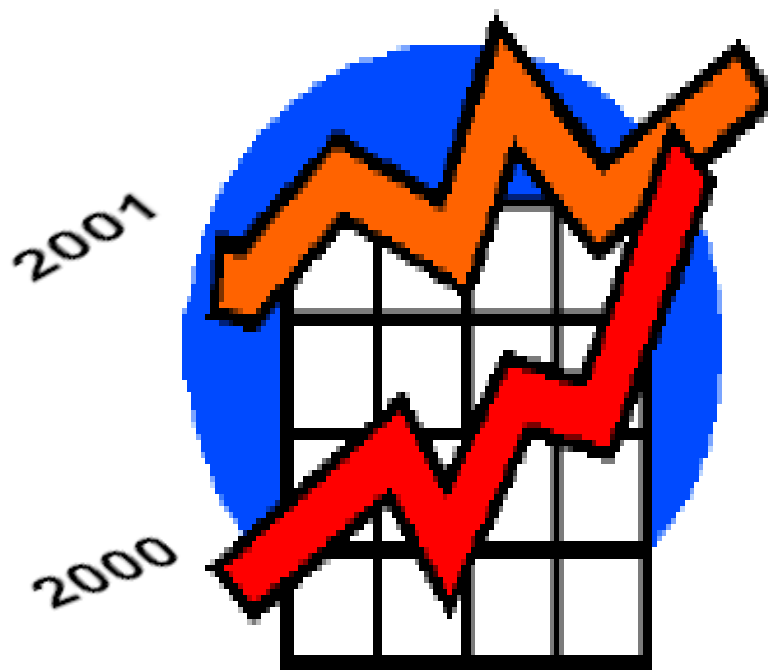


POST SECONDARY EDUCATION EXPENDITURE REVIEW



**Conducted November 6-8, 2001
By the Kentucky Department of Vocational Rehabilitation**

POST SECONDARY EDUCATION EXPENDITURE REVIEW

Expenditures for higher education had increased radically in the years prior to 2000. In order to make sound, data based decisions on cost containment measures, the Department conducted a review of college training cases in 2000. The sample for that study included cases that received training assistance in fiscal years 1998, 1999, or 2000. In the areas that the review indicated the Department had weaknesses, strategies were implemented to correct the deficiencies.

The 2000 Review established the following goals for the 2001 Post Secondary Education Expenditure Review. All staff were informed of these goals and expectations in January 2001.

- ❖ Training Expenditure Worksheets will be correctly completed and present in every case with adequate financial need documentation including the Student Aid Report.
- ❖ All training cases will be appropriate for training assistance.
- ❖ All cases will contain sufficient documentation to support the appropriateness of training assistance.
- ❖ Expanded definitions will be utilized correctly when determining significance of disability.

This study is a repeat of 2000 Review using a sample of cases that received post secondary education assistance in fiscal years 1999, 2000, or 2001. The purpose of this study was to determine if the strategies implemented after the 2000 review were effective.

As in the 2000 Review, a statistically significant number of cases was randomly selected. An additional 87 cases were randomly selected from cases that had achieved positive employment outcomes (PEO's) and had received training assistance in the target years. This insured that an adequate number of PEO's were reviewed to allow some generalization of results. After duplicate cases and cases that did not meet the sample criteria were discarded, a total of 337 cases were reviewed.

Except where noted, the data contained within this report is from the 2001 Review. Unless recorded, there was no significant difference in the data gathered for the years sampled in both studies (1999 and 2000). A copy of the 2000 Expenditure Review can be printed from the Department's Intranet site for comparison.

The cases were reviewed in two parts. Central Office Assistants and other staff gathered and recorded data from financial records regarding expenditures, number of semesters of training paid for by the Department, amount of comparable benefits received, etc. Two (2) Field Administrators, eight

(8) Rehabilitation Administrators, and two (2) Division Directors reviewed the entire case record for appropriateness of the training decision, accuracy of the Training Expenditure Worksheet, adequacy of documentation supporting training, etc.

The survey instrument (Appendix A) was developed by the Department to look at several key factors of training cases.

1. The extent that higher education is a necessary or reasonable service to address barriers to employment when an individual's abilities, interests, limitations, choices, attendant factors and employment opportunities are considered.
2. The effectiveness of training expenditures in terms of employment outcomes.
3. The accuracy and adequacy of the Training Expenditure Worksheet to provide tuition assistance in a fair and equitable fashion.
4. The extent that students utilize Department funds to provide disability related costs of education (personal care assistance, assistive technology, tutoring, notetaking, etc.).
5. The financial ability of students to pay tuition without Department assistance including the extent which students utilize available comparable benefits.

Training Need

The study asked reviewers to determine if the decision to provide higher education was appropriate or reasonable to overcome the limitations of the disability or barriers to employment. Reviewers were instructed to consider the entire case record when making this decision. Nineteen percent (19%) of cases were recorded as being questionable as to appropriateness of training.

The Department paid for 265 semesters of training on the 65 cases that reviewers considered questionable in terms of appropriateness of training.

Tuition Expenditures

	FALL 1999	FALL 2000	FALL 2001
Total Tuition Expenditures	\$187,518.31	\$114,352.01	\$96,056.75
Tuition Expenditures on Questionable Cases	\$31,484.00	\$19,054.50	\$20,788.50
Percentage	16.79	16.66	21.64

Thirty percent (30%) of the cases contained little or insufficient documentation to support training. Some cases appeared to include information that indicated that training was not an appropriate service for the individual yet the counselor committed Department funding for training.

Effectiveness

To explore the effectiveness of college level training in terms of employment outcome, the study looked at the type of employment of the 87 individuals whose cases were closed successfully.

- Fifty-four percent (54%) of eighty-seven (87) positive employment outcomes sampled were by individuals who had received a degree. This is an increase from forty-eight percent (48%) in the 2000 Training Expenditure Review.
- Forty-nine percent (49%) of the eighty-seven (87) individuals whose cases were closed with a positive employment outcome received a degree and were working in a field related to the degree. This is an increase from forty-two percent (42%) in the 2000 Training Expenditure Review.
- Fifty-two percent (52%) of the eighty-seven (87) individuals whose cases were closed with a positive employment outcome received a degree and were working in a field that required a degree. This is an increase from forty percent (40%) in the 2000 Training Expenditure Review.
- Only two percent (2%) of the eighty-seven (87) individuals who achieved positive employment outcomes received a degree and had cases closed documenting work in a job unrelated to their degree. This is a decrease from ten percent (10%) in 2000.
- Seven percent (7%) of the eighty-seven (87) individuals with positive employment outcomes did **not** receive degrees but were working in fields related to their field of study. This is a decrease from ten percent (10%) in 2000.
- Thirty percent (30%) of the eighty-seven (87) individuals with positive employment outcomes did **not** receive degrees and were working in jobs unrelated to their field of study. This was an improvement over the 2000 review when thirty-seven percent (37%) met this criterion.
- Seventy-seven percent (77%) of the eighty-seven (87) individuals who achieved successful employment outcomes were considered appropriate for training. This is a substantial increase from the 2000 review percentage of sixty-seven (67%).

Only one (1) of the 87 individuals sampled who achieved a positive employment outcome reported a weekly wage at application. That individual earned one hundred and fifty dollars (\$150.00) per week. The average weekly

wage at closure for the same group was \$361.78 with an average of 36 hours worked per week or \$10.05 per hour. The average weekly wage at closure in the 2000 review was \$9.88.

For comparison purposes, data from the U.S. Department of Labor, Bureau of Labor Statistics¹ was gathered regarding wages in Kentucky for similar jobs. The study looked at wages in white collar occupations including professional (engineers, mathematical and computer scientists, natural scientists, health occupations, teachers, social scientists, social/religious/recreation, lawyers, and writers); technical; executive; administrative; managerial; sales; and administrative support. Data was gathered from three Kentucky areas whose wages had been studied by the Bureau of Labor Statistics during the approximate time that the cases were open. Since the wage information in the cases was gathered after only approximately ninety days of employment, the study compared the wages of the lowest 10th percentile of workers in that occupational group with the wages at closure of sampled cases. It is assumed that entry-level employment compensation would roughly correspond with the lowest wages in that category.

Comparison of Wages in Similar Occupations In and Near Kentucky

	Harrison County 1997	Northern KY/ Cincinnati 1999	Louisville/ Southern Indiana 1999	PEO's Receiving Post Secondary Education
Average Wage*	\$9.54	\$8.49	\$9.29	\$10.05
Weekly Wage**	\$343.44	\$305.64	\$334.44	\$361.78

*Based on wages in the lowest 10th percentile of white-collar occupations in that region.

**Computed using 36 average number of hours worked by the sample population closed attaining positive employment outcomes.

Tuition Worksheet/Training Expenditure Worksheet

In order to study the impact of the Austerity Measures and subsequent changes to the Tuition Worksheet, post-secondary education expenditures in three semesters were compared. The Tuition Worksheet was required for Fall 1999 and imposed a sliding scale in 25% increments from 0% - 100% for tuition dependent upon financial need. The Tuition Worksheet was revised for Fall 2000 and included a sliding scale in 25% increments with a maximum of 75% of the highest amount of tuition charged at a state supported school. The form was further revised for Fall 2001 which replaced the 25% figure in the sliding scale

¹ U.S. Department of Labor, Bureau of Labor Statistics, **Harrison County, KY, National Compensation Survey**, December 1997.

U.S. Department of Labor, Bureau of Labor Statistics, **Louisville, KY-IN, National Compensation Survey**, December 1999.

U.S. Department of Labor, Bureau of Labor Statistics, **Cincinnati-Hamilton, OH-KY-IN, National Compensation Survey**, November 1999.

with 15% and was renamed the Training Expenditure Worksheet. In addition, new Federal regulations required that a financial needs test not be applied to SSI/SSDI recipients.

Tuition Expenditures

	FALL 1999	FALL 2000	FALL 2001
Tuition Expenditures	\$187,518.00	\$114,352.00	\$96,056.00
Number of Students	164	116	99
Average Tuition Expenditures	\$1143.00	\$985.00	\$970.00
% Decrease from Previous Yr.	---	(-13.78)	(-1.57)

The following chart illustrates the impact of the Austerity Measure regarding percentage of tuition.

Percentage of Tuition Paid

	Number Attending		
	FALL 1999	FALL 2000	FALL 2001
100%	90	7	12*
75%	16	74	70
70%	4	7	0
50%	14	10	11
25%	6	4	0
15%	0	0	2
0%	2	1	2
Not Indicated	35	14	4
Total	207	153	132

*Of the 12 cases that indicated 100% payment of tuition, 8 were coded as SSI or SSDI recipients either on the application or at case closure. The amount of tuition paid for those students receiving 100% tuition not coded as SSI or SSDI recipients ranged from \$1,355-\$2000.

The study also looked at the accuracy with which counselors were completing the 2001 Training Expenditure Worksheet. Of those attending training in Fall 2001, sixty-one percent (61%) of cases contained Training Expenditure Worksheets that the reviewers considered to be completed appropriately according to instructions. This is an increase from fifty-eight percent (58%) in the 2000 Review.

Disability Related Costs

Of the 337 cases reviewed, only 31 received assistance from the Department for disability related costs in any of the three semesters studied. For the purpose of this study, disability related costs included expenditures for notetaking, personal assistance, tutoring, interpreter services, assistive technology, and other disability related expenditures.

The following tables chart the number of consumers served and the type of funding received.

Disability Related Services

	FALL 1999		FALL 2000		FALL 2001	
	Number*	%	Number*	%	Number*	%
Disability Related Costs & Tuition &/or Books	19	9.2	3	2.0	9	6.8
Disability Related Costs Only	1	0.3	3	2.0	0	0.0
Total in Post-Sec.	207		153		132	

*Duplicate count when individuals attended more than one semester sampled.

Disability Related Expenditures and Number Individuals Receiving Service

	1999	2000	2001*
Personal Assistance	\$4,217.00/1	\$4,670/2	\$2561.00/1
Assistive Technology	\$3,365.00/3	\$74.00/1	\$1899.55/2
Tutoring	\$1,103.00/4	\$450.00/1	0
Interpreter	\$11,050.00/3	\$10,647.50/3	0
Notetaking	\$281.00/3	\$75.00/1	0
Other Disability Related Expenses	\$2,347.39/8	\$21,398.85/5	\$14,173.12/7

*Incomplete data, semester ongoing

Post-Secondary Expenditures from Both Review Years

School Year	1999		2000		2001
Review Year	2000	2001	2000	2001	2001
Tuition Only	101 37%	68 33%	62 41%	53 35%	40 30%
Tuition + Other*	0 0%	5 2%	0 0%	2 1 %	4 3%
Tuition +Books	125 46%	81 39%	60 39%	56 37%	50 38%
Tuition + Books + Other*	0 0%	9 5%	0 0%	4 3%	5 4%
0 Tuition + Books	37 14%	34 16%	27 18%	29 19%	32 24%
0 Tuition + Books + Other*	6 2%	9 4%	1 1%	4 3%	0 0%
Other Non- Disability Related Only**	2 1%	0 0%	0 0%	2 1%	1 1%
Other Disability Related Only***	1 0%	1 .5%	2 0%	3 2%	0
Total in Post-Sec Ed.	272	207	152	153	132

*Any Expenditures Other Than Tuition or Books. **Maintenance, Transportation, Other fees. ***Notetaking, Personal Assistance, Tutoring, Interpreter, Assistive Technology, Other Disability Related Expenditures.

Financial Ability

Of the 337 cases reviewed, 298 or eighty-eight percent (88%) contained Student Aid Reports (SAR) that documented the Adjusted Gross Income for the student's household. This is an increase from seventy-four percent (74%) in the 2000 Training Expenditure Review. The survey instrument recorded the income reported on the most recent SAR. The following table records the household income of students in the categories utilized by the 2001 Revision of the Training Expenditure Worksheet.

SAR'S

FAMILY OF	Column A Up to \$ amount, 75% Tuition		Column B Between Column A & B, 50% Tuition		Column C Between Column B & C, 15% Tuition		Column D This \$ amount and Above 0	
	\$ Amount	Number	\$ Amount	Number	\$ Amount	Number	\$ Amount	Number
1	26,381	59	31,658	0	36,934	0	36,934	8
2	34,499	58	41,399	2	48,298	1	48,298	4
3	42,616	45	51,140	6	59,663	5	59,663	16
4	50,734	34	60,881	6	71,028	2	71,028	9
5	58,851	21	70,622	2	82,392	4	82,392	5
6	66,969	1	80,363	2	93,756	1	93,756	2
7	68,490	2	82,188	1	95,886	0	95,886	0
8	70,013	0	84,015	0	98,018	0	98,018	1
9	71,535	0	85,842	0	100,149	0	100,149	0
10	73,056	0	87,668	0	102,279	0	102,279	1
TOTALS		220		19		13		46
Percent		73.83		6.38		4.36		15.44

The average household income of students whose cases contained SAR's was \$32,645.59 with a low of \$0.00 income and a high of \$465,826 per year. The average household income of students in the 2000 Training Expenditure Review was \$28,866.21.

One hundred and eighty-nine (189) or fifty-six percent (56%) of the 337 cases sampled received some type of financial aid in at least one of the semesters sampled.

Comparable Benefits

	FALL 1999	FALL 2000	FALL 2001
Number in Post-Sec. Education	207	153	132
Comparable Benefit	123 (59%)	84 (54%)	38 (29%)*

*2001 Training Expenditure procedures did not require comparable benefits to be reported when tuition and/or books only were being provided. The number and percentage may be substantially higher.

Reported Amount of Comparable Benefits Received

	FALL 1999	FALL 2000	FALL 2001
Grants	\$152,501.00	\$136,371.00	\$54,262.00
Loans	\$128,549.00	\$79,337.00	\$40,739.00
Scholarships	\$36,066.00	\$19,907.00	\$20,138.00

Comparable Benefits Received

	1999	2000	2001
Grants	95	67	31*
Loans	59	38	15*
Scholarships	27	16	10*

*2001 Training Expenditure procedures did not require comparable benefits to be reported when tuition and/or books only were being provided. The number may be substantially higher.

Average Amount Per Student

	FALL 1999	FALL 2000	FALL 2001
Grants	\$1605.00	\$2035.00	\$1750.39
Loans	\$2178.80	\$2087.82	\$2715.93
Scholarships	\$1335.78	\$1244.19	\$2013.85

The study explored the amount of comparable benefits reported by individuals not receiving tuition assistance.

Comparable Benefits and Average Amount for Cases Not Receiving Tuition Assistance

	1999	2000	2001
Grants	9(\$1675.11)	4(\$1806.25)	2(\$504.50)
Loans	11(\$1777.27)	1(\$1313.00)	2(\$3281.50)
Scholarships	6(\$1139.83)	2(\$3281.50)	2(\$5605.00)
Total 0 Tuition	43	37	33

Household Income of Cases Not Receiving Tuition Assistance

	1999	2000	2001
Over \$100,000	5	7	7
\$75,000-\$99,999	6	4	6
\$50,000-\$74,999	5	5	4
\$25,000-\$49,999	3	5	4
\$1.00 - \$24,999	13	7	7
0 Income w/SAR	5	5	4
0 Income No SAR	6	4	1
Total 0 Tuition	43	37	33

The study also looked at the amount of book and other expenditures for individuals that did not qualify for tuition assistance from the Department.

Book Expenditures in Cases Not Receiving Tuition Assistance

	1999	2000	2001
Amount	\$9332.20	\$8040.23	\$7914.94
Number Cases	43	33	32
Average Per Case	\$217.03	\$243.64	\$247.34

Number and Average Amount of Expenditures Other Than Books in Cases Not Receiving Tuition Assistance

	1999	2000	2001
Notetaking	2(\$85.00)	1(\$75.00)	0
Assistive Technology	0	0	1(\$393.55)
Personal Assistance	1(\$4217.00)	2(\$2335.00)	1(\$2561.00)
Interpreter	2(\$3500.00)	3(\$3549.17)	0
Tutoring	1(\$40.00)	1(\$450.00)	0
Other Disability Costs	2(\$423.50)	2(\$71.00)	3(\$183.33)
Maintenance	2(\$2335.00)	1(\$642.00)	1(\$1680.00)
Transportation	2(\$114.50)	2(\$58.00)	1(\$96.00)
Other Fees	1(\$30.00)	0	4(\$875.75)

Miscellaneous Information

Of the 373 cases sampled, 126 or 37.39% were referred by the school system. This is an increase from 33.18% in the 2000 Training Expenditure Review. These referrals included those from schools with cooperative programs, rehabilitation counselor presentations at schools, and other. Future study may yield more definitive information. Cases referred by the school system made up 40% of the successful closures in the study. This is an increase from 29% in the 2000 Training Expenditure Review.

Primary Disability

Disability	Total		PEO's	
	Number	Percent	Number	Percent
Mobility/Orthopedic	80	23.74	27	31.03
Psychiatric/Psychological	123	36.50	30	34.48
Chemical Dependency	22	6.53	6	6.90
Sensory	13	3.86	2	2.30
Cognitive	34	10.09	7	8.05
Other	65	19.29	15	17.24

Secondary Disability

Disability	Total		PEO's	
	Number	Percent	Number	Percent
Mobility/Orthopedic	22	6.53	7	8.05
Psychiatric/Psychological	53	15.73	14	16.09
Chemical Dependency	14	4.15	3	3.45
Sensory	11	3.26	2	2.30
Cognitive	8	2.37	1	1.15
Other	33	9.79	10	11.49
None	196	58.16	50	57.47

Priority Code

Priority Code	Total		PEO's	
	Number	Percent	Number	Percent
1	36	10.68	4	04.60
2	130	38.58	37	42.53
3	113	33.53	34	39.08
4	54	16.02	11	12.64
5	4	01.19	1	01.15

Area of Study and Average Semesters or Quarters

Area	Number	Percentage	Average Semesters	Average Quarters*
Business	45	13.35	4.16	5.00
Communications	9	2.67	6.00	1.00
Computer	29	8.61	4.85	2.25
Education	54	16.02	4.68	13
Human Services	59	17.51	5.00	11.00
Medical	63	18.69	3.86	6.50
Professional	22	6.53	5.52	4.00
Scientific	9	2.67	4.56	0.00
Technical	33	9.79	4.11	3.50
Other	9	2.67	3.67	0.00
Not Indicated	5	1.48	6.20	0.00

*Only 20 cases in the sample had attended training on a quarter system. This sample may be too small to make any inferences.

Area of Study and Average Semesters for Cases with Positive Employment Outcomes

Area	#	Percentage	Average Semesters	Median	Mode	Range
Business	10	11.49	6.22	6	8	3-12
Computer	7	8.05	6.00	4	4	1-18
Communications	3	3.45	7.33	10	**	1-11
Education	14	16.09	6.07	6	6	2-13
Human Services	11	12.64	5.64	4	2	1-15
Medical	18	20.69	4.93	6	6	1-10
Professional	2	2.30	10.00	*	**	9-11
Scientific	3	3.45	7.33	8	**	2-12
Technical	14	16.09	2.70	2	1	1-6
Other	3	3.45	2.33	2	**	1-4
Not Indicated	2	2.30	-	-	-	-

*Too few values to establish a meaningful median.

**All values are unique so there is no mode.

Only 8 cases in the sample with positive employment outcomes attended post-secondary education on a quarter system. One (1) of those cases also attended an additional 4 semesters of training. Four (4) out of the eight obtained degrees. The average quarters were 5.5 with a median of 6 and a mode of 6. The range was 2-10 quarters.

The average number of semesters provided was 4.70 with a range of 1-19. The average number of semesters provided to the individuals who attended on a semester basis and whose cases were closed with positive employment outcomes was 5.49.

Impact of 2000 Training Expenditure Review

The 2000 Review established the following goals for the 2001 Post Secondary Education Expenditure Review. All staff were informed of these goals and expectations in January 2001.

- ❖ **Training Expenditure Worksheets will be correctly completed and present in every case with adequate financial need documentation including the Student Aid Report.**
- ❖ **All training cases will be appropriate for training assistance.**
- ❖ **All cases will contain sufficient documentation to support the appropriateness of training assistance.**
- ❖ **Expanded definitions will be utilized correctly when determining significance of disability.**

The study looked at whether these goals were accomplished in the 2001 Review and particularly in the sampled 36 cases that were referred in the calendar year 2001 after the goals and expectations were communicated to staff.

	2000 Review	2001 Review	Referred In 2001
Correct Worksheet	58%	61%	69%
SAR Present	74%	88%	86%*
Appropriate for Training	68%	81%	81%
Sufficient Documentation	65%	70%	78%

*Less than 2001 overall percentage.

There was notable improvement in all addressed areas. It is interesting to note that a smaller percentage of cases referred in 2001 contained SARs than the overall percentage of cases sampled in the 2001 Review.

Since the issue of the appropriate use of expanded definitions was not explored in 2000, it was not addressed in the 2001 study. This issue will be explored in future TRACKS case reviews.

Implications for Training

As part of the study the reviewers were asked to give suggestions for training topics to address case deficiencies. Four major focus areas were reported: assessment, eligibility, IPE development, and documentation.

Assessment

- What is an assessment?
- The difference between and need for assessment for eligibility and assessment of rehabilitation needs
- How to tie assessment to choice – Guidance & Counseling
- When to get further assessments even if you have to pay for it
- Job market information, job responsibilities and work environment
- Utilizing web tools and other resources in assessment

Eligibility

- How to tie disability to services on IPE
- How to explain how services circumvent, ameliorate, etc. limitations
- Major life activities
- Correctly coding expanded definition (little or no explanation)
- Difference between attendant factors and functional limitations
- Appropriate use of school information
- Relationship between current IEP and eligibility for rehabilitation services

Vocational Goal & IPE Development

- Informed choice in goals and services
- How to conduct and document employment follow-up
- Which services provided by the counselor to include in IPE
- How to write annual reviews

Documentation

- Documenting development of vocational goal including limitations and interests
- Documenting how services were developed
- Documenting why goal is compatible with disability, limitations, ability etc.
- Documenting why DVR services are required.
- Need to document graduation, place of employment, wages, etc.
- How to write straightforward, complete progress notes
- How to document employment follow-up

These topics were submitted to the Human Resource Branch for consideration in upcoming training.

Issues for Leadership

The reviewers asked the Department leadership to study and address the following issues.

- When is it appropriate to use independently developed forms?
- Are demands for numbers impacting eligibility decisions?
- Is the Eligibility Worksheet contributing to incorrect eligibility decisions?

Conclusions and Recommendations

The primary reason for repeating the 2000 Training Expenditure Review was to determine if the deficiencies noted were being corrected. The study showed that there was substantial improvement in those cases accepted in or after January 2001 in terms of correct completion of the Training Expenditure Form; presence of Student Aid Report in case, sufficient documentation to support training, and appropriateness of training to circumvent or compensate for the limitations of disability(ies). However, the goals established for the 2001 Review were not met. It is recommended that the Field Administrators review the results of this study with their staff, develop an action plan and implement steps to address the areas of deficiency.

It appears that counselors and consumers continue to make good use of comparable benefits. Fifty-six percent of cases indicated the availability of comparable benefits. It is important to note that a procedural change effective for Fall 2001 eliminated the requirement for financial aid notification in cases only

receiving Department assistance for tuition and/or books. The actual percentage of students receiving comparable benefits and Department assistance may be higher.

Disability related services were purchased in less than one percent (1%) of the cases sampled. Efforts in the last year to encourage provision of disability related services do not appear to have had the desired impact.

There continues to be a high correlation between obtaining a degree and successful employment outcomes among those attending post-secondary training.

Consumers who attended post-secondary training with Department financial assistance and achieved positive employment outcomes obtained jobs that paid comparably or slightly higher than starting wages in similar occupations in Kentucky.

There is a high correlation between sufficient documentation to support college level training and appropriateness of training to overcome the limitations of the disability or barriers to employment. Ninety-five percent (95%) of those cases determined to have sufficient documentation to support training were also determined to be appropriate for training. The Department may want to explore if going through the process of thoroughly documenting the steps in developing the vocational goal and necessary services results in better decisions.

This repeated study indicates that comprehensive reviews on a given topic can positively impact the quality of casework. The quality of training cases has improved and is expected to continue to improve with implementation of the suggested training topics. It is recommended that similar case reviews be conducted on a yearly basis.