



APPENDIXES

APPENDIX 1: Questionnaire Set

NRP:

Gender: Male

Female

Direction: Please mark (√) the appropriate number to indicate your learning language to each statement honestly!

PART A: HOW IS MY LEARNING?

No	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1	In learning, I'm free from the control of my lecturers/counselors/parents.				
2	I learn independently without any guide or help from my lecturers or counselors.				
3	I am an open minded person (e.g. I communicate well with my friends, counselors and lecturers, I share my problems in learning English with them, etc).				
4	In learning English, I don't depend on my friends, lecturers and counselors.				
5	I understand the right strategy for myself to master English well (e.g. I choose reading novels to enrich my vocabularies or I choose watching movies to improve my listening skill).				
6	I understand my needs to improve my English (e.g. I am weak in grammar so that I need to read and do more exercises from grammar books).				

7	I analyze my own strengths in learning (e.g. I get good scores for my writing and grammar, so that I know that my strengths are in writing and grammar).				
8	I try to improve my strengths in learning without any commands from my lecturers or counselors.				
9	I analyze my own weaknesses in learning (e.g. I get bad scores for my listening and vocabulary, so that I know that my weaknesses are in listening and vocabulary).				
10	I try to reduce my weaknesses in learning without any commands from my lecturers or counselors.				
11	I set achievable targets and objectives or goals (cita-cita atau tujuan yang ingin dicapai) for my study and I try to do my best to reach those targets and goals.				
12	I choose the exercises and the materials for learning English based on my interests (e.g. I like to read newspapers to improve my reading skill).				
13	I select interesting activities for myself to improve my language ability (e.g. I enjoy studying with small group work with my friends).				
14	I evaluate my own progress of learning.				
15	I integrate my self-management of learning (e.g. I arrange my own schedule of learning; Today I want to improve my speaking skill at Self Access Center (SAC) and tomorrow I will read books at the library to enrich my vocabularies, etc.).				
16	I make my learning meaningful for myself (e.g. by learning English, I				

	can read imported books that I like and I can have a chat with native speakers without any difficulties, etc.).				
17	I am active and enthusiastic to learn English.				
18	I enjoy learning English, because I view the problems I face in my learning as challenges (positive thinking).				
19	I have strong self-discipline.				
20	I fully believe in myself that I can be a successful learner and I will not give up learning English.				

PART B: WHAT FACTORS AFFECT MY LEARNING?

No	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1	I want to master English for social purposes (e.g. I learn English because I want to communicate with foreigners and read English novels, etc.).				
2	I want to master English because English is mostly used in this globalization era.				
3	I study hard because I will get gifts from my friends/ parents/ lecturers/ counselors.				
4	I study hard to get high scores.				
5	I study hard and do my assignments to get positive feedback/compliments/popularity from my friends/ parents/ lecturers/ counselors.				
6	I study hard because I am afraid of punishment from my parents/ lecturers/ counselors.				
7	My friends support me to study hard.				

8	My lecturers and counselors motivate me to study hard.				
9	My family supports me to study hard.				
10	My lecturers can create interesting classroom situations and activities that make me love learning English.				
11	I'd like to attend the classes because my lecturers are attractive, nice, and friendly.				
12	The challenges in learning English can motivate me to learn more and more.				
13	The curriculum at English Department is appropriate for me to learn well.				
14	I like the subjects at English Department.				
15	I can learn well because of complete facilities in my campus like Self Access Center (SAC), the language laboratories and the library.				
16	I like learning English because of interesting activities like group work in the classes, conversation club in Self Access Center (SAC), English Debate Society, etc.				
17	I study hard because of strict rules from my lecturers/counselors (e.g. My lecturers force me to speak English at the campus).				
18	I love studying English because I have comfortable places for learning (e.g. my house, library, SAC, language laboratory, canteen, etc).				
19	I want to master English because I want to be great or smart like my lecturers/ counselors/ other experts.				
20	I want to learn English because I have strong willingness and determination (tekad) to achieve				

	academic and future careers.				
21	I love studying English to satisfy my curiosity (memenuhi rasa keingin tahuan) about English.				
22	I enjoy learning English, because I love English.				
23	I have a strong belief in myself.				
24	I study hard, because I appreciate/respect myself (menghargai diri sendiri) to do so.				
25	I like learning English because I like to learn new things about English in order to enrich my knowledge.				

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

APPENDIX 2: Data Questionnaire of the Students from Academic Year 2006

NRP	Gender	Degrees
1213006002	F	3.15
1213006003	F	3.05
1213006004	F	3.25
1213006005	F	3.3
1213006009	F	3.5
1213006011	F	2.8
1213006013	F	2.65
1213006014	F	3.05
1213006015	F	2.8
1213006016	F	3.05
1213006018	F	3.35
1213006019	F	2.15
1213006020	F	3.1
1213006021	F	3
1213006022	F	2.95
1213006024	F	3.05
1213006027	F	3.15
1213006029	F	2.95
1213006030	F	2.7
1213006031	F	3.1
1213006032	F	2.95
1213006036	F	2.9
1213006037	M	2.8
1213006038	F	3.4
1213006039	F	3.5
1213006041	F	2.8
1213006042	F	3.15
1213006045	F	2.7
1213006046	F	2.85
1213006052	F	3.1
1213006056	F	3.1
1213006057	F	2.55

1213006060	F	3.45
1213006065	F	2.35
1213006069	F	3
1213006071	F	3.05
1213006073	M	3.2
1213006074	M	2.95
1213006075	F	3
1213006076	F	2.5
1213006078	F	2.35
1213006081	F	2.7
1213006082	F	2.9
1213006083	M	2.75
1213006084	M	2.65
1213006085	F	3.75
1213006087	F	3.3
1213006090	M	2.8
1213006092	F	2.75
1213006095	F	2.75
1213006097	F	4

APPENDIX 3: Data Questionnaire of the Students from Academic Year 2007

NRP	Gender	Degrees
1213007001	F	2.85
1213007005	F	2.7
1213007008	F	3.6
1213007009	F	3.35
1213007012	F	2.85
1213007014	F	2.95
1213007015	M	3.3
1213007016	F	3
1213007017	F	3.15
1213007018	F	2.75
1213007020	F	2.9
1213007021	F	2.5
1213007023	F	3.1
1213007027	F	2.7
1213007032	M	3.45
1213007034	F	3.35
1213007038	M	3
1213007046	F	2.7
1213007050	F	3.75
1213007053	M	2.9
1213007055	F	3.2
1213007057	F	2.75
1213007063	M	2.65
1213007065	F	3.1
1213007069	M	2.75
1213007075	F	2.4
1213007077	M	2.95
1213007080	M	3.2
1213007081	M	2.8
1213007083	F	2.95
1213007084	M	2.55
1213007085	F	2.85

1213007087	F	3.3
1213007088	F	3.05
1213007089	F	3.15
1213007091	F	3.2
1213007093	M	2.7
1213007094	F	3.5
1213007095	F	3.2
1213007098	F	2.25

APPENDIX 4: Data Questionnaire of the Students from Academic Year 2008

NRP	Gender	Degrees
1213008001	F	2.7
1213008003	F	3.35
1213008004	F	2.6
1213008005	F	3.05
1213008008	F	2.05
1213008011	M	3.15
1213008016	M	3.3
1213008017	M	2.75
1213008022	F	2.85
1213008023	F	2.95
1213008025	F	3.1
1213008027	F	2.65
1213008034	F	2.4
1213008035	F	2.8
1213008044	M	2.6
1213008045	M	2.75
1213008046	M	2.7
1213008048	F	3.1
1213008051	F	2.75
1213008052	F	2.6
1213008054	M	2.8
1213008056	M	2.05
1213008059	M	2.85
1213008061	F	3.2
1213008063	F	3.1
1213008074	F	2.7
1213008078	F	3.05
1213008082	F	2.85
1213008083	F	3
1213008084	F	2.85
1213008086	M	2.9
1213008087	F	2.9

1213008088	F	2.6
1213008090	F	3
1213008091	M	2.8
1213008092	F	2.9
1213008093	F	3.25
1213008095	F	2.9
1213008097	F	2.7
1213008098	M	3.6
1213008099	F	3.2
1213008100	M	2.6

APPENDIX 5: Data Questionnaire of the Students from Academic Year 2009

NRP	Gender	Degrees
1213009001	F	3.4
1213009002	F	2.95
1213009005	M	3.3
1213009006	F	2.75
1213009007	F	3.35
1213009009	F	2.75
1213009010	F	3.25
1213009012	F	3.35
1213009013	F	2.75
1213009014	F	3.05
1213009016	F	2.85
1213009017	M	2.6
1213009018	F	2.2
1213009020	F	3.4
1213009022	F	3.15
1213009023	F	3
1213009024	F	2.85
1213009025	F	2.95
1213009026	M	3.25
1213009027	F	2.55
1213009029	F	3
1213009030	F	2.85
1213009031	F	3.3
1213009032	F	2.65
1213009033	M	2.9
1213009034	F	2.4
1213009035	F	2.4
1213009036	M	3.25
1213009038	F	2.85
1213009040	F	2.95
1213009041	F	2.95
1213009042	F	3.4

APPENDIX 5: Data Questionnaire of the Students from Academic Year 2009

NRP	Gender	Degrees
1213009001	F	3.4
1213009002	F	2.95
1213009005	M	3.3
1213009006	F	2.75
1213009007	F	3.35
1213009009	F	2.75
1213009010	F	3.25
1213009012	F	3.35
1213009013	F	2.75
1213009014	F	3.05
1213009016	F	2.85
1213009017	M	2.6
1213009018	F	2.2
1213009020	F	3.4
1213009022	F	3.15
1213009023	F	3
1213009024	F	2.85
1213009025	F	2.95
1213009026	M	3.25
1213009027	F	2.55
1213009029	F	3
1213009030	F	2.85
1213009031	F	3.3
1213009032	F	2.65
1213009033	M	2.9
1213009034	F	2.4
1213009035	F	2.4
1213009036	M	3.25
1213009038	F	2.85
1213009040	F	2.95
1213009041	F	2.95
1213009042	F	3.4

1213009043	M	3.05
1213009044	F	2.7
1213009046	F	3.15
1213009047	F	3.05
1213009048	F	2.9
1213009049	M	3.4
1213009050	F	2.85
1213009052	M	2.9
1213009055	F	2.6
1213009057	F	3.15
1213009058	F	2.5
1213009059	M	2.75
1213009062	M	2.8
1213009063	F	2.85
1213009064	F	2.85
1213009065	F	3
1213009067	F	3.4
1213009071	M	2.7
1213009072	M	2.55
1213009073	F	2.4
1213009074	M	2.75
1213009075	F	3
1213009076	F	3.1
1213009077	F	2.85
1213009078	M	2.8
1213009079	F	2.55
1213009080	M	2.95
1213009081	F	2.9
1213009082	F	2.95
1213009083	F	2.8
1213009085	F	3.1

APPENDIX 6: Data Questionnaire of All Students (from Academic Year 2006, 2007, 2008 and 2009)

NRP	Gender	Degrees
1213006002	F	3.15
1213006003	F	3.05
1213006004	F	3.25
1213006005	F	3.3
1213006009	F	3.5
1213006011	F	2.8
1213006013	F	2.65
1213006014	F	3.05
1213006015	F	2.8
1213006016	F	3.05
1213006018	F	3.35
1213006019	F	2.15
1213006020	F	3.1
1213006021	F	3
1213006022	F	2.95
1213006024	F	3.05
1213006027	F	3.15
1213006029	F	2.95
1213006030	F	2.7
1213006031	F	3.1
1213006032	F	2.95
1213006036	F	2.9
1213006037	M	2.8
1213006038	F	3.4
1213006039	F	3.5
1213006041	F	2.8
1213006042	F	3.15
1213006045	F	2.7
1213006046	F	2.85
1213006052	F	3.1
1213006056	F	3.1
1213006057	F	2.55

1213006060	F	3.45
1213006065	F	2.35
1213006069	F	3
1213006071	F	3.05
1213006073	M	3.2
1213006074	M	2.95
1213006075	F	3
1213006076	F	2.5
1213006078	F	2.35
1213006081	F	2.7
1213006082	F	2.9
1213006083	M	2.75
1213006084	M	2.65
1213006085	F	3.75
1213006087	F	3.3
1213006090	M	2.8
1213006092	F	2.75
1213006095	F	2.75
1213006097	F	4
1213007001	F	2.85
1213007005	F	2.7
1213007008	F	3.6
1213007009	F	3.35
1213007012	F	2.85
1213007014	F	2.95
1213007015	M	3.3
1213007016	F	3
1213007017	F	3.15
1213007018	F	2.75
1213007020	F	2.9
1213007021	F	2.5
1213007023	F	3.1
1213007027	F	2.7
1213007032	M	3.45
1213007034	F	3.35

1213007038	M	3
1213007046	F	2.7
1213007050	F	3.75
1213007053	M	2.9
1213007055	F	3.2
1213007057	F	2.75
1213007063	M	2.65
1213007065	F	3.1
1213007069	M	2.75
1213007075	F	2.4
1213007077	M	2.95
1213007080	M	3.2
1213007081	M	2.8
1213007083	F	2.95
1213007084	M	2.55
1213007085	F	2.85
1213007087	F	3.3
1213007088	F	3.05
1213007089	F	3.15
1213007091	F	3.2
1213007093	M	2.7
1213007094	F	3.5
1213007095	F	3.2
1213007098	F	2.25
1213008001	F	2.7
1213008003	F	3.35
1213008004	F	2.6
1213008005	F	3.05
1213008008	F	2.05
1213008011	M	3.15
1213008016	M	3.3
1213008017	M	2.75
1213008022	F	2.85
1213008023	F	2.95
1213008025	F	3.1

1213008027	F	2.65
1213008034	F	2.4
1213008035	F	2.8
1213008044	M	2.6
1213008045	M	2.75
1213008046	M	2.7
1213008048	F	3.1
1213008051	F	2.75
1213008052	F	2.6
1213008054	M	2.8
1213008056	M	2.05
1213008059	M	2.85
1213008061	F	3.2
1213008063	F	3.1
1213008074	F	2.7
1213008078	F	3.05
1213008082	F	2.85
1213008083	F	3
1213008084	F	2.85
1213008086	M	2.9
1213008087	F	2.9
1213008088	F	2.6
1213008090	F	3
1213008091	M	2.8
1213008092	F	2.9
1213008093	F	3.25
1213008095	F	2.9
1213008097	F	2.7
1213008098	M	3.6
1213008099	F	3.2
1213008100	M	2.6
1213009001	F	3.4
1213009002	F	2.95
1213009005	M	3.3
1213009006	F	2.75

1213009007	F	3.35
1213009009	F	2.75
1213009010	F	3.25
1213009012	F	3.35
1213009013	F	2.75
1213009014	F	3.05
1213009016	F	2.85
1213009017	M	2.6
1213009018	F	2.2
1213009020	F	3.4
1213009022	F	3.15
1213009023	F	3
1213009024	F	2.85
1213009025	F	2.95
1213009026	M	3.25
1213009027	F	2.55
1213009029	F	3
1213009030	F	2.85
1213009031	F	3.3
1213009032	F	2.65
1213009033	M	2.9
1213009034	F	2.4
1213009035	F	2.4
1213009036	M	3.25
1213009038	F	2.85
1213009040	F	2.95
1213009041	F	2.95
1213009042	F	3.4
1213009043	M	3.05
1213009044	F	2.7
1213009046	F	3.15
1213009047	F	3.05
1213009048	F	2.9
1213009049	M	3.4
1213009050	F	2.85
1213009052	M	2.9

1213009055	F	2.6
1213009057	F	3.15
1213009058	F	2.5
1213009059	M	2.75
1213009062	M	2.8
1213009063	F	2.85
1213009064	F	2.85
1213009065	F	3
1213009067	F	3.4
1213009071	M	2.7
1213009072	M	2.55
1213009073	F	2.4
1213009074	M	2.75
1213009075	F	3
1213009076	F	3.1
1213009077	F	2.85
1213009078	M	2.8
1213009079	F	2.55
1213009080	M	2.95
1213009081	F	2.9
1213009082	F	2.95
1213009083	F	2.8
1213009085	F	3.1

APPENDIX 7: Table and Calculation of Correlation (Students from Academic Year 2006)

Academic Year 2006						
NRP	Gender	Degrees (X)	GPA (Y)	X.Y	X^2	Y^2
1213006002	F	3.15	2.99	9.4185	9.9225	8.9401
1213006003	F	3.05	3.94	12.017	9.3025	15.5236
1213006004	F	3.25	3.57	11.6025	10.5625	12.7449
1213006005	F	3.3	3.81	12.573	10.89	14.5161
1213006009	F	3.5	3.44	12.04	12.25	11.8336
1213006011	F	2.8	3.79	10.612	7.84	14.3641
1213006013	F	2.65	2.98	7.897	7.0225	8.8804
1213006014	F	3.05	3.06	9.333	9.3025	9.3636
1213006015	F	2.8	3.86	10.808	7.84	14.8996
1213006016	F	3.05	3.09	9.4245	9.3025	9.5481
1213006018	F	3.35	3.14	10.519	11.2225	9.8596
1213006019	F	2.15	2.42	5.203	4.6225	5.8564
1213006020	F	3.1	3.26	10.106	9.61	10.6276
1213006021	F	3	3.25	9.75	9	10.5625
1213006022	F	2.95	3.3	9.735	8.7025	10.89
1213006024	F	3.05	3.25	9.9125	9.3025	10.5625

1213006027	F	3.15	3.33	10.4895	9.9225	11.0889
1213006029	F	2.95	2.65	7.8175	8.7025	7.0225
1213006030	F	2.7	2.89	7.803	7.29	8.3521
1213006031	F	3.1	3.29	10.199	9.61	10.8241
1213006032	F	2.95	3.4	10.03	8.7025	11.56
1213006036	F	2.9	2.92	8.468	8.41	8.5264
1213006037	M	2.8	2.76	7.728	7.84	7.6176
1213006038	F	3.4	3.16	10.744	11.56	9.9856
1213006039	F	3.5	2.86	10.01	12.25	8.1796
1213006041	F	2.8	3.85	10.78	7.84	14.8225
1213006042	F	3.15	3.36	10.584	9.9225	11.2896
1213006045	F	2.7	2.24	6.048	7.29	5.0176
1213006046	F	2.85	2.91	8.2935	8.1225	8.4681
1213006052	F	3.1	3.26	10.106	9.61	10.6276
1213006056	F	3.1	2.36	7.316	9.61	5.5696
1213006057	F	2.55	2.26	5.763	6.5025	5.1076
1213006060	F	3.45	3.36	11.592	11.9025	11.2896
1213006065	F	2.35	3.23	7.5905	5.5225	10.4329
1213006069	F	3	2.86	8.58	9	8.1796
1213006071	F	3.05	2.96	9.028	9.3025	8.7616
1213006073	M	3.2	3.53	11.296	10.24	12.4609

1213006074	M	2.95	2.02	5.959	8.7025	4.0804
1213006075	F	3	3.43	10.29	9	11.7649
1213006076	F	2.5	3.77	9.425	6.25	14.2129
1213006078	F	2.35	3.32	7.802	5.5225	11.0224
1213006081	F	2.7	2.73	7.371	7.29	7.4529
1213006082	F	2.9	3.63	10.527	8.41	13.1769
1213006083	M	2.75	3.08	8.47	7.5625	9.4864
1213006084	M	2.65	2.78	7.367	7.0225	7.7284
1213006085	F	3.75	2.08	7.8	14.0625	4.3264
1213006087	F	3.3	2.84	9.372	10.89	8.0656
1213006090	M	2.8	3.61	10.108	7.84	13.0321
1213006092	F	2.75	2.69	7.3975	7.5625	7.2361
1213006095	F	2.75	2.82	7.755	7.5625	7.9524
1213006097	F	4	3.7	14.8	16	13.69
		152.1	159.09	475.6605	459.525	507.385

n = 51

n.ΣXY 24258.6855
 ΣXΣY 24197.589
 n.ΣX² 23435.775
 n.ΣY² 25876.6095

n.ΣXY -
 ΣX.ΣY 61.0965
 n.ΣX² -
 (ΣX)² 301.365
 n.ΣY² - 566.9814

{n.ΣX² - (ΣX)²} {n.ΣY² -
 (ΣY)²} = 170868.3496
 Square root [{n.ΣX² - (ΣX)²} 413.3622499

$$\begin{aligned}(\sum X)^2 & 23134.41 \\ (\sum Y)^2 & 25309.6281\end{aligned}$$

$$(\sum Y)^2$$

$$\begin{aligned}\{n \cdot \sum Y^2 - (\sum Y)^2\} &= \\ r &= 0.147803773\end{aligned}$$

APPENDIX 8: Table and Calculation of Correlation (Students from Academic Year 2007)

Academic Year 2007						
NRP	Gender	Degrees (X)	GPA (Y)	X.Y	X²	Y²
1213007001	F	2.85	3.15	8.9775	8.1225	9.9225
1213007005	F	2.7	2.93	7.911	7.29	8.5849
1213007008	F	3.6	3.88	13.968	12.96	15.0544
1213007009	F	3.35	3.59	12.0265	11.2225	12.8881
1213007012	F	2.85	3.33	9.4905	8.1225	11.0889
1213007014	F	2.95	3.77	11.1215	8.7025	14.2129
1213007015	M	3.3	3.38	11.154	10.89	11.4244
1213007016	F	3	3.84	11.52	9	14.7456
1213007017	F	3.15	3.93	12.3795	9.9225	15.4449
1213007018	F	2.75	3.74	10.285	7.5625	13.9876
1213007020	F	2.9	3.25	9.425	8.41	10.5625
1213007021	F	2.5	3.48	8.7	6.25	12.1104
1213007023	F	3.1	3.42	10.602	9.61	11.6964
1213007027	F	2.7	3.01	8.127	7.29	9.0601
1213007032	M	3.45	3.9	13.455	11.9025	15.21
1213007034	F	3.35	3.55	11.8925	11.2225	12.6025

1213007038	M	3	2.92	8.76	9	8.5264
1213007046	F	2.7	3.08	8.316	7.29	9.4864
1213007050	F	3.75	3.09	11.5875	14.0625	9.5481
1213007053	M	2.9	2.39	6.931	8.41	5.7121
1213007055	F	3.2	3.88	12.416	10.24	15.0544
1213007057	F	2.75	2.88	7.92	7.5625	8.2944
1213007063	M	2.65	2.67	7.0755	7.0225	7.1289
1213007065	F	3.1	3.09	9.579	9.61	9.5481
1213007069	M	2.75	3	8.25	7.5625	9
1213007075	F	2.4	1.65	3.96	5.76	2.7225
1213007077	M	2.95	3.04	8.968	8.7025	9.2416
1213007080	M	3.2	2.97	9.504	10.24	8.8209
1213007081	M	2.8	2.42	6.776	7.84	5.8564
1213007083	F	2.95	2.45	7.2275	8.7025	6.0025
1213007084	M	2.55	3.19	8.1345	6.5025	10.1761
1213007085	F	2.85	2.04	5.814	8.1225	4.1616
1213007087	F	3.3	2.65	8.745	10.89	7.0225
1213007088	F	3.05	2.06	6.283	9.3025	4.2436
1213007089	F	3.15	3.25	10.2375	9.9225	10.5625
1213007091	F	3.2	2.78	8.896	10.24	7.7284
1213007093	M	2.7	2.67	7.209	7.29	7.1289

1213007094	F	3.5	2.6	9.1	12.25	6.76
1213007095	F	3.2	2.72	8.704	10.24	7.3984
1213007098	F	2.25	3.58	8.055	5.0625	12.8164
		119.35	123.22	369.4835	360.3075	391.537

n = 40

$n \cdot \sum XY = 14779.34$

$\sum X \sum Y = 14706.307$

$n \cdot \sum X^2 = 14412.3$

$n \cdot \sum Y^2 = 15661.488$

$(\sum X)^2 = 14244.4225$

$(\sum Y)^2 = 15183.1684$

$n \cdot \sum XY - \sum X \cdot \sum Y = 73.033$

$n \cdot \sum X^2 - (\sum X)^2 = 167.8775$

$n \cdot \sum Y^2 - (\sum Y)^2 = 478.3196$

$\{n \cdot \sum X^2 - (\sum X)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\} = 80299.09865$

Square root [$\{n \cdot \sum X^2 - (\sum X)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}] = 283.3709559$

$r = 0.257729307$

APPENDIX 9: Table and Calculation of Correlation (Students from Academic Year 2008)

Academic Year 2008						
NRP	Gender	Degrees (X)	GPA (Y)	X.Y	X²	Y²
1213008001	F	2.7	3.32	8.964	7.29	11.0224
1213008003	F	3.35	1.61	5.3935	11.2225	2.5921
1213008004	F	2.6	3.18	8.268	6.76	10.1124
1213008005	F	3.05	3.38	10.309	9.3025	11.4244
1213008008	F	2.05	2.07	4.2435	4.2025	4.2849
1213008011	M	3.15	3.68	11.592	9.9225	13.5424
1213008016	M	3.3	3.23	10.659	10.89	10.4329
1213008017	M	2.75	2.9	7.975	7.5625	8.41
1213008022	F	2.85	3.33	9.4905	8.1225	11.0889
1213008023	F	2.95	2.71	7.9945	8.7025	7.3441
1213008025	F	3.1	2.87	8.897	9.61	8.2369
1213008027	F	2.65	2.17	5.7505	7.0225	4.7089
1213008034	F	2.4	2.81	6.744	5.76	7.8961
1213008035	F	2.8	1.93	5.404	7.84	3.7249
1213008044	M	2.6	2.16	5.616	6.76	4.6656
1213008045	M	2.75	2.95	8.1125	7.5625	8.7025

1213008046	M	2.7	3.66	9.882	7.29	13.3956
1213008048	F	3.1	2.92	9.052	9.61	8.5264
1213008051	F	2.75	2.39	6.5725	7.5625	5.7121
1213008052	F	2.6	2.73	7.098	6.76	7.4529
1213008054	M	2.8	2.31	6.468	7.84	5.3361
1213008056	M	2.05	3.59	7.3595	4.2025	12.8881
1213008059	M	2.85	2.17	6.1845	8.1225	4.7089
1213008061	F	3.2	2.12	6.784	10.24	4.4944
1213008063	F	3.1	3.62	11.222	9.61	13.1044
1213008074	F	2.7	3.73	10.071	7.29	13.9129
1213008078	F	3.05	2.11	6.4355	9.3025	4.4521
1213008082	F	2.85	2.84	8.094	8.1225	8.0656
1213008083	F	3	2.96	8.88	9	8.7616
1213008084	F	2.85	2.44	6.954	8.1225	5.9536
1213008086	M	2.9	2.18	6.322	8.41	4.7524
1213008087	F	2.9	2.9	8.41	8.41	8.41
1213008088	F	2.6	2.72	7.072	6.76	7.3984
1213008090	F	3	2.92	8.76	9	8.5264
1213008091	M	2.8	2.98	8.344	7.84	8.8804
1213008092	F	2.9	3.3	9.57	8.41	10.89
1213008093	F	3.25	3.05	9.9125	10.5625	9.3025

1213008095	F	2.9	2.62	7.598	8.41	6.8644
1213008097	F	2.7	2.76	7.452	7.29	7.6176
1213008098	M	3.6	3.38	12.168	12.96	11.4244
1213008099	F	3.2	3.17	10.144	10.24	10.0489
1213008100	M	2.6	3.13	8.138	6.76	9.7969
		120	119	340.3605	346.66	348.866

n = 42

$n \cdot \sum XY = 14295.141$

$\sum X \sum Y = 14280$

$n \cdot \sum X^2 = 14559.72$

$n \cdot \sum Y^2 = 14652.3888$

$(\sum X)^2 = 14400$

$(\sum Y)^2 = 14161$

$n \cdot \sum XY - \sum X \cdot \sum Y = 15.141$

$n \cdot \sum X^2 - (\sum X)^2 = 159.72$

$n \cdot \sum Y^2 - (\sum Y)^2 = 491.3888$

$$\frac{\{n \cdot \sum XY - (\sum X) \cdot (\sum Y)\}}{\sqrt{\{n \cdot \sum X^2 - (\sum X)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}}} = 0.054045841$$

APPENDIX 10: Table and Calculation of Correlation (Students from Academic Year 2009)

Academic Year 2009						
NRP	Gender	Degrees (X)	GPA (Y)	X.Y	X^2	Y^2
1213009001	F	3.4	4	13.6	11.56	16
1213009002	F	2.95	4	11.8	8.7025	16
1213009005	M	3.3	3.5	11.55	10.89	12.25
1213009006	F	2.75	4	11	7.5625	16
1213009007	F	3.35	4	13.4	11.2225	16
1213009009	F	2.75	3.5	9.625	7.5625	12.25
1213009010	F	3.25	4	13	10.5625	16
1213009012	F	3.35	3.5	11.725	11.2225	12.25
1213009013	F	2.75	3	8.25	7.5625	9
1213009014	F	3.05	4	12.2	9.3025	16
1213009016	F	2.85	3	8.55	8.1225	9
1213009017	M	2.6	1	2.6	6.76	1
1213009018	F	2.2	3.5	7.7	4.84	12.25
1213009020	F	3.4	4	13.6	11.56	16
1213009022	F	3.15	3	9.45	9.9225	9
1213009023	F	3	3.5	10.5	9	12.25

1213009024	F	2.85	3	8.55	8.1225	9
1213009025	F	2.95	3	8.85	8.7025	9
1213009026	M	3.25	4	13	10.5625	16
1213009027	F	2.55	1	2.55	6.5025	1
1213009029	F	3	3	9	9	9
1213009030	F	2.85	3	8.55	8.1225	9
1213009031	F	3.3	2	6.6	10.89	4
1213009032	F	2.65	3	7.95	7.0225	9
1213009033	M	2.9	3.5	10.15	8.41	12.25
1213009034	F	2.4	1	2.4	5.76	1
1213009035	F	2.4	3	7.2	5.76	9
1213009036	M	3.25	3	9.75	10.5625	9
1213009038	F	2.85	3	8.55	8.1225	9
1213009040	F	2.95	3	8.85	8.7025	9
1213009041	F	2.95	2	5.9	8.7025	4
1213009042	F	3.4	3	10.2	11.56	9
1213009043	M	3.05	0	0	9.3025	0
1213009044	F	2.7	2	5.4	7.29	4
1213009046	F	3.15	4	12.6	9.9225	16
1213009047	F	3.05	3	9.15	9.3025	9
1213009048	F	2.9	3	8.7	8.41	9

1213009049	M	3.4	3.5	11.9	11.56	12.25
1213009050	F	2.85	3	8.55	8.1225	9
1213009052	M	2.9	3	8.7	8.41	9
1213009055	F	2.6	2.5	6.5	6.76	6.25
1213009057	F	3.15	3	9.45	9.9225	9
1213009058	F	2.5	3.5	8.75	6.25	12.25
1213009059	M	2.75	4	11	7.5625	16
1213009062	M	2.8	2	5.6	7.84	4
1213009063	F	2.85	2.5	7.125	8.1225	6.25
1213009064	F	2.85	2	5.7	8.1225	4
1213009065	F	3	4	12	9	16
1213009067	F	3.4	3	10.2	11.56	9
1213009071	M	2.7	1	2.7	7.29	1
1213009072	M	2.55	3	7.65	6.5025	9
1213009073	F	2.4	3	7.2	5.76	9
1213009074	M	2.75	3	8.25	7.5625	9
1213009075	F	3	3	9	9	9
1213009076	F	3.1	2.5	7.75	9.61	6.25
1213009077	F	2.85	2.5	7.125	8.1225	6.25
1213009078	M	2.8	1	2.8	7.84	1
1213009079	F	2.55	1	2.55	6.5025	1

1213009080	M	2.95	3	8.85	8.7025	9
1213009081	F	2.9	4	11.6	8.41	16
1213009082	F	2.95	2	5.9	8.7025	4
1213009083	F	2.8	2	5.6	7.84	4
1213009085	F	3.1	2.5	7.75	9.61	6.25
		183.9	180.5	532.65	541.775	571.25

n = 63

$n \cdot \sum XY = 33556.95$

$\sum X \sum Y = 33193.95$

$n \cdot \sum X^2 = 34131.825$

$n \cdot \sum Y^2 = 35988.75$

$(\sum X)^2 = 33819.21$

$(\sum Y)^2 = 32580.25$

$n \cdot \sum XY - \sum X \cdot \sum Y = 363$

$n \cdot \sum X^2 - (\sum X)^2 = 312.615$

$n \cdot \sum Y^2 - (\sum Y)^2 = 3408.5$

$$\frac{\{n \cdot \sum X^2 - (\sum X)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}}{\{n \cdot \sum X^2 - (\sum X)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}} = 1065548.227$$

$$\text{Square root} [\frac{\{n \cdot \sum X^2 - (\sum X)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}}{\{n \cdot \sum X^2 - (\sum X)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}}] = 1032.253955$$

$$r = 0.35165765$$

APPENDIX 11: Table and Calculation of Correlation (All Students from Academic Year 2006, 2007, 2008, and 2009)

NRP	Gender	Degrees (X)	GPA (Y)	X.Y	X²	Y²
1213006002	F	3.15	2.99	9.4185	9.9225	8.9401
1213006003	F	3.05	3.94	12.017	9.3025	15.5236
1213006004	F	3.25	3.57	11.6025	10.5625	12.7449
1213006005	F	3.3	3.81	12.573	10.89	14.5161
1213006009	F	3.5	3.44	12.04	12.25	11.8336
1213006011	F	2.8	3.79	10.612	7.84	14.3641
1213006013	F	2.65	2.98	7.897	7.0225	8.8804
1213006014	F	3.05	3.06	9.333	9.3025	9.3636
1213006015	F	2.8	3.86	10.808	7.84	14.8996
1213006016	F	3.05	3.09	9.4245	9.3025	9.5481
1213006018	F	3.35	3.14	10.519	11.2225	9.8596
1213006019	F	2.15	2.42	5.203	4.6225	5.8564
1213006020	F	3.1	3.26	10.106	9.61	10.6276
1213006021	F	3	3.25	9.75	9	10.5625
1213006022	F	2.95	3.3	9.735	8.7025	10.89
1213006024	F	3.05	3.25	9.9125	9.3025	10.5625
1213006027	F	3.15	3.33	10.4895	9.9225	11.0889

1213006029	F	2.95	2.65	7.8175	8.7025	7.0225
1213006030	F	2.7	2.89	7.803	7.29	8.3521
1213006031	F	3.1	3.29	10.199	9.61	10.8241
1213006032	F	2.95	3.4	10.03	8.7025	11.56
1213006036	F	2.9	2.92	8.468	8.41	8.5264
1213006037	M	2.8	2.76	7.728	7.84	7.6176
1213006038	F	3.4	3.16	10.744	11.56	9.9856
1213006039	F	3.5	2.86	10.01	12.25	8.1796
1213006041	F	2.8	3.85	10.78	7.84	14.8225
1213006042	F	3.15	3.36	10.584	9.9225	11.2896
1213006045	F	2.7	2.24	6.048	7.29	5.0176
1213006046	F	2.85	2.91	8.2935	8.1225	8.4681
1213006052	F	3.1	3.26	10.106	9.61	10.6276
1213006056	F	3.1	2.36	7.316	9.61	5.5696
1213006057	F	2.55	2.26	5.763	6.5025	5.1076
1213006060	F	3.45	3.36	11.592	11.9025	11.2896
1213006065	F	2.35	3.23	7.5905	5.5225	10.4329
1213006069	F	3	2.86	8.58	9	8.1796
1213006071	F	3.05	2.96	9.028	9.3025	8.7616
1213006073	M	3.2	3.53	11.296	10.24	12.4609
1213006074	M	2.95	2.02	5.959	8.7025	4.0804

1213006075	F	3	3.43	10.29	9	11.7649
1213006076	F	2.5	3.77	9.425	6.25	14.2129
1213006078	F	2.35	3.32	7.802	5.5225	11.0224
1213006081	F	2.7	2.73	7.371	7.29	7.4529
1213006082	F	2.9	3.63	10.527	8.41	13.1769
1213006083	M	2.75	3.08	8.47	7.5625	9.4864
1213006084	M	2.65	2.78	7.367	7.0225	7.7284
1213006085	F	3.75	2.08	7.8	14.0625	4.3264
1213006087	F	3.3	2.84	9.372	10.89	8.0656
1213006090	M	2.8	3.61	10.108	7.84	13.0321
1213006092	F	2.75	2.69	7.3975	7.5625	7.2361
1213006095	F	2.75	2.82	7.755	7.5625	7.9524
1213006097	F	4	3.7	14.8	16	13.69
1213007001	F	2.85	3.15	8.9775	8.1225	9.9225
1213007005	F	2.7	2.93	7.911	7.29	8.5849
1213007008	F	3.6	3.88	13.968	12.96	15.0544
1213007009	F	3.35	3.59	12.0265	11.2225	12.8881
1213007012	F	2.85	3.33	9.4905	8.1225	11.0889
1213007014	F	2.95	3.77	11.1215	8.7025	14.2129
1213007015	M	3.3	3.38	11.154	10.89	11.4244
1213007016	F	3	3.84	11.52	9	14.7456

1213007017	F	3.15	3.93	12.3795	9.9225	15.4449
1213007018	F	2.75	3.74	10.285	7.5625	13.9876
1213007020	F	2.9	3.25	9.425	8.41	10.5625
1213007021	F	2.5	3.48	8.7	6.25	12.1104
1213007023	F	3.1	3.42	10.602	9.61	11.6964
1213007027	F	2.7	3.01	8.127	7.29	9.0601
1213007032	M	3.45	3.9	13.455	11.9025	15.21
1213007034	F	3.35	3.55	11.8925	11.2225	12.6025
1213007038	M	3	2.92	8.76	9	8.5264
1213007046	F	2.7	3.08	8.316	7.29	9.4864
1213007050	F	3.75	3.09	11.5875	14.0625	9.5481
1213007053	M	2.9	2.39	6.931	8.41	5.7121
1213007055	F	3.2	3.88	12.416	10.24	15.0544
1213007057	F	2.75	2.88	7.92	7.5625	8.2944
1213007063	M	2.65	2.67	7.0755	7.0225	7.1289
1213007065	F	3.1	3.09	9.579	9.61	9.5481
1213007069	M	2.75	3	8.25	7.5625	9
1213007075	F	2.4	1.65	3.96	5.76	2.7225
1213007077	M	2.95	3.04	8.968	8.7025	9.2416
1213007080	M	3.2	2.97	9.504	10.24	8.8209
1213007081	M	2.8	2.42	6.776	7.84	5.8564

1213007083	F	2.95	2.45	7.2275	8.7025	6.0025
1213007084	M	2.55	3.19	8.1345	6.5025	10.1761
1213007085	F	2.85	2.04	5.814	8.1225	4.1616
1213007087	F	3.3	2.65	8.745	10.89	7.0225
1213007088	F	3.05	2.06	6.283	9.3025	4.2436
1213007089	F	3.15	3.25	10.2375	9.9225	10.5625
1213007091	F	3.2	2.78	8.896	10.24	7.7284
1213007093	M	2.7	2.67	7.209	7.29	7.1289
1213007094	F	3.5	2.6	9.1	12.25	6.76
1213007095	F	3.2	2.72	8.704	10.24	7.3984
1213007098	F	2.25	3.58	8.055	5.0625	12.8164
1213008001	F	2.7	3.32	8.964	7.29	11.0224
1213008003	F	3.35	1.61	5.3935	11.2225	2.5921
1213008004	F	2.6	3.18	8.268	6.76	10.1124
1213008005	F	3.05	3.38	10.309	9.3025	11.4244
1213008008	F	2.05	2.07	4.2435	4.2025	4.2849
1213008011	M	3.15	3.68	11.592	9.9225	13.5424
1213008016	M	3.3	3.23	10.659	10.89	10.4329
1213008017	M	2.75	2.9	7.975	7.5625	8.41
1213008022	F	2.85	3.33	9.4905	8.1225	11.0889
1213008023	F	2.95	2.71	7.9945	8.7025	7.3441

1213008025	F	3.1	2.87	8.897	9.61	8.2369
1213008027	F	2.65	2.17	5.7505	7.0225	4.7089
1213008034	F	2.4	2.81	6.744	5.76	7.8961
1213008035	F	2.8	1.93	5.404	7.84	3.7249
1213008044	M	2.6	2.16	5.616	6.76	4.6656
1213008045	M	2.75	2.95	8.1125	7.5625	8.7025
1213008046	M	2.7	3.66	9.882	7.29	13.3956
1213008048	F	3.1	2.92	9.052	9.61	8.5264
1213008051	F	2.75	2.39	6.5725	7.5625	5.7121
1213008052	F	2.6	2.73	7.098	6.76	7.4529
1213008054	M	2.8	2.31	6.468	7.84	5.3361
1213008056	M	2.05	3.59	7.3595	4.2025	12.8881
1213008059	M	2.85	2.17	6.1845	8.1225	4.7089
1213008061	F	3.2	2.12	6.784	10.24	4.4944
1213008063	F	3.1	3.62	11.222	9.61	13.1044
1213008074	F	2.7	3.73	10.071	7.29	13.9129
1213008078	F	3.05	2.11	6.4355	9.3025	4.4521
1213008082	F	2.85	2.84	8.094	8.1225	8.0656
1213008083	F	3	2.96	8.88	9	8.7616
1213008084	F	2.85	2.44	6.954	8.1225	5.9536
1213008086	M	2.9	2.18	6.322	8.41	4.7524

1213008087	F	2.9	2.9	8.41	8.41	8.41
1213008088	F	2.6	2.72	7.072	6.76	7.3984
1213008090	F	3	2.92	8.76	9	8.5264
1213008091	M	2.8	2.98	8.344	7.84	8.8804
1213008092	F	2.9	3.3	9.57	8.41	10.89
1213008093	F	3.25	3.05	9.9125	10.5625	9.3025
1213008095	F	2.9	2.62	7.598	8.41	6.8644
1213008097	F	2.7	2.76	7.452	7.29	7.6176
1213008098	M	3.6	3.38	12.168	12.96	11.4244
1213008099	F	3.2	3.17	10.144	10.24	10.0489
1213008100	M	2.6	3.13	8.138	6.76	9.7969
1213009001	F	3.4	4	13.6	11.56	16
1213009002	F	2.95	4	11.8	8.7025	16
1213009005	M	3.3	3.5	11.55	10.89	12.25
1213009006	F	2.75	4	11	7.5625	16
1213009007	F	3.35	4	13.4	11.2225	16
1213009009	F	2.75	3.5	9.625	7.5625	12.25
1213009010	F	3.25	4	13	10.5625	16
1213009012	F	3.35	3.5	11.725	11.2225	12.25
1213009013	F	2.75	3	8.25	7.5625	9
1213009014	F	3.05	4	12.2	9.3025	16

1213009016	F	2.85	3	8.55	8.1225	9
1213009017	M	2.6	1	2.6	6.76	1
1213009018	F	2.2	3.5	7.7	4.84	12.25
1213009020	F	3.4	4	13.6	11.56	16
1213009022	F	3.15	3	9.45	9.9225	9
1213009023	F	3	3.5	10.5	9	12.25
1213009024	F	2.85	3	8.55	8.1225	9
1213009025	F	2.95	3	8.85	8.7025	9
1213009026	M	3.25	4	13	10.5625	16
1213009027	F	2.55	1	2.55	6.5025	1
1213009029	F	3	3	9	9	9
1213009030	F	2.85	3	8.55	8.1225	9
1213009031	F	3.3	2	6.6	10.89	4
1213009032	F	2.65	3	7.95	7.0225	9
1213009033	M	2.9	3.5	10.15	8.41	12.25
1213009034	F	2.4	1	2.4	5.76	1
1213009035	F	2.4	3	7.2	5.76	9
1213009036	M	3.25	3	9.75	10.5625	9
1213009038	F	2.85	3	8.55	8.1225	9
1213009040	F	2.95	3	8.85	8.7025	9
1213009041	F	2.95	2	5.9	8.7025	4

1213009042	F	3.4	3	10.2	11.56	9
1213009043	M	3.05	0	0	9.3025	0
1213009044	F	2.7	2	5.4	7.29	4
1213009046	F	3.15	4	12.6	9.9225	16
1213009047	F	3.05	3	9.15	9.3025	9
1213009048	F	2.9	3	8.7	8.41	9
1213009049	M	3.4	3.5	11.9	11.56	12.25
1213009050	F	2.85	3	8.55	8.1225	9
1213009052	M	2.9	3	8.7	8.41	9
1213009055	F	2.6	2.5	6.5	6.76	6.25
1213009057	F	3.15	3	9.45	9.9225	9
1213009058	F	2.5	3.5	8.75	6.25	12.25
1213009059	M	2.75	4	11	7.5625	16
1213009062	M	2.8	2	5.6	7.84	4
1213009063	F	2.85	2.5	7.125	8.1225	6.25
1213009064	F	2.85	2	5.7	8.1225	4
1213009065	F	3	4	12	9	16
1213009067	F	3.4	3	10.2	11.56	9
1213009071	M	2.7	1	2.7	7.29	1
1213009072	M	2.55	3	7.65	6.5025	9
1213009073	F	2.4	3	7.2	5.76	9

1213009074	M	2.75	3	8.25	7.5625	9
1213009075	F	3	3	9	9	9
1213009076	F	3.1	2.5	7.75	9.61	6.25
1213009077	F	2.85	2.5	7.125	8.1225	6.25
1213009078	M	2.8	1	2.8	7.84	1
1213009079	F	2.55	1	2.55	6.5025	1
1213009080	M	2.95	3	8.85	8.7025	9
1213009081	F	2.9	4	11.6	8.41	16
1213009082	F	2.95	2	5.9	8.7025	4
1213009083	F	2.8	2	5.6	7.84	4
1213009085	F	3.1	2.5	7.75	9.61	6.25
		575.35	581.81	1718.1545	1708.2675	1819.0381

$n \cdot \sum XY$ 336758.282
 $\sum X \sum Y$ 334744.384
 $n \cdot \sum X^2$ 334820.43
 $n \cdot \sum Y^2$ 356531.468
 $(\sum X)^2$ 331027.623

$n \cdot \sum XY - \sum X \cdot \sum Y$ 2013.8985
 $n \cdot \sum X^2 - (\sum X)^2$ 3792.8075
 $n \cdot \sum Y^2 - (\sum Y)^2$ 18028.5915

$$(\sum Y)^2 = 338502.876$$

$$n = 196$$

$$\frac{\{n \cdot \sum X^2 - (\sum X)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}}{(\sum Y)^2} = 68378977.06$$

$$\text{Square root} \left[\frac{\{n \cdot \sum X^2 - (\sum X)^2\} \{n \cdot \sum Y^2 - (\sum Y)^2\}}{(\sum Y)^2} \right] = 8269.158183$$

$$r = 0.243543352$$

APPENDIX 12: Values of r Product Moment

N	Level of Significance	
	5%	1%
3	0.997	0.999
4	0.950	0.990
5	0.878	0.959
6	0.811	0.917
7	0.754	0.874
8	0.707	0.874
9	0.666	0.796
10	0.632	0.765
11	0.602	0.735
12	0.576	0.708
13	0.553	0.684
14	0.532	0.661
15	0.514	0.641
16	0.497	0.623
17	0.482	0.606
18	0.468	0.590
19	0.456	0.575
20	0.444	0.561
21	0.433	0.549
22	0.423	0.537
23	0.413	0.526
24	0.404	0.515
25	0.396	0.305
26	0.388	0.496
27	0.381	0.487
28	0.374	0.478
29	0.367	0.470
30	0.361	0.463
31	0.355	0.456
32	0.349	0.449
33	0.344	0.442
34	0.339	0.436
35	0.334	0.430
36	0.329	0.424
37	0.325	0.418
38	0.320	0.413

39	0.316	0.408
40	0.321	0.403
41	0.308	0.396
42	0.304	0.393
43	0.301	0.389
44	0.297	0.408
45	0.294	0.380
46	0.291	0.376
47	0.288	0.372
48	0.284	0.368
49	0.281	0.364
50	0.279	0.361
55	0.266	0.345
60	0.254	0.330
65	0.244	0.317
70	0.235	0.306
75	0.277	0.296
80	0.220	0.286
85	0.213	0.278
90	0.207	0.270
91	0.206	0.268
92	0.205	0.266
93	0.204	0.265
94	0.203	0.264
95	0.202	0.263
100	0.195	0.256
125	0.176	0.230
150	0.159	0.210
175	0.148	0.194
200	0.138	0.181