

# What Do Fresno State Students Learn?

## A Multi-Year Comparison of NSSE Results

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The National Survey of Student Engagement (NSSE), administered in 2001, 2002, 2005 and 2007 at Fresno State, contains 16 items on which freshmen and seniors rate their educational and personal growth. This descriptive report examines responses to these items across years. Each year's respondent data are weighted to represent the corresponding population based on gender and ethnicity. "High achievement" in the report refers to students choosing "Very much" or "Quite a bit" as their responses to the survey items. (Other options are "Some" and "Very little").

### Findings

1. Critical thinking, acquiring a broad general education, and writing effectively are the items on which the most freshmen and seniors reported high achievement (See Table 1 and Figure 4). At least 70% of both groups. On average, a larger percentage of seniors than freshmen report considerable learning in critical thinking and acquiring a broad general education.
2. More students, including freshmen and seniors, reported high achievement in educational growth than in personal growth (Figures 1 and 2).
3. More seniors than freshmen reported high achievement on most survey items (Table 1 and Figure 4). The largest average difference is in acquiring job or work-related skills. A substantially higher percentage of seniors (71%) than freshmen (49%) reported growth in this area.
4. Across the years, an increasingly larger percentage of freshmen report high achievement in most growth areas. This is especially evident in effective speaking, using computer and information technology, and general education (Table 2 and Figure 3).
5. Across the years, a substantial portion of seniors reported high achievement in all educational growth areas (Figure 2). For seniors, writing effectively, understanding oneself and other people, contributing to the community and developing a personal code of values show lower achievement in recent years than in 2001 or 2002 (Table 3 and Figure 3).
6. On average across the survey periods (Table 1), freshmen's growth is larger than the growth of seniors on most items. (Figure 3).

**Table 1: Multiple-year comparison in students' learning outcomes**

		2001	2002	2005	2007	Average %	Change in % (to previous yr)			
							2002	2005	2007	Average
<b>Educational (knowledge and skills) achievements</b>										
Acquiring a broad general education	Freshmen	65.6	70.7	76.2	81.4	73.5	5.1	5.5	5.2	5.3
	Senior	76.3	79.2	81.9	82.5	80.0	2.9	2.7	0.6	2.1
Acquiring job or work-related knowledge and skills	Freshmen	46.1	48.8	51.8	51.1	49.5	2.7	3.0	-0.7	1.7
	Senior	74.4	71.1	68.4	71.0	71.2	-3.3	-2.7	2.6	-1.1
Writing clearly and effectively	Freshmen	67.4	71.7	69.6	72.8	70.4	4.3	-2.1	3.2	1.8
	Senior	81.4	71.1	74.2	74.0	75.2	-10.3	3.1	-0.2	-2.5
Speaking clearly and effectively	Freshmen	52.6	64.3	68.6	72.8	64.6	11.8	4.3	4.2	6.8
	Senior	71.4	66.7	68.8	68.6	68.9	-4.7	2.1	-0.2	-0.9
Thinking critically and analytically	Freshmen	71.9	72.9	78.3	79.4	75.6	1.0	5.3	1.2	2.5
	Senior	83.1	84.1	82.9	83.5	83.4	1.0	-1.3	0.6	0.1
Analyzing quantitative problems	Freshmen	55.2	53.0	63.2	66.9	59.6	-2.3	10.2	3.7	3.9
	Senior	76.7	64.2	71.4	70.4	70.7	-12.5	7.2	-1.0	-2.1
Using computing and information technology	Freshmen	47.9	55.5	64.9	66.1	58.6	7.6	9.4	1.2	6.1
	Senior	68.1	67.4	78.1	77.6	72.8	-0.7	10.7	-0.5	3.2
Working effectively with others	Freshmen	64.9	68.9	68.3	70.5	68.2	4.0	-0.6	2.2	1.9
	Senior	70.6	78.8	72.7	72.9	73.7	8.2	-6.1	0.2	0.8
<b>Personal achievements</b>										
Voting in local, state, or national elections	Freshmen	16.2	15.8	43.1	28.5	25.9	-0.4	27.2	-14.6	4.1
	Senior	20.7	20.1	34.9	28.2	25.9	-0.6	14.8	-6.7	2.5
Learning effectively on your own	Freshmen	65.8	65.1	62.4	65.5	64.7	-0.7	-2.7	3.1	-0.1
	Senior	69.6	73.8	65.8	69.0	69.5	4.2	-8.0	3.2	-0.2
Understanding yourself	Freshmen	60.1	62.3	56.2	59.9	59.6	2.3	-6.2	3.7	0.0
	Senior	69.5	70.7	57.3	56.7	63.6	1.2	-13.4	-0.6	-4.3
Understanding people of other racial and ethnic	Freshmen	58.8	58.6	52.3	56.9	56.7	-0.2	-6.4	4.7	-0.6
	Senior	71.5	61.0	63.1	58.9	63.6	-10.5	2.1	-4.2	-4.2
Solving complex real-world problems	Freshmen	NA	44.4	47.1	50.8	47.4	NA	2.7	3.7	3.2
	Senior	NA	53.1	56.5	55.1	54.9	NA	3.4	-1.4	1.0
Developing a personal code of values and ethics	Freshmen	52.0	47.6	46.1	54.1	49.9	-4.4	-1.4	8.0	0.7
	Senior	59.6	53.5	51.9	54.6	54.9	-6.2	-1.5	2.7	-1.7
Contributing to the welfare of your community	Freshmen	36.4	25.8	33.8	39.8	33.9	-10.5	7.9	6.1	1.2
	Senior	53.7	44.2	42.9	42.9	45.9	-9.5	-1.3	0.0	-3.6
Developing a deepened sense of spirituality	Freshmen	NA	NA	29.6	31.6	30.6	NA	NA	1.9	NA
	Senior	NA	NA	24.4	20.4	22.4	NA	NA	-4.0	NA

Notes:

\* Values in cells are the percentage of respondents who answered "Very much" or "Quite a bit". Other options are "Some" and "Very little".

**Table 2: Multiple-year comparison of freshmen' learning outcomes**

	2001		2002		2005		2007		Average %	Change in % (to previous yr)			
	N	%	N	%	N	%	N	%		2002	2005	2007	Average
<b>Educational (knowledge and skills) achievements</b>													
Acquiring a broad general education	92	65.6	122	70.7	416	76.2	384	81.4	73.5	5.1	5.5	5.2	5.3
Acquiring job or work-related knowledge and skills	65	46.1	84	48.8	282	51.8	242	51.1	49.5	2.7	3.0	-0.7	1.7
Writing clearly and effectively	94	67.4	123	71.7	379	69.6	344	72.8	70.4	4.3	-2.1	3.2	1.8
Speaking clearly and effectively	74	52.6	111	64.3	374	68.6	344	72.8	64.6	11.8	4.3	4.2	6.8
Thinking critically and analytically	101	71.9	126	72.9	425	78.3	376	79.4	75.6	1.0	5.3	1.2	2.5
Analyzing quantitative problems	77	55.2	92	53.0	342	63.2	316	66.9	59.6	-2.3	10.2	3.7	3.9
Using computing and information technology	67	47.9	96	55.5	353	64.9	313	66.1	58.6	7.6	9.4	1.2	6.1
Working effectively with others	91	64.9	118	68.9	370	68.3	334	70.5	68.2	4.0	-0.6	2.2	1.9
<b>Personal achievements</b>													
Voting in local, state, or national elections	23	16.2	27	15.8	232	43.1	134	28.5	25.9	-0.4	27.2	-14.6	4.1
Learning effectively on your own	92	65.8	113	65.1	336	62.4	307	65.5	64.7	-0.7	-2.7	3.1	-0.1
Understanding yourself	83	60.1	107	62.3	303	56.2	281	59.9	59.6	2.3	-6.2	3.7	0.0
Understanding people of other racial and ethnic backgrounds	82	58.8	101	58.6	281	52.3	266	56.9	56.7	-0.2	-6.4	4.7	-0.6
Solving complex real-world problems	NA	NA	77	44.4	254	47.1	238	50.8	47.4	NA	2.7	3.7	3.2
Developing a personal code of values and ethics	70	52.0	82	47.6	248	46.1	253	54.1	49.9	-4.4	-1.4	8.0	0.7
Contributing to the welfare of your community	51	36.4	45	25.8	182	33.8	186	39.8	33.9	-10.5	7.9	6.1	1.2
Developing a deepened sense of spirituality	NA	NA	NA	NA	160	29.6	148	31.6	30.6	NA	NA	1.9	NA

Notes:

\* N = Number of respondents who answered "Very much" or "Quite a bit"; %= Percentage of respondents who answered "Very much" or "Quite a bit". Other options are "Some" and "Very little".

**Table 3: Mutiple-year comparison of seniors' learning outcomes**

	2001		2002		2005		2007		Average %	Change in %(to previous			
	N	%	N	%	N	%	N	%		2002	2005	2007	Average
<b>Educational (knowledge and skills) achievements</b>													
Acquiring a broad general education	98	76.3	145	79.2	474	81.9	450	82.5	80.0	2.9	2.7	0.6	2.1
Acquiring job or work-related knowledge and skills	95	74.4	129	71.1	395	68.4	387	71.0	71.2	-3.3	-2.7	2.6	-1.1
Writing clearly and effectively	104	81.4	130	71.1	429	74.2	404	74.0	75.2	-10.3	3.1	-0.2	-2.5
Speaking clearly and effectively	91	71.4	122	66.7	398	68.8	374	68.6	68.9	-4.7	2.1	-0.2	-0.9
Thinking critically and analytically	107	83.1	153	84.1	479	82.9	455	83.5	83.4	1.0	-1.3	0.6	0.1
Analyzing quantitative problems	98	76.7	116	64.2	413	71.4	384	70.4	70.7	-12.5	7.2	-1.0	-2.1
Using computing and information technology	86	68.1	123	67.4	451	78.1	423	77.6	72.8	-0.7	10.7	-0.5	3.2
Working effectively with others	91	70.6	144	78.8	420	72.7	397	72.9	73.7	8.2	-6.1	0.2	0.8
<b>Personal achievements</b>													
Voting in local, state, or national elections	26	20.7	37	20.1	200	34.9	152	28.2	25.9	-0.6	14.8	-6.7	2.5
Learning effectively on your own	89	69.6	133	73.8	377	65.8	372	69.0	69.5	4.2	-8.0	3.2	-0.2
Understanding yourself	89	69.5	128	70.7	329	57.3	306	56.7	63.6	1.2	-13.4	-0.6	-4.3
Understanding people of other racial and ethnic backgrounds	90	71.5	111	61.0	362	63.1	317	58.9	63.6	-10.5	2.1	-4.2	-4.2
Solving complex real-world problems	NA	NA	96	53.1	325	56.5	298	55.1	54.9	NA	3.4	-1.4	1.0
Developing a personal code of values and ethics	76	59.6	97	53.5	298	51.9	295	54.6	54.9	-6.2	-1.5	2.7	-1.7
Contributing to the welfare of your community	69	53.7	80	44.2	247	42.9	232	42.9	45.9	-9.5	-1.3	0.0	-3.6
Developing a deepened sense of spirituality	NA	NA	NA	NA	140	24.4	110	20.4	22.4	NA	NA	-4.0	NA

Notes:

\* N = Number of respondents who answered "Very much" or "Quite a bit"; %= Percentage of respondents who answered "Very much" or "Quite a bit". Other options are "Some" and "Very little".

Figure 1: Freshmen learning outcomes

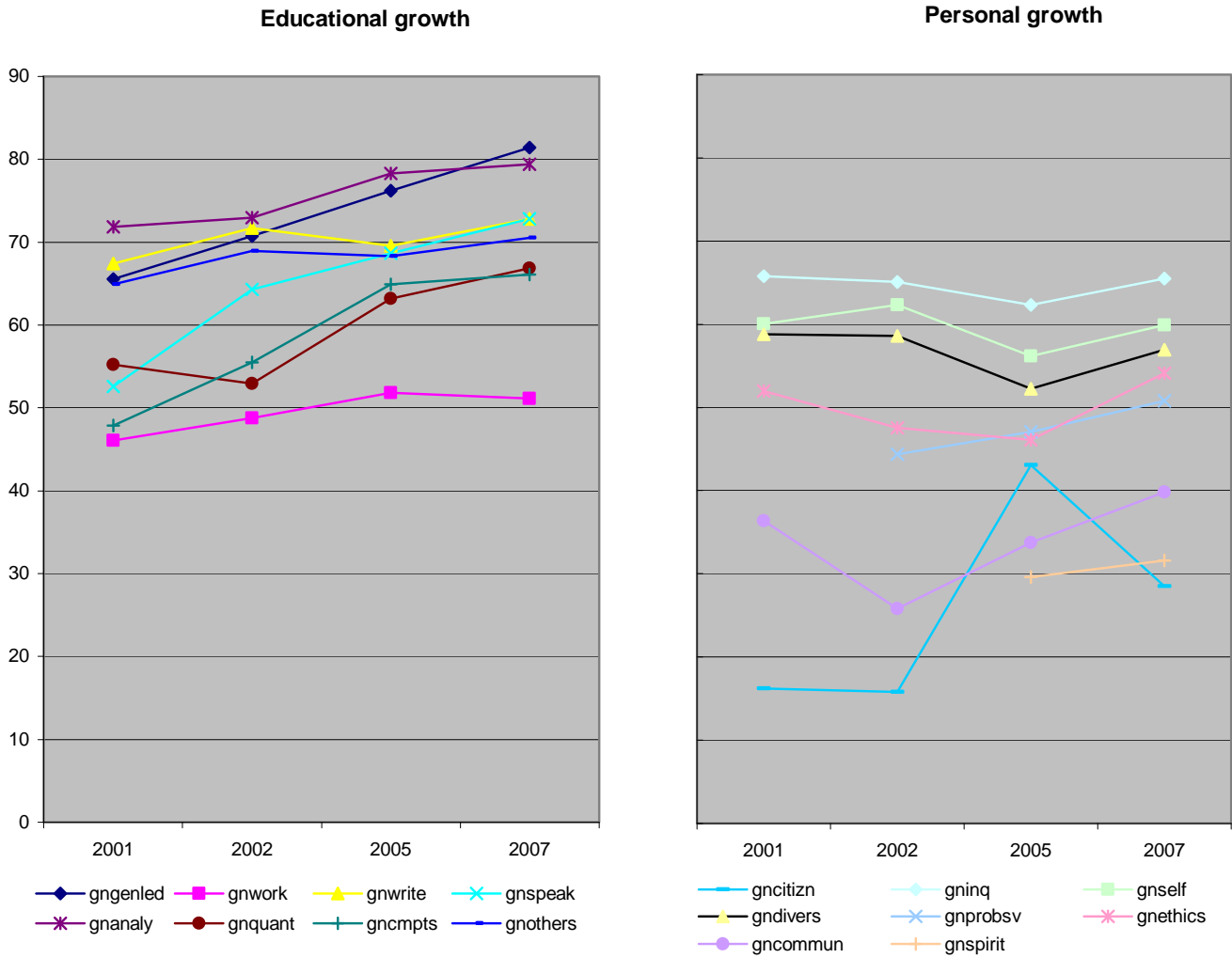


Figure 2: Senior learning outcomes

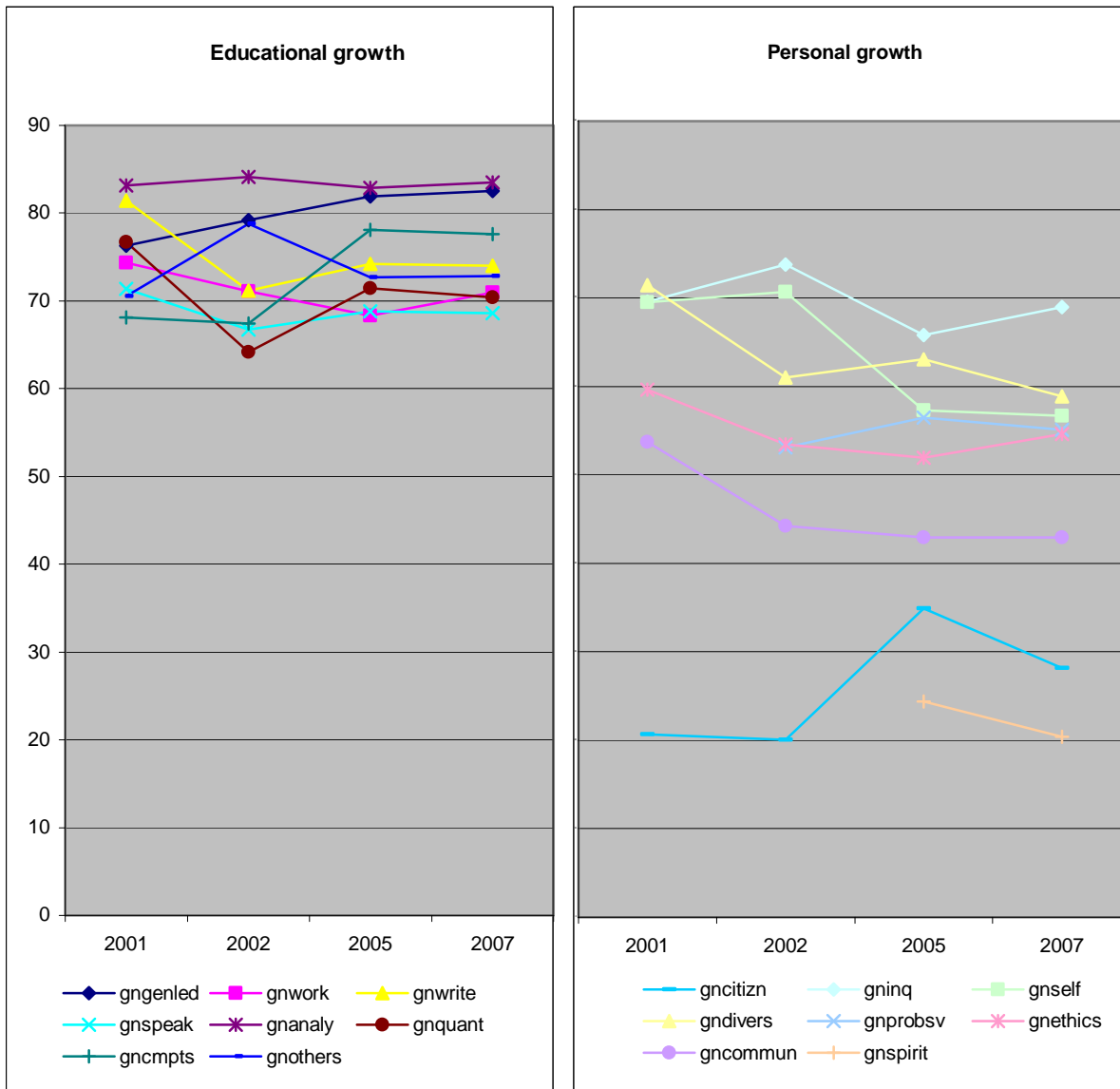
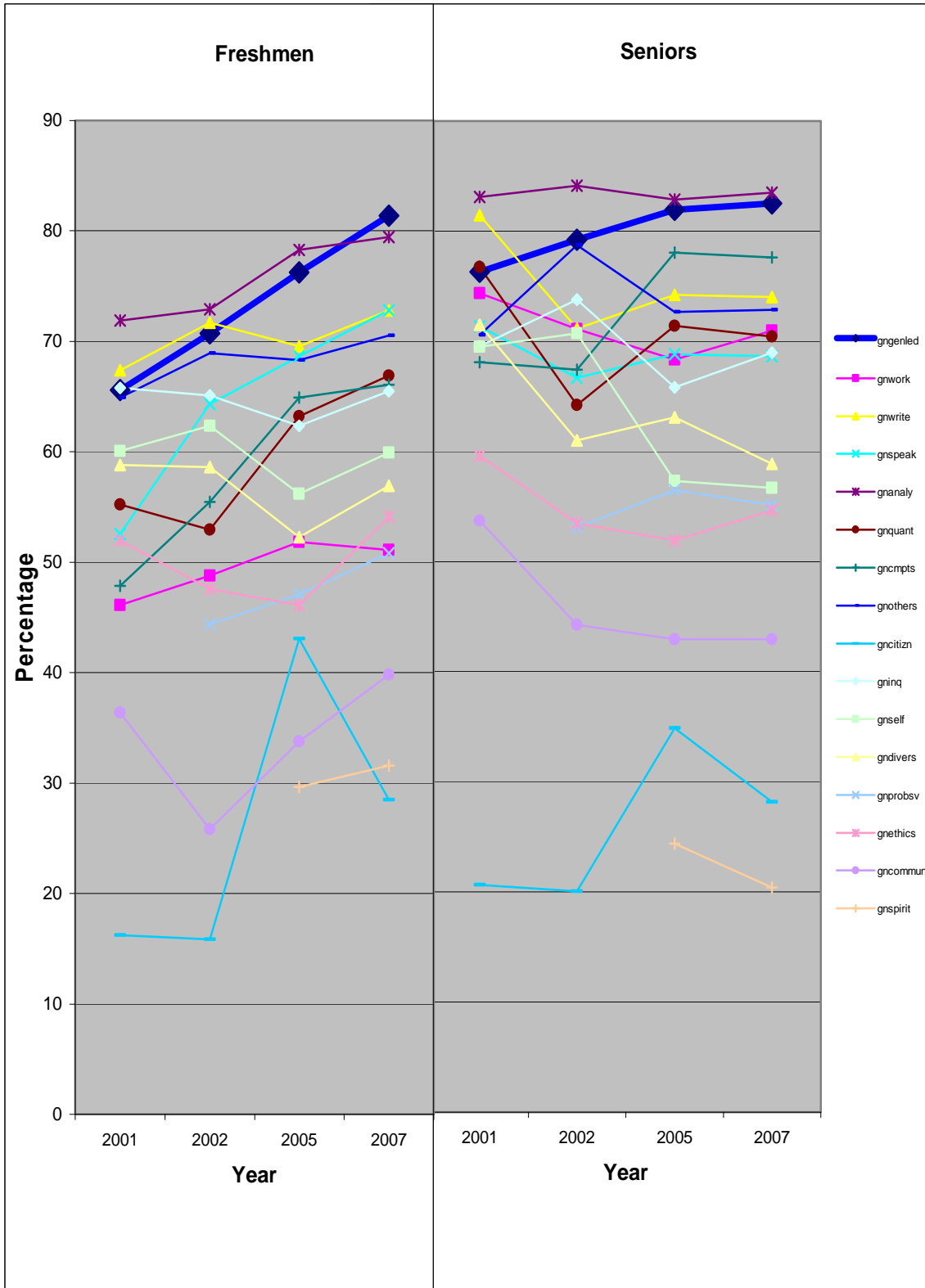


Figure 3: Freshmen and senior comparison



**Figure 4: Learning outcome comparison (average)**

