



Great Plains IDEA Human Sciences  
Academic Programs Trend Analysis FY01-FY09

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**GREAT PLAINS IDEA** 

**Interactive Distance Education Alliance**

# The Great Plains Interactive Distance Education Alliance

## Academic Programs Trend Analysis FY01-FY09

### Methodology

This analysis identifies notable trends in revenue, enrollment and completion of programs offered through the Great Plains Interactive Distance Education Alliance within past nine years. The report is a product of the analysis of secondary data retrieved from the ExpanSIS, distance education information system. The following five aggregated reports were used in the scope of this exercise:

- Common price revenue
- Enrollment by program age
- Student credit hours earned
- Demographics

The unit of analysis is academic program (Family Financial Planning (CFP<sup>TM</sup>), Gerontology, Merchandising, Youth Development, Community Development, Dietetics, Family and Consumer Sciences Education).

Given that some programs have nearly 10 years of successful track record, while others were launched only a year ago, comparing several programs on the same scale is somewhat problematic. However, comparison of data from well established Family Financial Planning, Youth Development and Gerontology programs may help to predict growth for newer programs, identify shortfalls in planning course offering and student enrollment.

### Definition of Indicators

Data were aggregated and analyzed using *SPSS* software. Several variables were recoded or calculated.

*FY##*. ExpanSIS stores student tuition, enrollment and course information by semesters. To keep reporting of revenue consistent with universities' financial cycle, a new variable *FY##* (Fiscal Year) was introduced. For example, *FY08* (fiscal year 2008) aggregates data for summer 2007, fall 2007 and spring 2008 semesters.

*YR##*. This indicator is the age of a program (program year). To compare program trends program year was used to bring trend lines to a common starting point. This indicator allows programs to be compared at similar states of development. For example, one can compare total revenue across programs at a given point in program history.

*Revenue*. Revenue in this analysis refers to net tuition, e.g. the difference between total tuition and adjustments.

*Teaching University.* The teaching university is the institution that teaches courses for the Great Plains IDEA.

*Home University.* The home university is the institution that enrolls students for online courses within Great Plains IDEA.

Note that a University may be both “home” and “teaching” university. For example, Kansas State University both enrolls its own students and teaches students from other Universities within the Great Plains IDEA.

*Student Enrollment.* Enrollment refers to the number of active students enrolled in courses. One student may have multiple enrollments. This indicator does not refer to credit hours.

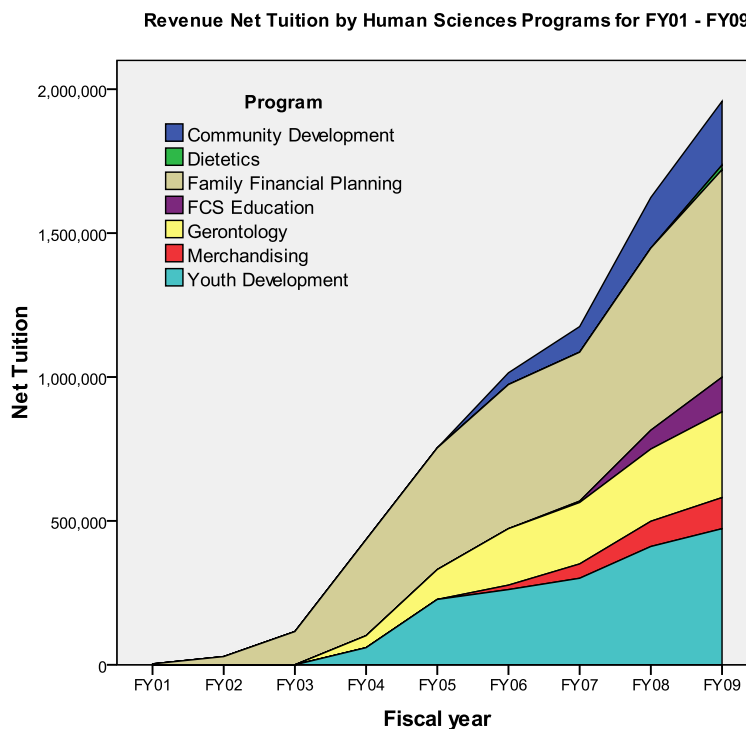
*Mean Student Enrollment.* This indicator is the average number of students per course offered. The indicator is calculated by summing all students enrolled during a fiscal year and dividing by the number of offered courses. This ratio is a surrogate measure of program efficiency. While revenue is an important indicator it does not provide a clear picture of program health, as teaching expenses may not be covered when - enrollments in a course are low.

*Course Offering.* A course that is offered by the teaching university within Great Plains IDEA.

*Distinct Student.* Distinct student refers to an individual student. This student may be enrolled in multiple classes.

### Common Trends

**Revenue.** The Great Plains IDEA has experienced significant growth within the past nine years. Total revenue for all programs in FY09 was over \$2 million. Of this amount, human sciences programs alone generated \$1.958 million in revenue. All programs have grown substantially since FY2008. Mature programs such as Family Financial planning (14%), Youth Development (15%) and Gerontology (19%) experienced moderate growth. Younger programs showed large increases: Community Development (26%), Merchandising (23%) and FCS Education (83%). There was not enough data to compare the Dietetics program. (Table 1.)

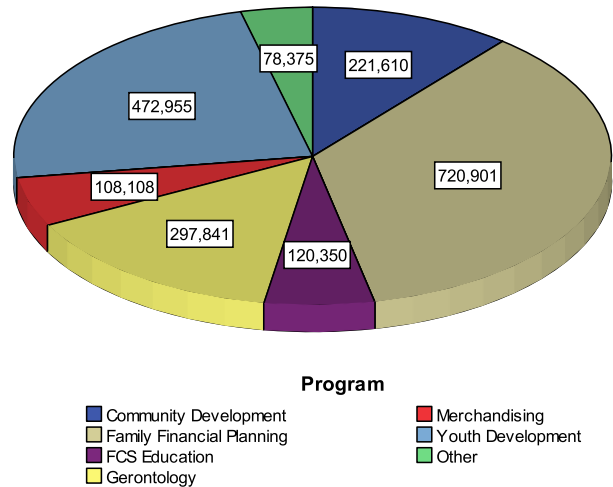


**Table 1. Revenue Generated and % Change over Program Years**

Year	Family Financial Planning		Youth Development		Gerontology		Community Development		Merchandising		FCS Education		Dietetics	
	Revenue	% Change	Revenue	% Change	Revenue	% Change	Revenue	% Change	Revenue	% Change	Revenue	% Change	Revenue	% Change
Year 1	3,285	0%	59,500	0%	41,655	0%	40,907	0%	15,405	0%	4,740	0%	16,185	0%
Year 2	28,620	771%	227,120	282%	103,763	149%	88,994	118%	49,770	223%	65,467	1281%		
Year 3	115,515	304%	261,399	15%	196,219	89%	176,184	98%	87,555	76%	120,350	84%		
Year 4	333,698	189%	300,744	15%	213,498	9%	221,610	26%	108,108	23%				
Year 5	422,738	27%	411,158	37%	250,988	18%								
Year 6	500,693	18%	472,955	15%	297,841	19%								
Year 7	517,470	3%												
Year 8	632,592	22%												
Year 9	720,901	14%												
Total	3,275,510		1,732,875		1,103,963		527,694		260,838		190,557		16,185	

**FY09 Revenue (Net Tuition) by Programs**

Almost 60% of FY09 revenue. was generated by Family Financial Planning (37%) along with Youth Development (23%) generated The remaining programs also contributed to the growth; Gerontology (14%), Community Development (10%), Family and Consumer Sciences Education and Merchandising (5% each), Dietetics and Agriculture programs less than 4%.

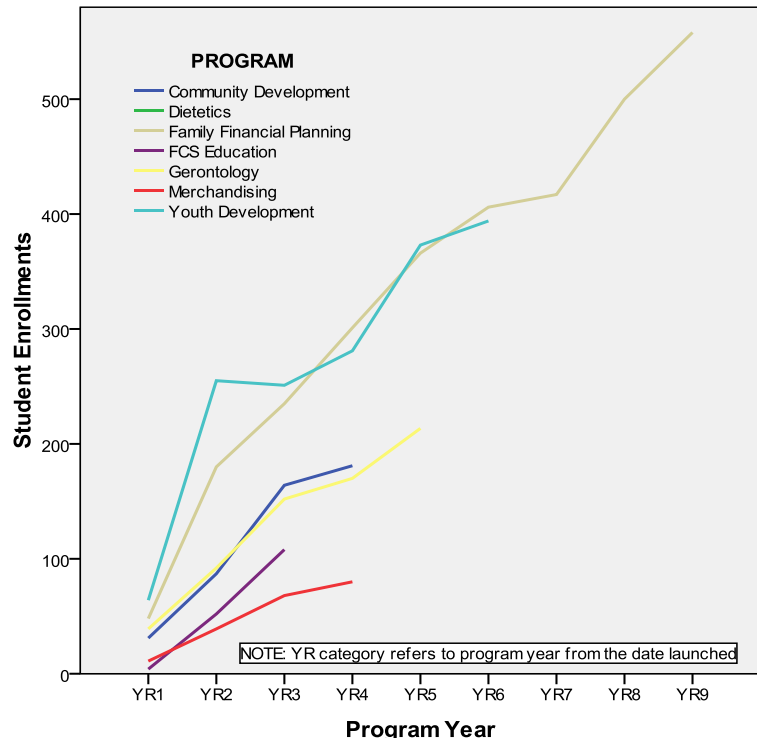


In FY10 programs continue to grow, generating \$1.565 million in total revenue in the 2009 summer and fall terms. This is a 29% increase compared to the same period of FY09 (\$1.211 million).

**Student Enrollment.** Enrollment refers to active students enrolled in a distinct course rather than credit hours generated. Although, information about credit hours is available, it is highly correlated with revenue data and demonstrates similar patterns. Therefore, it is excluded from this report.

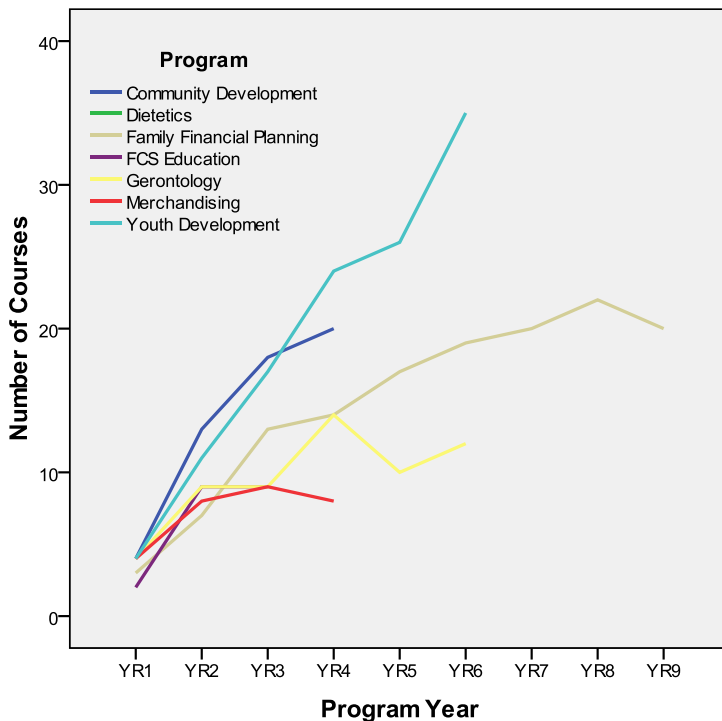
**Student Enrollment Trend by Programs**

There has been a steady increase in student enrollment across all programs. Programs show three distinct trends in their growth patterns. The Family Financial Planning (541 enrollments in FY09) and Youth Development programs formed one growth pattern reaching 395 and 394 student enrollments during their 6<sup>th</sup> program year. If this trend continues, the Youth Development program may expect a



30% increase in student enrollment in the next three years. Gerontology and Community Development enrollment trends are the second group, achieving 169 and 171 respectively student enrollments during the 4<sup>th</sup> program year. In the third group, FCS Education reached 88 student enrollments during its third year, while the Merchandising program had only 76. Further analysis is needed to identify contributing factors for differences among the groups. Those may be attributed to higher market demands for selected programs, marketing strategies implemented to promote a course, or other external factors.

**Course Offering Trend by Programs**



**Course Offering.** There has been a steady growth in the number of courses offered. The Youth Development program offers significantly more courses than any other program. In its sixth year the program offered 35 courses, while Family and Financial Planning offered 19 and the Gerontology program offered twelve. However, this trend in the Youth Development program is heavily influenced by the format of one course, Foundations of Youth Development. In FY09 this course was offered 11 times at four teaching Universities (Kansas State University, University of Nebraska, Michigan State University and University of Missouri – Columbia). This resulted in very modest 4.1 average number of students enrolled in this particular course. In future analysis, this course will be removed from the data set.

**Mean Enrollment.** Despite the visible growth of programs, long-term program viability may not be directly correlated to revenue, enrollment and course offering trends. These trends are crude indicators that do not account for the costs incurred to generate them. To award a degree, programs must offer a sufficient number of courses for program completion. However, each offered course adds to the overall cost of the program. Therefore, there must be an equilibrium between courses offered (costs incurred) and students enrolled (revenue generated). Programs must aim to maximize the student enrollment vs. course offering ratio, keeping student enrollment high but course offerings to the minimum possible.

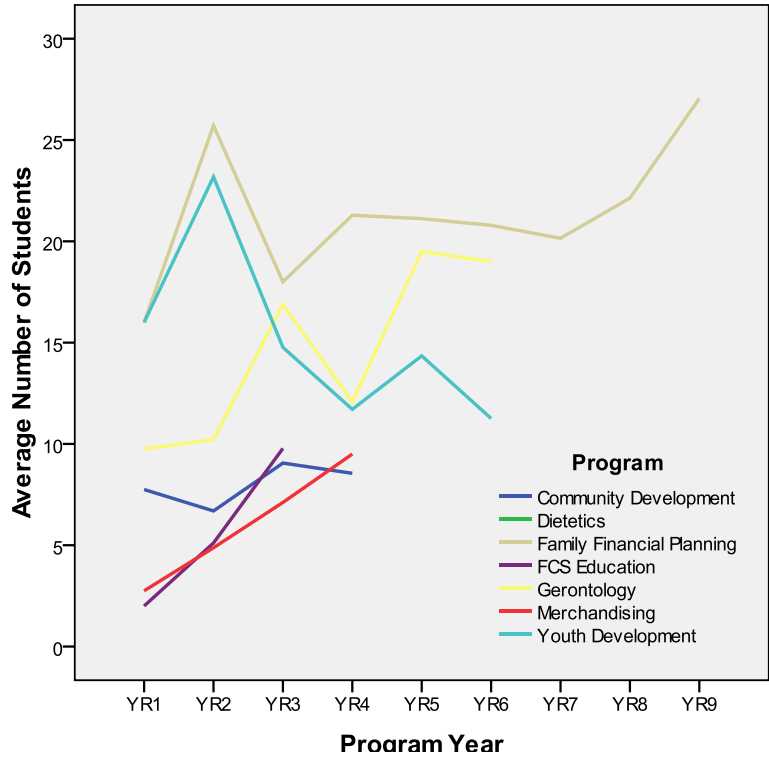
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Youth Development shows continuing decline from the peak of an average of 23 students per course in the 2<sup>nd</sup> year down to 11 students in its 6<sup>th</sup> year (FY09). Growth in the course offerings was not compensated by the sufficient growth in student enrollment. This may be attributed to multiple offerings of Foundations in Youth Development mentioned earlier.

Mean student enrollment per class offered, may be a more valid indicator of program viability. A high average number of students per class will increase net profits by keeping operating costs to a minimum. Online programs are not limited by a maximum allowed number of students per class. Therefore, programs have a great potential to increase their efficiency through optimizing course offerings vs. student enrollment.

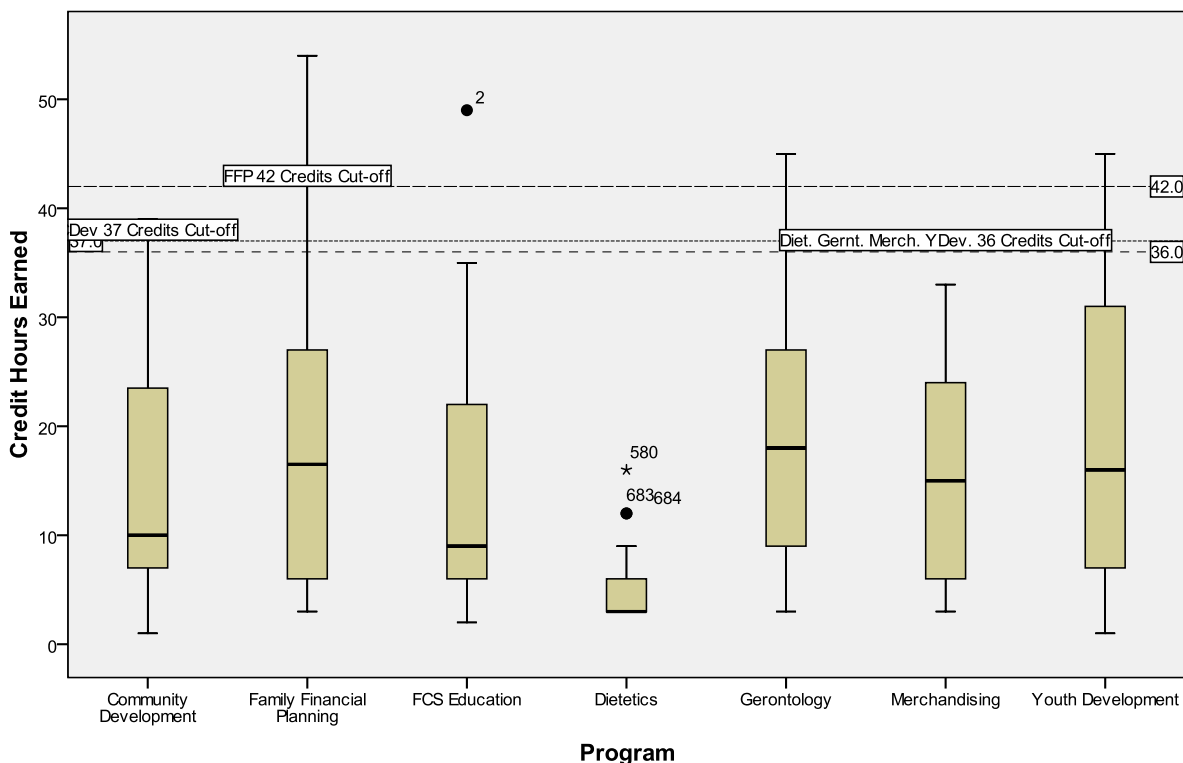
**Mean Student Enrollment Per Class Offering Trend by Programs**



Average student enrollment per course excludes masters theses, creative components, practica, independent study, and other courses that are self-directed that might distort the analysis. The rationale to drop them from the analysis was dictated by the sporadic enrollment patterns of such courses as well as low costs associated with them.

**Student Credit Hours Earned.** This indicator reveals the distribution of earned credit hours among active students. The side by side boxplot compares distribution of credit hours earned by

**Distribution of Student Credit Hours Earned by Active Masters Students by Programs**



programs. The shaded boxes represent the middle 50% of data, and extending lines (whiskers) are maximum and minimum values. Horizontal lines inside the box indicate median credit hours earned. It must be noted that anecdotal data supported by findings from the statistical analysis suggest that labeling student status in ExpanSIS may not always be accurate. Entry of student status is done manually by the university Campus Coordinator. In the dataset there were several entries that list a student as “active but having taken more courses than required”. At the same time there were entries with students status marked as “completed” with fewer credit hours than required. Because it is impossible to accurately interpret these data entries, the boxplot and histograms include “cut-off” markers, indicating required number of hours to graduate.

**Demographics.** Demographic data is not entered for all Great Plains IDEA students. As of Fall 2009 semester, the overwhelming majority of students (76%) in Great Plains IDEA were females. Age distribution revealed that 38% of students were below 30 years of age; 29% between the age of 30 and 39; 25% between 40 and 54 and the remaining 7% were 55 and above. Eighty percent of students were white, 4.4% Black, Asian and Native Americans at 2% each, and Hispanic and Mexican less than 1% each. Six percent of students preferred not to report their race.

N.B. Data on age was available only for some students (N=328)

