

**Adult Educational Development
Tracking Study of NNL and GED Students**

Spring 2008

*Prepared by the Office of Research
Teaming to Serve Research Needs of the College
March 20, 2008*

Introduction

As a part of its program review efforts, the Adult Educational Development (AED) department at Harper College desired information regarding what courses were taken by students in the non-native literacy (NNL) and general education (GED) programs.

The goal was to investigate students near the culmination of their AED program. For NNL students, we focused on students taking AED004 from Summer 2002 through Spring 2006. For GED students, we focused on students taking AED025, AED035, or AED045 (collectively, “GED-level courses”) from Summer 2002 through Spring 2006. Harper’s Regent system was used to identify these students and then to collect information on what other courses these students had taken and the grades they had earned in these courses.

This report is organized into an Introduction, a Results and Discussion section that presents information in tabular format, and a Summary section that highlights notable results. The Appendix presents additional detail on courses taken by GED students.

Results and Discussion

NNL Tracking Study

A total of 228 students took AED004 between Summer 2002 and Spring 2006. Note that this represents unduplicated headcount; some students took AED004 more than once. Through Fall FY08, these AED004 students had enrolled in a total of 619 classes in addition to AED004, representing 42 unique courses. The majority of the students (188, or 83%) had taken at least one course in addition to AED004. A large minority (42%) had taken courses in addition to their NNL courses (including non-NNL AED courses). A very small proportion (2%) had taken any college-level courses. Table 1, below, summarizes the number of non-AED004 classes taken before, during, and after students had taken AED004 for the last time. The majority of classes were taken prior to AED004; as shown in Table 2, these classes were predominantly AED001, AED002, and AED003.

Table 1: Timing of Classes Taken Relative to AED004

Timing of Class	Number of Classes Taken	%
Before AED004	385	62.2%
Concurrently with AED004	29	4.7%
After AED004	205	33.1%
<i>Total other classes taken</i>	<i>619</i>	

Table 2: Classes Taken by AED004 Students

Class	Timing Relative to AED004			Total
	Prior	Concurrent	After	
AED001	73			73
AED002	135		4	139
AED003	95	8	16	119
AED013	17	1	4	22
AED015	17	10	14	41
AED023	2	2	20	24
AED025			4	4
AED031	5		20	25
AED033	1	2	20	23
AED035			3	3
AED041	4		10	14
AED043	3	2	26	31
AED045			8	8
AED063	14	3	5	22
AED065			1	1
AED071	9	1	4	14
ESL008			2	2
ESL009			1	1
ESL010	2			2
ESL020	5		1	6
ESL024			1	1
ESL026			2	2
ESL028	1			1
ESL030	2		1	3
ESL034			4	4
ESL038			1	1
ESL040			3	3
ESL043			4	4
ESL044			4	4
ESL046			4	4
ESL050			2	2
ESL053			2	2
ESL056			2	2
ESL057			1	1
ESL059			1	1
ESL063			1	1
ESL067			1	1
ESL074			1	1
ESL076			1	1
ACC101			1	1
RAC101			3	3
RAC103			2	2
<i>Total</i>	<i>385</i>	<i>29</i>	<i>205</i>	<i>619</i>

Table 2 shows the specific classes taken by AED004 students. Classes are separated in the table to show NNL, AED, ESL, and other college classes. The majority of classes taken (54%) were other NNL classes. The next largest proportion of classes was other AED classes (38%), followed by ESL classes (8%). Only one percent of classes taken by the NNL students through Fall FY08 were non-ESL college credit

classes. If we focus on classes taken after AED004, the majority were non-NNL AED classes (68%). An additional 20 percent were ESL classes.

Next, we examined how successful students were in their classes depending on the timing of the class (before, during, or after AED004). Success was defined as earning a passing grade (grades of A, B, C, or P) in the class. The results shown in Table 3 focus on non-NNL classes only. There was a slight tendency for students to be more successful in their later classes, but the differences in success rates were not statistically significant.

Table 3: Success Rates in Non-NNL Classes Based on Timing Relative to AED004

Success in Non-NNL Classes	Timing Relative to AED004					
	Before		During		After	
	n	%	n	%	n	%
Successful	43	52.4%	12	57.1%	116	63.4%
Non-successful	39	47.6%	9	42.9%	67	36.6%

Table 4: Success Rates in Non-AED Classes Based on Timing Relative to AED004

Success in Non-AED Classes ^a	Timing Relative to AED004					
	Before		During		After	
	n	%	n	%	n	%
Successful	3	30.0%	0	n/a	31	67.4%
Non-successful	7	70.0%	0	n/a	15	32.6%

^a The difference in success rates was statistically significant ($\chi^2=4.82$, $df=1$, $p<.05$).

Table 4 shows success rates for non-AED classes. As we can see from Table 2, most of these classes were ESL classes. The AED004 students only took 10 non-AED classes before their AED004 class, but were usually not successful. In contrast, more than two-thirds were successful in classes they took after their AED004 class. Despite the small number of classes, the difference in success rates was statistically significant ($\chi^2=4.82$, $df=1$, $p<.05$).

In summary, the large majority of AED004 students (83%) had taken other classes in addition to AED004. Most of these classes (62%) were taken before AED004 and reflect enrollment in AED001, AED002, and AED003. Few classes were taken concurrently with AED004, but 33 percent were taken afterwards. The classes taken after AED004 were most often non-NNL AED classes. When students took non-AED classes, they were most often ESL classes. Students tended to be more successful in these classes if they took the class after AED004. However, sample sizes were too small to regard these results as conclusive.

GED Tracking Study

A total of 1,013 students took either AED025, AED035, or AED045 between Summer 2002 and Spring 2006. As above, this represents unduplicated headcount. Through Fall FY08, these GED students had enrolled in a total of 3,574 classes in addition to their GED classes, representing 431 unique courses in 72 prefixes. The

majority of the students (816, or 81%) had taken at least one course in addition to their GED courses. Nearly one fifth of the GED students (19%) had taken at least one college-level course. Table 5, below, shows the number of non-GED courses taken by the GED students through Fall FY08. Nearly half of the classes (49%) were taken before the GED classes. A third (33%) of the classes were taken after the GED classes.

Table 5: Timing of Classes Taken Relative to GED Classes

Timing of Class	Number of Classes Taken	%
Before GED classes	1,740	48.7%
Concurrently with GED classes	652	18.2%
After GED classes	1,182	33.1%
<i>Total other classes taken</i>	3,574	

Table 6 presents the prefixes of non-GED classes taken by the GED students through Fall FY08. A complete list of non-GED classes is included in the Appendix. The majority of classes (2,045 classes, or 57% of the total) were other (non-GED) AED classes. Focusing on classes taken after the GED classes, the most common prefixes were AED (11%), ENG (9%), MTH (8%), PSY (7%), and ESL (6%).

Table 7 shows the grades that GED students received in non-AED classes depending on the when the class was taken relative to the GED classes. Students were significantly more likely to earn A grades and less likely to earn F grades in non-AED classes taken after their GED classes ($\chi^2=83.80$, $df=16$, $p<.01$).

Table 8 shows students' grades in their college level (non-AED, non-developmental, non-ESL) courses. Similar to the results in Table 7, the GED students were more likely to earn A grades and less likely to earn F grades in college-level classes taken after their GED classes ($\chi^2=29.31$, $df=14$, $p<.01$).

Finally, we examined the grades that GED students earned in other (non-GED) AED classes. These results are shown in Table 9. Similar to the pattern discussed in the report produced by the Office of Research in 2000, the GED students appeared less likely to pass the AED classes that are taken after their GED classes. This pattern is statistically significant ($\chi^2=40.44$, $df=4$, $p<.01$). It is important to bear in mind that there were very few AED classes taken after the last GED class (123 out of 2,045 total non-GED AED classes). After examining the data, a number of different patterns emerged:

- Some students had enrolled in AED065 (Adult Employment Skills) and withdrew from the course;
- Some students had enrolled in AED013 (Topics in Adult Educational Development) and withdrew from the course;
- Some students had passed the GED-level course in one topic area (e.g., Writing) and were taking the preparatory courses in a new topic area (e.g., Math);

- Some students had passed the GED-level course in a topic area and had enrolled in a preparatory course in that same topic area in the following year (perhaps as a “refresher” before taking the GED exam); and finally,
- Some students were not successful in their GED-level course and were enrolling in the preparatory courses.

Table 6: Prefixes Taken by GED Students

Prefix	Timing Relative to GED class				Prefix	Timing Relative to GED class			
	Prior	Concurrent	After	Total		Prior	Concurrent	After	Total
AED	1,326	596	123	2,045	HUM	3		13	16
ACC	3	1	19	23	IND			2	2
ANT	2		6	8	JPN		1	2	3
ART	1		13	14	LIT	2		16	18
AST			2	2	LNG	1			1
ATE	4		3	7	LTE	11			11
AUT	1			1	MCM			2	2
BFC	1		1	2	MGT	2	1	35	38
BIO	3	1	46	50	MKT			18	18
CAS			8	8	MNT			1	1
CCA	1			1	MOA			7	7
CDV			2	2	MTH	16	1	94	111
CHM	1		23	24	MUS	1	1	18	20
CIS	15	9	27	51	NET			2	2
CMN	1			1	NUR			5	5
CNA	2	1	4	7	OFC	1	2	24	27
CRJ	5	2	18	25	ORN			1	1
DIT			2	2	PED	7	2	27	36
DPR	1			1	PHI	5		32	37
ECE	6		5	11	PHS			3	3
ECO			13	13	PHY			9	9
EDU		1	1	2	PKM			4	4
EGR			4	4	PLS	1	1	14	16
ELT	4	3	45	52	PSC	2		6	8
EMS	2	2	8	12	PST			4	4
ENG	21	4	103	128	PSY	13	2	79	94
ESL	236	9	65	310	RAC	3		2	5
FAS	1	3	2	6	RDG	6		19	25
FIS			6	6	RES		1	8	9
FNA	1			1	SEC	6			6
FRN	1		1	2	SGN		1		1
FSM	3		26	29	SOC	5	1	35	41
GEG		1	7	8	SPA			4	4
GER			4	4	SPE	5	1	29	35
GRA			4	4	WEB			2	2
HSC	5	4	58	67	<i>Total</i>	<i>1,740</i>	<i>652</i>	<i>1,182</i>	<i>3,574</i>
HST	3		16	19					

Table 7: Grades of GED Students in Non-AED Classes

Grade ^a	Timing Relative to GED Classes					
	Prior		Concurrent		After	
	n	%	n	%	n	%
A	48	11.6%	10	17.5%	306	28.9%
B	116	28.0%	11	19.3%	215	20.3%
C	92	22.2%	7	12.3%	146	13.8%
D	25	6.0%	3	5.3%	39	3.7%
F	91	21.9%	17	29.8%	180	17.0%
P	4	1.0%	0	0.0%	6	0.6%
W	39	9.4%	9	15.8%	166	15.7%

^a Grades were significantly different based on timing relative to GED classes ($\chi^2=83.80$, $df=16$, $p<.01$).

Table 8: Grades of GED Students in College-Level Non-ESL Classes

Grade ^a	Timing Relative to GED Classes					
	Prior		Concurrent		After	
	n	%	n	%	n	%
A	28	18.5%	9	19.6%	275	30.5%
B	23	15.2%	8	17.4%	177	19.6%
C	16	10.6%	5	10.9%	117	13.0%
D	8	5.3%	2	4.3%	34	3.8%
F	44	29.1%	14	30.4%	149	16.5%
P	3	2.0%	0	0.0%	6	0.7%
W	29	19.2%	8	17.4%	143	15.9%

^a Grades were significantly different based on timing relative to GED classes ($\chi^2=83.80$, $df=16$, $p<.01$).

Table 9: Grades of GED Students in Other AED Classes

Grade ^a	Timing Relative to GED Classes					
	Prior		Concurrent		After	
	n	%	n	%	n	%
P	859	65.9%	341	58.6%	46	38.7%
W	444	34.1%	241	41.4%	73	61.3%

^a Grades were significantly different based on timing relative to GED classes ($\chi^2=40.44$, $df=4$, $p<.01$).

Summary

The goal of this study was to investigate what classes NNL and GED students took and how successful they were in these classes. NNL students were defined as students who took AED004 between Summer 2002 and Spring 2006. GED students were defined as students who took AED025, AED035, or AED045 between Summer 2002 and Spring 2006. A total of 228 NNL students and 1,013 GED students were included in the analyses.

The 228 NNL students enrolled in a total of 619 other classes at Harper through Fall FY08. Most of these classes were taken before they enrolled in AED004. The majority of classes (54%) were other NNL classes. However, the NNL students also took many other AED classes (38% of total classes) such as AED015, AED043, and AED031. Some of the classes (8%) were ESL classes. Very few (less than 1%) were other college-level classes. The NNL students tended to be more successful in non-NNL classes they took after AED004, but the difference in success rates was not statistically significant. If we restrict our attention to non-AED classes, then the NNL students were statistically more likely to be successful in classes taken after AED004 but sample sizes were too small to place a great deal of confidence in this finding.

The 1,013 GED students enrolled in a total of 3,574 other classes through Fall FY08. These classes represent 431 different courses in 72 prefixes. Approximately half of these classes were taken before the GED classes. For classes taken after the GED classes, the most common prefixes were AED, ENG, MTH, PSY, and ESL. Nineteen percent of the GED students had taken at least one college-level course. The GED students tended to earn higher grades in the classes they took following their GED classes, compared to classes taken before or concurrently with the GED classes. The most common college prefixes taken by GED students were ENG, MTH, and PSY, while the most common college-level courses were ENG101, PSY101, SOC101, and SPE101.

Moving forward, the AED department should consider ways in which to encourage NNL and GED students to stretch their educational aspirations and continue their education. For example, just as there are “bridge” classes to help students transition to certain career programs, it may be possible to ease the transition of GED students into college-level classes in a similar fashion.

Appendix
Course Detail for GED Students

Table A1: Courses Taken by GED Students

Course	Timing Relative to GED class				Course	Timing Relative to GED class			
	Prior	Concurrent	After	Total		Prior	Concurrent	After	Total
ACC101	2	1	12	15	CAS115			2	2
ACC102			2	2	CAS160			1	1
ACC155	1			1	CAS215			1	1
ACC211			4	4	CCA111	1			1
ACC216			1	1	CDV110			2	2
AED001	11			11	CHM100	1		11	12
AED002	23			23	CHM110			3	3
AED003	31			31	CHM121			4	4
AED004	11			11	CHM122			4	4
AED013	51	31	7	89	CHM204			1	1
AED015	9	1	2	12	CIS100	4	1	6	11
AED021	15	1		16	CIS101	6	3	11	20
AED023	304	116	21	441	CIS102		1		1
AED031	78	18		96	CIS119			1	1
AED033	300	113	24	437	CIS120	2	1	4	7
AED041	112	68	4	184	CIS122		1		1
AED043	352	222	23	597	CIS123		1	1	2
AED063	5	1	5	11	CIS124			1	1
AED065	13	25	35	73	CIS125	2	1		3
AED071	11		2	13	CIS128			1	1
ANT101	2		3	5	CIS147			1	1
ANT203			1	1	CIS149			1	1
ANT206			1	1	CIS154	1			1
ANT215			1	1	CMN098	1			1
ART105			5	5	CNA101	2	1	4	7
ART110	1		3	4	CRJ101	4		8	12
ART114			3	3	CRJ104	1	1	1	3
ART121			1	1	CRJ116			2	2
ART296			1	1	CRJ202			1	1
AST101			2	2	CRJ207			1	1
ATE101			1	1	CRJ210			2	2
ATE102	1			1	CRJ216			1	1
ATE104	1			1	CRJ222		1	1	2
ATE105	1		1	2	CRJ224			1	1
ATE106			1	1	DIT101			2	2
ATE214	1			1	DPR101	1			1
AUT140	1			1	ECE101	1		3	4
BFC101	1		1	2	ECE102	1		1	2
BIO101	1	1	18	20	ECE115	1			1
BIO103			1	1	ECE155	1			1
BIO104			3	3	ECE209	1			1
BIO110			5	5	ECE210	1			1
BIO120			3	3	ECE219			1	1
BIO130			2	2	ECO200			7	7
BIO135			2	2	ECO211			4	4
BIO136			2	2	ECO212			2	2
BIO140			1	1	EDU201		1		1
BIO160	1		5	6	EDU211			1	1
BIO161	1		4	5	EGR100			2	2
CAS105			3	3	EGR120			2	2
CAS110			1	1	ELT101			1	1

Table A1: Continued

Course	Timing Relative to GED class				Course	Timing Relative to GED class			
	Prior	Concurrent	After	Total		Prior	Concurrent	After	Total
ELT110	1	3	11	15	ESL044	11		5	16
ELT111			1	1	ESL045	3		1	4
ELT120			3	3	ESL046	12	2	2	16
ELT130			3	3	ESL047	2			2
ELT140			1	1	ESL048	1			1
ELT142	2		10	12	ESL049	2			2
ELT143			4	4	ESL050	5		1	6
ELT144			4	4	ESL053	9		3	12
ELT207			1	1	ESL054	8			8
ELT215	1		6	7	ESL055	5			5
EMS110			1	1	ESL056	13	1	1	15
EMS210	1	1		2	ESL057	4	2	3	9
EMS211	1	1		2	ESL058	1			1
EMS212			2	2	ESL059	3		1	4
EMS213			1	1	ESL060	5			5
EMS214			2	2	ESL063	8	3	4	15
EMS215			1	1	ESL064	5			5
EMS216			1	1	ESL065	3			3
ENG098	5		5	10	ESL066	7			7
ENG100	4	1	12	17	ESL067	2		7	9
ENG101	10	2	60	72	ESL068	3			3
ENG102	2		22	24	ESL069	5			5
ENG103		1	1	2	ESL073	4		8	12
ENG130			1	1	ESL074	4		7	11
ENG221			2	2	ESL075	1		2	3
ESL006			1	1	ESL076	3		4	7
ESL007	1		1	2	ESL078	2			2
ESL008			2	2	ESL079	1			1
ESL009			3	3	ESL085	1		1	2
ESL010	5			5	ESL098	2			2
ESL015	3			3	FAS105		1		1
ESL016	3			3	FAS107		1		1
ESL018	1			1	FAS110			1	1
ESL020	8			8	FAS112		1		1
ESL023	3			3	FAS113			1	1
ESL024	3			3	FAS116	1			1
ESL025	3			3	FIS100			1	1
ESL026	4			4	FIS121			1	1
ESL028	2			2	FIS122			1	1
ESL030	11			11	FIS132			1	1
ESL033	3			3	FIS200			1	1
ESL034	10	1	2	13	FIS250			1	1
ESL035	1			1	FNA114	1			1
ESL036	6			6	FRN101	1		1	2
ESL037	3			3	FSM107			1	1
ESL038	4		1	5	FSM108			1	1
ESL039	1		1	2	FSM109			2	2
ESL040	10			10	FSM110			2	2
ESL041	2			2	FSM111	1		1	2
ESL042	2			2	FSM113			2	2
ESL043	12		4	16	FSM114			4	4

Table A1: Continued

Course	Timing Relative to GED class				Course	Timing Relative to GED class			
	Prior	Concurrent	After	Total		Prior	Concurrent	After	Total
FSM115	1		2	3	LNG105	1			1
FSM162			1	1	LTE101	2			2
FSM163			1	1	LTE102	2			2
FSM172			1	1	LTE103	2			2
FSM173			1	1	LTE105	1			1
FSM211			2	2	LTE123	2			2
FSM212			1	1	LTE200	1			1
FSM213			1	1	LTE203	1			1
FSM214			1	1	MCM120			1	1
FSM215	1		1	2	MCM130			1	1
FSM220			1	1	MGT111	2	1	19	22
GEG100			1	1	MGT115			1	1
GEG101		1	4	5	MGT150			5	5
GEG111			2	2	MGT154			1	1
GER101			2	2	MGT160			3	3
GER102			1	1	MGT218			1	1
GER201			1	1	MGT265			1	1
GRA101			1	1	MGT270			4	4
GRA103			1	1	MKT106			1	1
GRA113			1	1	MKT140			4	4
GRA120			1	1	MKT217			1	1
HSC100	2		12	14	MKT245			6	6
HSC104			2	2	MKT247			1	1
HSC105	1	3	14	18	MKT250			1	1
HSC107			4	4	MKT252			1	1
HSC112	2	1	19	22	MKT255			1	1
HSC151			2	2	MKT260			1	1
HSC201			2	2	MKT281			1	1
HSC213			3	3	MNT110			1	1
HST111	3		5	8	MOA145			2	2
HST112			5	5	MOA150			1	1
HST121			1	1	MOA195			2	2
HST141			1	1	MOA235			1	1
HST152			1	1	MOA240			1	1
HST212			2	2	MTH051	1		1	2
HST214			1	1	MTH052	2		2	4
HUM101	3		4	7	MTH053			2	2
HUM102			3	3	MTH054			1	1
HUM105			1	1	MTH055	4	1	15	20
HUM115			1	1	MTH060	2		25	27
HUM120			4	4	MTH061	2			2
IND100			1	1	MTH070	1		4	5
IND101			1	1	MTH080	2		18	20
JPN101		1	2	3	MTH101			4	4
LIT105	1		4	5	MTH103	1		7	8
LIT112			2	2	MTH124	1			1
LIT115			7	7	MTH130			1	1
LIT208			1	1	MTH131			1	1
LIT210	1		1	1	MTH140			4	4
LIT219			1	1	MTH200			3	3
LIT222			1	1	MTH201			2	2

Table A1: Continued

Course	Timing Relative to GED class				Course	Timing Relative to GED class			
	Prior	Concurrent	After	Total		Prior	Concurrent	After	Total
MTH202			2	2	PED205			5	5
MTH212			2	2	PED207	2		3	5
MUS101			4	4	PED220		1		1
MUS102			1	1	PED226			1	1
MUS103			2	2	PHI101			8	8
MUS104	1		2	3	PHI105	4		3	7
MUS111			2	2	PHI115			11	11
MUS115			2	2	PHI120			2	2
MUS150		1		1	PHI150			1	1
MUS165			1	1	PHI205	1		5	6
MUS167			2	2	PHI210			1	1
MUS194			1	1	PHI220			1	1
MUS294			1	1	PHS101			1	1
NET101			1	1	PHS112			2	2
NET121			1	1	PHY121			2	2
NUR101			2	2	PHY122			1	1
NUR120			3	3	PHY201			2	2
OFC104			1	1	PHY202			2	2
OFC105			1	1	PHY203			2	2
OFC106			1	1	PKM140			1	1
OFC107			1	1	PKM150			1	1
OFC110	1	1	1	3	PKM210			1	1
OFC111		1		1	PKM213			1	1
OFC113			1	1	PLS101	1		2	3
OFC130			1	1	PLS102		1		1
OFC133			1	1	PLS103			1	1
OFC134			2	2	PLS105			1	1
OFC201			1	1	PLS123			1	1
OFC202			1	1	PLS200			1	1
OFC203			1	1	PLS202			1	1
OFC220			1	1	PLS205			1	1
OFC227			1	1	PLS206			1	1
OFC228			1	1	PLS208			1	1
OFC229			1	1	PLS210			1	1
OFC230			1	1	PLS212			1	1
OFC237			1	1	PLS222			1	1
OFC238			1	1	PLS223			1	1
OFC247			1	1	PSC101	2		6	8
OFC263			1	1	PST101			1	1
OFC264			1	1	PST102			1	1
OFC266			1	1	PST110			1	1
ORN101			1	1	PST111			1	1
PED104	2		2	4	PSY101	10	2	46	58
PED119			3	3	PSY106	2		15	17
PED122			2	2	PSY107	1		2	3
PED139			1	1	PSY216			4	4
PED150	1		1	2	PSY217			1	1
PED163			1	1	PSY225			2	2
PED195	1			1	PSY228			6	6
PED201			4	4	PSY230			1	1
PED203	1	1	4	6	PSY245			2	2

Table A1: Continued

Course	Timing Relative to GED class			Total
	Prior	Concurrent	After	
RAC101	3		2	5
RDG090	2		4	6
RDG099	4		15	19
RES101		1	3	4
RES140			1	1
RES141			2	2
RES142			2	2
SEC099	1			1
SEC110	2			2
SEC121	1			1
SEC133	1			1
SEC200	1			1
SGN101		1		1
SOC101	5		32	37
SOC120			1	1
SOC205		1	1	2
SOC215			1	1
SPA101			4	4
SPE101	3	1	28	32
SPE111			1	1
SPE212	1			1
SPE213	1			1
WEB150			2	2
<i>Total</i>	<i>1,740</i>	<i>652</i>	<i>1,182</i>	<i>3,574</i>