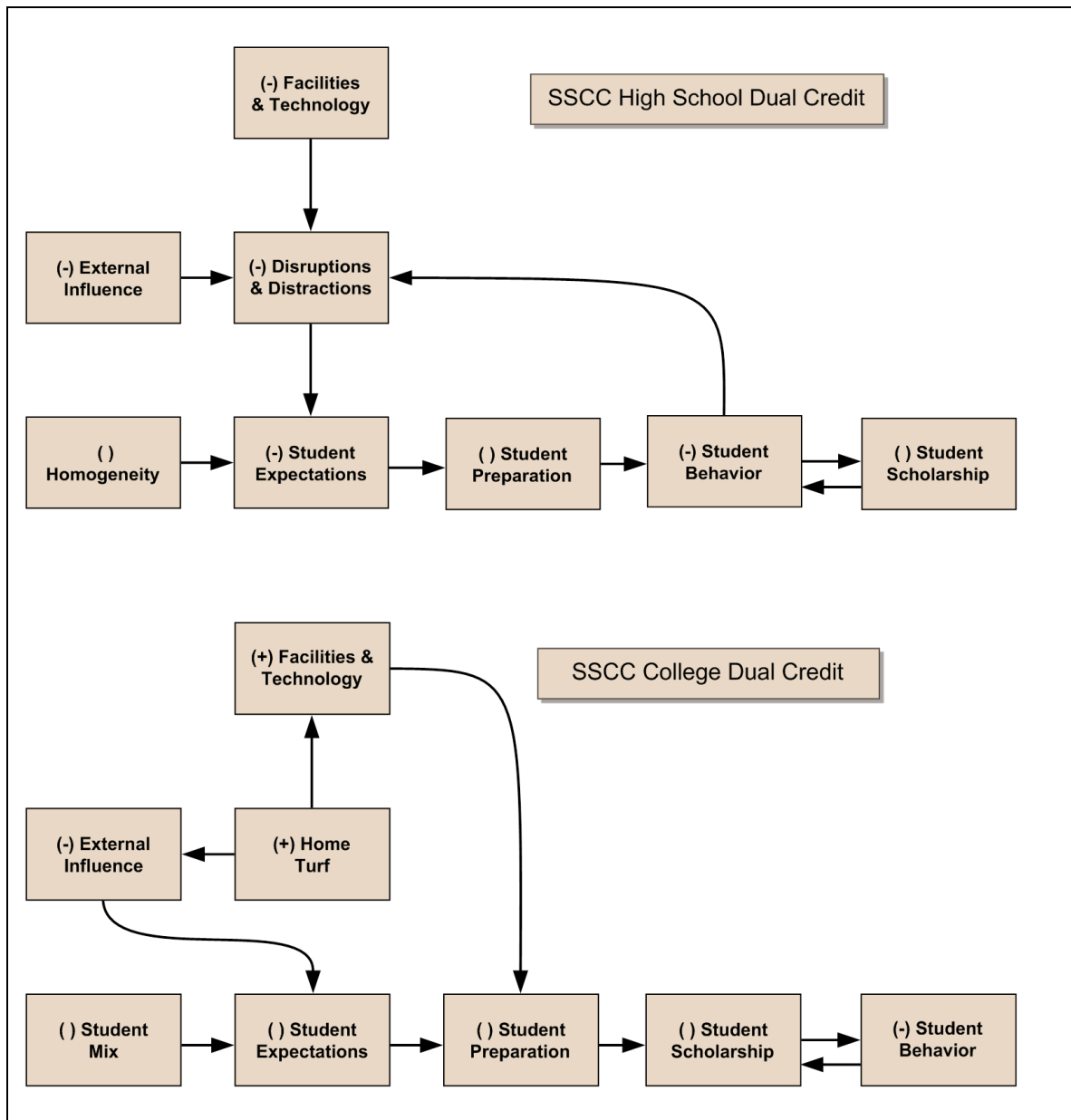


Figure 67. High school dual credit versus college dual credit at SSCC.

The group at SSCC drew very contrasting stories when defining the high school dual credit and college dual credit teaching experiences. The affinities in each model were very similar in nature, but not in tone. In some cases, parallel parts of the models were polar opposites in terms of experience.

External Influence in the high school environment was perceived very negatively. Faculty felt the constant presence of counselors, parents, public school administrators, and college administrators. In the presence of these external constituencies faculty often felt pressure to get students through courses successfully. Faculty perceived *External Influence* as the most powerful driver in the system, having far reaching effects in the overall experience. *Home Turf* embodied the faculty sentiment of being in control of the environment while on the college campus. Faculty even saw *Home Turf* as powerful enough to have impact on *External Influence*, the opposite of the relationship between *Disruptions & Distractions* (*Home Turf*'s parallel) and *External Influence* in the high school model.

The difference in how faculty perceived *Student Expectations* in the two environments is another significant difference in the two final SSCC models. In the high school environment, faculty perceived *Student Expectations* negatively. On the college campus, however, faculty expressed the idea of a positive turning point in *Student Expectations* around the mid-semester mark. Comparing the systems reveals three parallel influences on *Student Expectations*. In the high school environment, *Homogeneity* reinforces the status quo; the college class is introduced into the chaos of *Disruptions & Distractions*; and *External Influence* creates a safety net in the subconsciousness of students. In the college environment, *Student Mix* provides an opportunity for high school students to observe their older counterparts modeling a different set of expectations; *Home Turf* puts faculty in control of their environment; and

Student Expectations is somewhat buffered from negative *External Influence* by the strength of *Home Turf*.

High school dual credit versus college dual credit at LSCC.

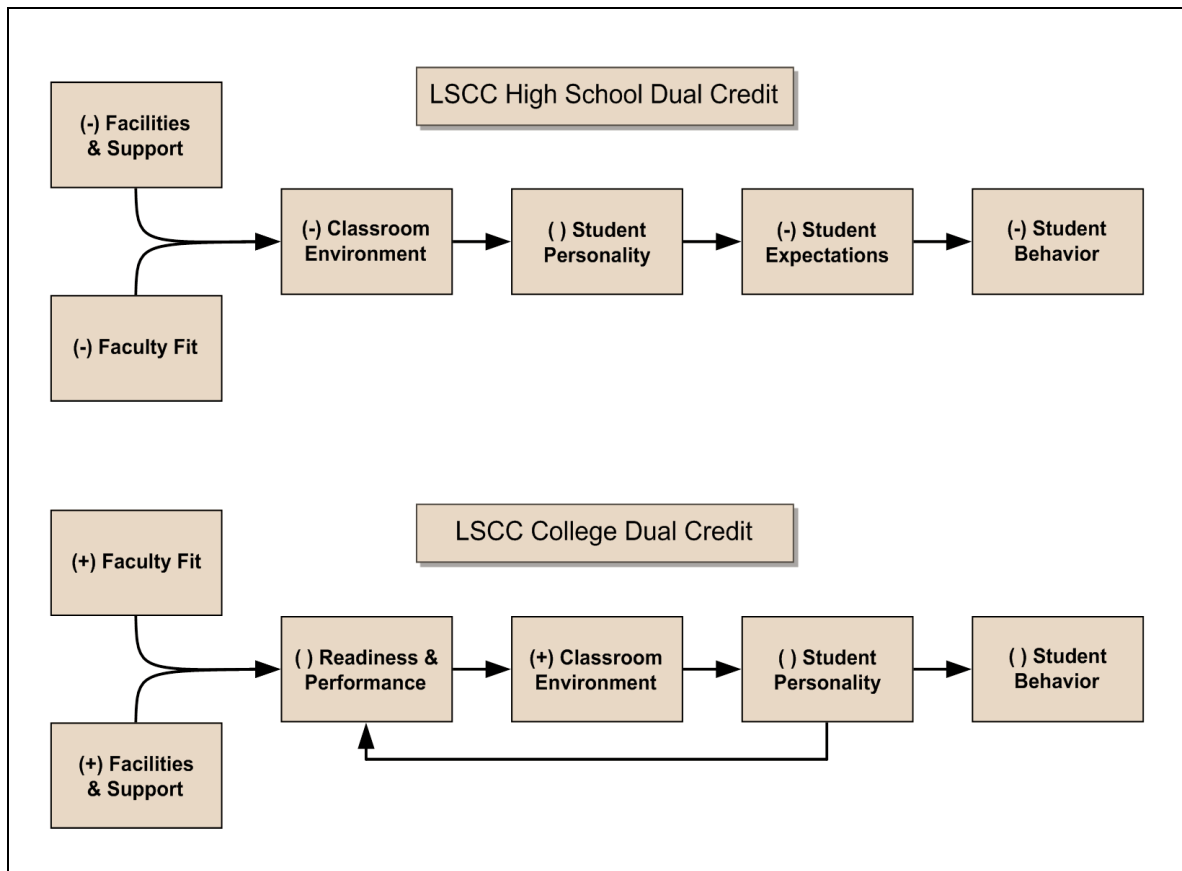


Figure 68. High school dual credit versus college dual credit at LSCC.

The 11 participants at LSCC tell two stories in stark contrast to one another when describing their experiences while teaching in the two different environments. The high school dual credit teaching experience was completely negative with the exception of *Student Personality*, which was perceived as neutral. Five of the six affinities in the high school model were rated more negatively than their counterparts in the college model. The three most powerful drivers in the high school dual credit teaching experience were

all perceived by faculty as negative. When LSCC faculty were in the high school dual credit teaching environment, they felt isolated in terms of *Faculty Fit*, found *Facilities & Support* lacking in many respects, and were thrust into an environment fraught with *Disruptions & Distractions*. The college dual credit teaching experience at LSCC on the other hand was, overall, a positive one. The two primary drivers of the system in the college environment, *Faculty Fit* and *Facilities & Support*, were both positive, as was *Classroom Environment*.

High school dual credit at SSCC versus high school dual credit at LSCC.

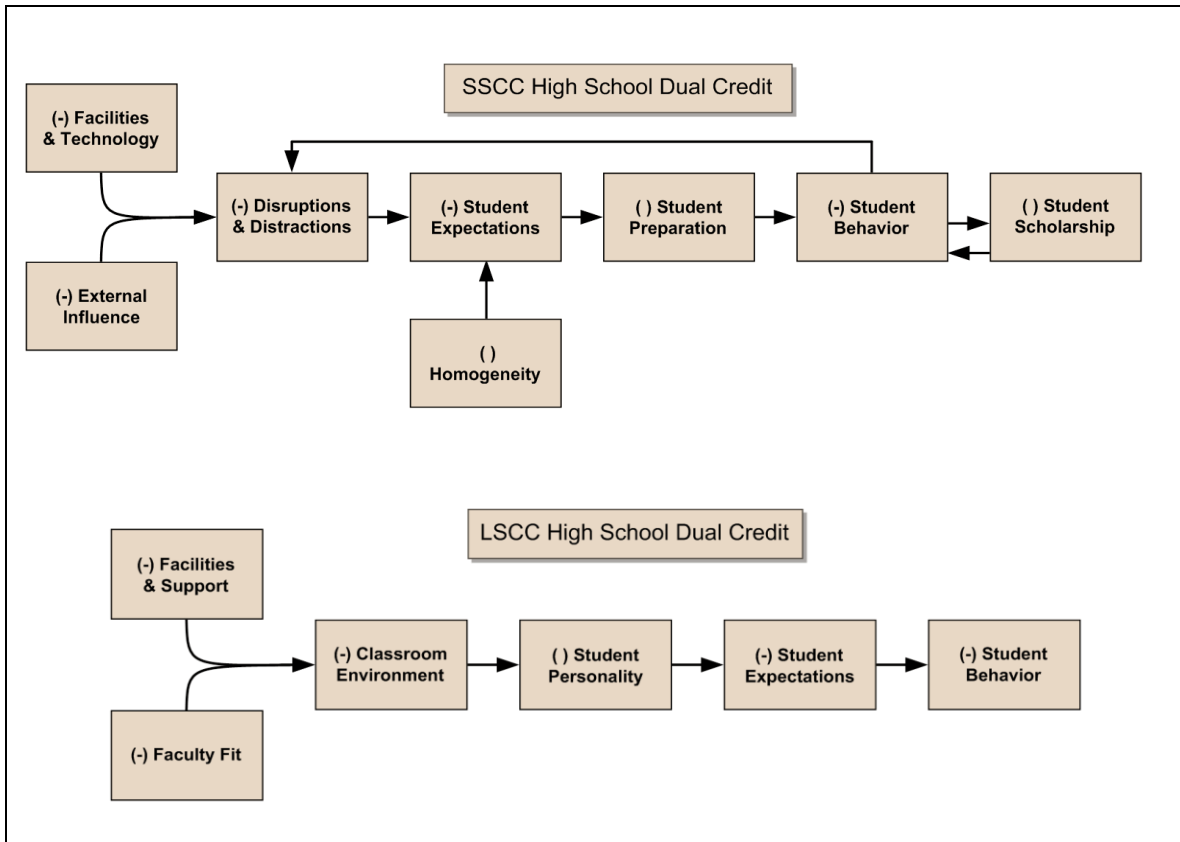


Figure 69. High school dual credit at SSCC versus high school dual credit at LSCC.

The two high school dual credit teaching experiences were similar in many ways. Both sets of faculty described an overall negative experience while teaching dual credit courses on the high school campus. Negative *Faculty Fit* at LSCC and *External Influence* at SSCC, although expressed differently, both pointed to a lack of power and influence in the environment. Less than ideal *Facilities & Support* or *Facilities & Technology* added to the struggle resulting in a powerful negative force driving events in the classroom. While the SSCC group defined a more robust set of affinities, the concepts within many of them were expressed by the LSCC faculty group as well. For example, the LSCC *Student Expectations* affinity was fairly broad in its definition and

embodied concepts contained in the *Student Preparation* and *Student Scholarship* affinities defined by the SSCC faculty. Conversely, the definitions of *Student Personality* and *Student Behavior* as defined by the LSCC faculty were encompassed by the *Student Behavior* affinity at SSCC.

One clear difference between the groups' experiences was the existence and definition of *Homogeneity* in the SSCC model, perhaps a result of SSCC serving in a smaller geographic area and population than LSCC.

On a pure comparison of timbre LSCC faculty seemed to have a more negative overall experience while teaching on the high school campus than did the faculty at SSCC. Timbre on five of six affinities was rated as negative in the LSCC model, while five out of eight affinities had a negative tone at SSCC. However, on closer inspection of the models this timbre difference is revealed as a fairly weak argument for the SSCC faculty experience being significantly more negative than that of LSCC faculty. Two of the affinities that were neutral at SSCC, *Student Preparation* and *Student Scholarship*, would need to be combined with the negative affinity *Student Expectations* at LSCC to draw a more fair comparison.

College dual credit at SSCC versus college dual credit at LSCC.

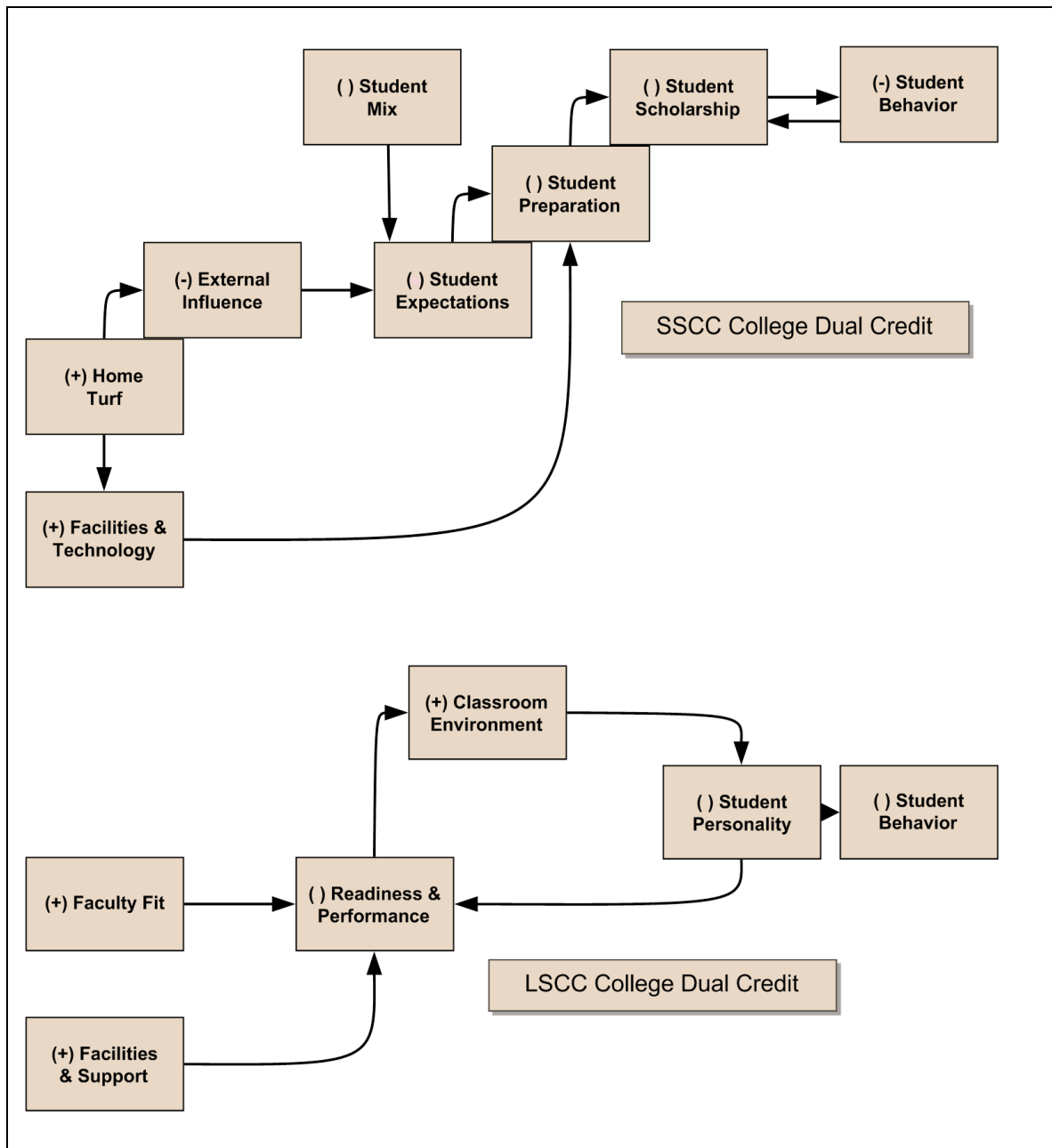


Figure 70. College dual credit at SSCC versus college dual credit at LSCC.

The dual credit teaching experiences on the campus at both SSCC and LSCC begin with similar positive drivers; *Home Turf* and *Facilities & Technology* at SSCC, and *Faculty Fit* and *Facilities & Support* at LSCC. Although *Student Mix* does not explicitly

appear in the LSCC model, faculty had a lot to share in terms of mix when the affinity *Classroom Environment* was discussed.

If *Student Expectations*, *Student Preparations*, and *Student Scholarship* are viewed as parallel to *Readiness & Performance* at LSCC, then a similarity exists in the two models in regard to the primary driver influence on intermediate affinities of each model.

The SSCC model is positive overall while the SSCC model is fairly neutral. *Student Behavior* at SSCC was negative while faculty at LSCC saw *Student Behavior* as neutral. An additional difference is the existence and timbre of the *External Influence* affinity in the SSCC model which was also viewed in a negative timbre. Elements of *Readiness & Performance* and *Classroom Environment* in the LSCC model mirror many of the topics that SSCC faculty discussed when asked about *External Influence*. The key difference is how faculty viewed these elements in the two models. While SSCC faculty saw *External Influence* as negative, LSCC faculty viewed *Performance & Readiness* as a neutral and *Classroom Environment* as positive.

Inferences

Overall, faculty perceived teaching dual credit students on the high school campus as markedly inferior to teaching dual credit students on the college campus. This inferiority is driven by three factors on the high school campus, 1) lack of facilities and by lack of technology appropriate for teaching college level courses, 2) absence of a sense of belonging and power, and 3) the inability to separate the student from the

environment to which he/she is inextricably connected. The college environment in general provides a more positive experience in all three areas.

Faculty would clearly perceived the college campus as a superior environment for engaging dual credit students. The results of this study are consistent with Kliener and Lewis (2005) who suggested a college tone is difficult to set on a high school campus. Kleiner and Lewis found 80% of all dual credit was being delivered on the high school campus.

Results support Swanson's (2003) finding that taking dual credit courses in a setting outside of the normal high school environment is a determining factor in student performance. In addition, the findings in this study are consistent with Speroni (2011a) who found dual enrollment students were more likely to enroll in college than the general population only if the dual courses were taken on the college campus, there was no effect if courses were taken on the high school campus.

Dual credit programs provide a bridge to college for students that might not otherwise consider continuing their education past high school; when critically examining dual credit programs that bridge cannot be dismissed. While having access to the college experience is important, it must be just that, a *college* experience. If institutions are simply providing students a dual credit experience that looks very much like their previous high school experiences, they are missing a critical component of the bridge they intended to provide.

A Note on Glasser

One of the original research questions in this study was, “How do Glasser’s seven *deadly* and seven *caring habits* relate to these models?” This study proved ill-suited to investigate this question. Although transcripts were coded for the seven *deadly* and seven *caring habits*, a worthwhile set of evidence simply did not materialize. Evidence in this study did not support or refute Glasser’s model. There was no clear evidence the seven *deadly* and seven *caring habits* were more or less present in either the high school dual credit teaching environment or the college dual credit teaching environment.

Suggestions for Further Research

This research failed to make a connection between Glasser’s seven *deadly* and seven *caring habits* to high school and college dual credit teaching experiences. The method in this study did not sufficiently illicit comments to make inferences about the two environments to use Glasser’s model as a lens through which to judge them. Finding this link, or the lack thereof, could help clarify the quality and level of learning taking place in these two environments. An IQA study with a differently framed problem, or a study using another method completely, could produce more applicable data, lending further insight into the question of quality and dual credit delivery location.

This study did not address faculty experiences with dual credit students in online courses. The online environment presents a different set of intricacies than either the college campus environment or the high school campus environment. As technological and economic pressures build to offer more options for delivery of educational experiences to students, questions of quality in the online environment will become more

pressing. How the virtual environment compares to the physical environments of high school and college campuses is a question worth exploring.

Stark contrasts in the experiences of faculty on high school and college campuses revealed in this study support the findings of Burns and Lewis (2000) who found students perceived courses differed significantly based on their location. However, the faculty experience models developed in this study do not clearly make that distinction for the student experience. An IQA study into the experiences of dual credit students in high school classrooms and on college campuses could prove useful to further illuminate the dual credit learning experience.

While this study made no distinction among subject areas, antidotal evidence did point to a possible difference in faculty experiences when teaching mathematics, a subject where social connections, immaturity, and class discussion may not play as significant a role in terms of the faculty members' ability to conduct their courses. Some mathematics faculty experiences suggest the difference between teaching dual credit students on the high school campus and the college campus is not as great as for other subjects. In a study of academically marginal students, Speroni (2011b) found taking college algebra while still in high school had a positive effect on high school graduation, college enrollment after high school, and college degree attainment. Research focused on differences in success rates and experiences by content could help practitioners design more effective dual credit programs.

Faculty perceive several structural disadvantages to dual credit programs. One participant quipped, "The train has left the station!" expressing the concern of other

faculty; oftentimes students who are not ready for college are encouraged to take dual credit courses. Faculty also expressed concerns over being the outsider, unappreciated, or even the *enemy*. In many of these instances faculty were speaking directly about high school AP teachers' animosity toward having *their* students pulled away into dual credit. Participants in the study also wondered what the high school students might be missing by missing any given high school subject while taking dual credit courses. Dual credit students are potentially coming out of the education pipeline with less exposure to writing, or critical reading, or math, or government, or history, or other areas as a result of choosing or being encouraged to take dual credit courses. The state funding model for dual credit provides formula funding to colleges for dual credit students without penalizing the public school. A study into the unintended outcomes of the dual funding model for dual credit could prove to be a very important piece of research.

Conclusion

Dual credit in the United States is a growing phenomenon, and while it is the subject of much research and debate, many unanswered questions remain. This study sought to convey the experiences of college faculty teaching dual credit students in high school and college environments. Through candid conversations faculty availed themselves so that their stories might be part a conversation of growing importance. It is the hope of the researcher the collective reality revealed in this study may help others in their investigation of the dual credit phenomenon and that it might inform public school administrators, college administrators, parents, and policy makers as they work to make decisions in the best interest of students.

Appendices

Appendix A:

Dual Credit Teaching Focus Group Warm-up Exercise

Introduce self, UT Austin, CCLP

Method: IQA, Northcutt & McCoy

Let's start with introductions. Please tell us your name, what subjects you teach where dual students are involved, and how you wound up teaching dual credit.

I would like you to think for a while about being a dual credit teacher on a (high school or college) campus.

In a few minutes, I am going to ask you to tell me about your experience as a dual credit teacher on a (high school or college) campus.

So let's begin.

- Please allow yourself to be as comfortable as possible.
- Put your thoughts from the day aside to allow your attention to focus on this topic.
- Close your eyes to increase your state of relaxation and your ability to reflect on what it means to be a dual credit teacher.
- Now imagine yourself in your role as a dual credit teacher (long pause)
- See yourself engaging in the activities of a dual credit teacher. (long pause)
- Notice your surroundings. (long pause) Looking around you, take in the sights, the sounds that are associated with being a dual credit teacher. (long pause)
- Who are the people? (long pause)
- What are the actions? (long pause)
- Allow yourself to become aware of your environment with all of your senses.
- Focus on what it feels like to be totally absorbed as a dual credit teacher. Be there in your mind. (long pause)
- Review all your recollections up to this moment. (pause)
- Allow all these thoughts to remain calmly in your consciousness and ready to be revealed.

Thank you for bringing these valuable observations and recollections forward.

Please gently allow your consciousness to come back to this time and place and when you are ready, open your eyes.

Good. Thank you.

And now, with all that you remember—and that is all that you just noticed—please write down your thoughts on these cards.

Write one thought or experience per card. Feel free to record a word, a phrase, a sentence, or a picture to capture that thought ... and ... tell me about being a dual credit teacher.

(Northcutt & McCoy, 2004)

Appendix B:

Table 40: Combined Theoretical Interview Table for High School Dual Credit at SSCC (Complete)

<i>(Affinities in Descending Order of Frequency with Power Analysis)</i>						
Driver	Outcome	Frequency	Cumulative Frequency (%)	Relative Cumulative Frequency (%)	Model Power	Relationship Explanatory Power (%)
3	1	13	5.9	1.8	4.2	5.9
3	7	10	10.5	3.6	6.9	4.6
3	8	10	15.1	5.4	9.7	4.6
7	8	10	19.6	7.1	12.5	4.6
6	1	10	24.2	8.9	15.3	4.6
4	8	8	27.9	10.7	17.1	3.7
6	8	8	31.5	12.5	19.0	3.7
4	3	8	35.2	14.3	20.9	3.7
2	3	7	38.4	16.1	22.3	3.2
2	7	7	41.6	17.9	23.7	3.2
2	8	7	44.7	19.6	25.1	3.2
5	7	7	47.9	21.4	26.5	3.2
2	1	7	51.1	23.2	27.9	3.2
4	1	7	54.3	25.0	29.3	3.2
6	3	7	57.5	26.8	30.7	3.2
4	7	6	60.3	28.6	31.7	2.7
5	8	6	63.0	30.4	32.7	2.7
6	7	6	65.8	32.1	33.6	2.7
8	1	6	68.5	33.9	34.6	2.7
4	2	6	71.2	35.7	35.5	2.7
1	8	5	73.5	37.5	36.0	2.3
5	3	5	75.8	39.3	36.5	2.3
1	2	4	77.6	41.1	36.6	1.8
1	7	4	79.5	42.9	36.6	1.8
7	1	4	81.3	44.6	36.6	1.8
5	2	4	83.1	46.4	36.7	1.8
4	5	3	84.5	48.2	36.3	1.4
4	6	3	85.8	50.0	35.8	1.4
7	3	3	87.2	51.8	35.4	1.4
8	3	3	88.6	53.6	35.0	1.4
2	6	2	89.5	55.4	34.1	0.9
5	1	2	90.4	57.1	33.3	0.9
8	4	2	91.3	58.9	32.4	0.9

(Affinities in Descending Order of Frequency with Power Analysis)

<i>Driver</i>	<i>Outcome</i>	<i>Frequency</i>	<i>Cumulative Frequency (%)</i>	<i>Relative Cumulative Frequency (%)</i>	<i>Model Power</i>	<i>Relationship Explanatory Power (%)</i>
7	6	2	92.2	60.7	31.5	0.9
8	7	2	93.2	62.5	30.7	0.9
8	6	1	93.6	64.3	29.3	0.5
1	4	1	94.1	66.1	28.0	0.5
1	6	1	94.5	67.9	26.7	0.5
2	4	1	95.0	69.6	25.3	0.5
2	5	1	95.4	71.4	24.0	0.5
3	4	1	95.9	73.2	22.7	0.5
3	6	1	96.3	75.0	21.3	0.5
3	2	1	96.8	76.8	20.0	0.5
6	2	1	97.3	78.6	18.7	0.5
7	2	1	97.7	80.4	17.4	0.5
8	2	1	98.2	82.1	16.0	0.5
7	4	1	98.6	83.9	14.7	0.5
6	5	1	99.1	85.7	13.4	0.5
7	5	1	99.5	87.5	12.0	0.5
8	5	1	100.0	89.3	10.7	0.5
1	3	0	100.0	91.1	8.9	0.0
1	5	0	100.0	92.9	7.1	0.0
3	5	0	100.0	94.6	5.4	0.0
5	6	0	100.0	96.4	3.6	0.0
5	4	0	100.0	98.2	1.8	0.0
6	4	0	100.0	100.0	0.0	0.0

Notes: 1) Shading in left two columns indicates potential conflicts.

2) Shading in right hand columns indicates power cutoff.

Appendix C:

Table: 41: Combined Theoretical Interview Table for College Dual Credit at SSCC (Complete)

<i>(Affinities in Descending Order of Frequency with Power Analysis)</i>						
<i>Driver</i>	<i>Outcome</i>	<i>Frequency</i>	<i>Cumulative Frequency (%)</i>	<i>Relative Cumulative Frequency (%)</i>	<i>Model Power</i>	<i>Relationship Explanatory Power (%)</i>
6	7	12	6.6	1.8	4.8	6.6
2	1	12	13.2	3.6	9.6	6.6
8	7	10	18.7	5.4	13.3	5.5
3	7	8	23.1	7.1	15.9	4.4
3	8	8	27.5	8.9	18.5	4.4
5	1	8	31.9	10.7	21.2	4.4
6	1	8	36.3	12.5	23.8	4.4
2	7	7	40.1	14.3	25.8	3.8
2	8	7	44.0	16.1	27.9	3.8
3	1	7	47.8	17.9	29.9	3.8
8	1	7	51.6	19.6	32.0	3.8
3	2	6	54.9	21.4	33.5	3.3
4	1	5	57.7	23.2	34.5	2.7
1	7	4	59.9	25.0	34.9	2.2
4	7	4	62.1	26.8	35.3	2.2
4	8	4	64.3	28.6	35.7	2.2
5	8	4	66.5	30.4	36.1	2.2
7	1	4	68.7	32.1	36.5	2.2
5	2	4	70.9	33.9	37.0	2.2
6	2	4	73.1	35.7	37.4	2.2
5	3	4	75.3	37.5	37.8	2.2
5	4	4	77.5	39.3	38.2	2.2
4	5	3	79.1	41.1	38.0	1.6
5	6	3	80.8	42.9	37.9	1.6
5	7	3	82.4	44.6	37.8	1.6
6	8	3	84.1	46.4	37.6	1.6
7	2	3	85.7	48.2	37.5	1.6
1	2	2	86.8	50.0	36.8	1.1
1	6	2	87.9	51.8	36.1	1.1
7	8	2	89.0	53.6	35.4	1.1
4	2	2	90.1	55.4	34.8	1.1
8	2	2	91.2	57.1	34.1	1.1
6	3	2	92.3	58.9	33.4	1.1

(Affinities in Descending Order of Frequency with Power Analysis)

<i>Driver</i>	<i>Outcome</i>	<i>Frequency</i>	<i>Cumulative Frequency (%)</i>	<i>Relative Cumulative Frequency (%)</i>	<i>Model Power</i>	<i>Relationship Explanatory Power (%)</i>
7	5	2	93.4	60.7	32.7	1.1
1	3	1	94.0	62.5	31.5	0.5
1	4	1	94.5	64.3	30.2	0.5
1	5	1	95.1	66.1	29.0	0.5
1	8	1	95.6	67.9	27.7	0.5
3	5	1	96.2	69.6	26.5	0.5
4	3	1	96.7	71.4	25.3	0.5
7	3	1	97.3	73.2	24.0	0.5
8	3	1	97.8	75.0	22.8	0.5
6	5	1	98.4	76.8	21.6	0.5
7	4	1	98.9	78.6	20.3	0.5
8	4	1	99.5	80.4	19.1	0.5
8	5	1	100.0	82.1	17.9	0.5
2	3	0	100.0	83.9	16.1	0.0
2	4	0	100.0	85.7	14.3	0.0
2	5	0	100.0	87.5	12.5	0.0
2	6	0	100.0	89.3	10.7	0.0
3	4	0	100.0	91.1	8.9	0.0
3	6	0	100.0	92.9	7.1	0.0
4	6	0	100.0	94.6	5.4	0.0
6	4	0	100.0	96.4	3.6	0.0
7	6	0	100.0	98.2	1.8	0.0
8	6	0	100.0	100.0	0.0	0.0

Notes: 1) Shading in left two columns indicates potential conflicts.

2) Shading in right hand columns indicates power cutoff.

Appendix D:

Table 42: Combined Theoretical Interview Table for High School Dual Credit at LSCC (Complete)

<i>(Affinities in Descending Order of Frequency with Power Analysis)</i>						
<i>Driver</i>	<i>Outcome</i>	<i>Frequency</i>	<i>Cumulative Frequency (%)</i>	<i>Relative Cumulative Frequency (%)</i>	<i>Model Power</i>	<i>Relationship Explanatory Power (%)</i>
3	1	11	10.6	3.3	7.2	10.6
3	7	10	20.2	6.7	13.5	9.6
4	1	9	28.8	10.0	18.8	8.7
5	6	8	36.5	13.3	23.2	7.7
6	1	8	44.2	16.7	27.6	7.7
2	4	6	50.0	20.0	30.0	5.8
3	6	6	55.8	23.3	32.4	5.8
3	4	5	60.6	26.7	33.9	4.8
5	1	5	65.4	30.0	35.4	4.8
5	2	5	70.2	33.3	36.9	4.8
6	2	5	75.0	36.7	38.3	4.8
6	4	5	79.8	40.0	39.8	4.8
5	4	4	83.7	43.3	40.3	3.8
3	2	3	86.5	46.7	39.9	2.9
5	3	3	89.4	50.0	39.4	2.9
2	3	2	91.3	53.3	38.0	1.9
4	6	2	93.3	56.7	36.6	1.9
4	3	2	95.2	60.0	35.2	1.9
2	6	1	96.2	63.3	32.8	1.0
3	5	1	97.1	66.7	30.4	1.0
4	5	1	98.1	70.0	28.1	1.0
4	2	1	99.0	73.3	25.7	1.0
6	3	1	100.0	76.7	23.3	1.0
1	2	0	100.0	80.0	20.0	0.0
1	3	0	100.0	83.3	16.7	0.0
1	4	0	100.0	86.7	13.3	0.0
1	5	0	100.0	90.0	10.0	0.0
1	6	0	100.0	93.3	6.7	0.0
2	5	0	100.0	96.7	3.3	0.0
6	5	0	100.0	100.0	0.0	0.0

Note: Shading in right hand columns indicates power cutoff.

Appendix E:

Table 43: *Combined Theoretical Interview Table for College Dual Credit at LSCC (Complete)*

<i>(Affinities in Descending Order of Frequency with Power Analysis)</i>						
Driver	Outcome	Frequency	Cumulative Frequency (%)	Relative Cumulative Frequency (%)	Model Power	Relationship Explanatory Power (%)
5	6	9	8.4	3.3	5.1	8.4
3	1	9	16.8	6.7	10.2	8.4
3	6	8	24.3	10.0	14.3	7.5
3	4	7	30.8	13.3	17.5	6.5
2	1	7	37.4	16.7	20.7	6.5
4	1	7	43.9	20.0	23.9	6.5
6	1	7	50.5	23.3	27.1	6.5
5	1	6	56.1	26.7	29.4	5.6
4	2	6	61.7	30.0	31.7	5.6
6	2	5	66.4	33.3	33.0	4.7
5	4	5	71.0	36.7	34.4	4.7
2	4	4	74.8	40.0	34.8	3.7
4	6	4	78.5	43.3	35.2	3.7
3	2	4	82.2	46.7	35.6	3.7
1	4	3	85.0	50.0	35.0	2.8
3	5	3	87.9	53.3	34.5	2.8
5	2	3	90.7	56.7	34.0	2.8
5	3	3	93.5	60.0	33.5	2.8
2	6	2	95.3	63.3	32.0	1.9
1	5	1	96.3	66.7	29.6	0.9
4	5	1	97.2	70.0	27.2	0.9
4	3	1	98.1	73.3	24.8	0.9
6	3	1	99.1	76.7	22.4	0.9
6	4	1	100.0	80.0	20.0	0.9
1	2	0	100.0	83.3	16.7	0.0
1	3	0	100.0	86.7	13.3	0.0
1	6	0	100.0	90.0	10.0	0.0
2	3	0	100.0	93.3	6.7	0.0
2	5	0	100.0	96.7	3.3	0.0
6	5	0	100.0	100.0	0.0	0.0

Notes: 1) Shading in left two columns indicates potential conflicts.

2) Shading in right hand columns indicates power cutoff.

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