Irony: Gender Pay Inequity among Those Promoting STEM for Women and Girls

A Gender Pay Equity Study of Iowa's K-12 Education Technology Jobs

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Introduction

SHE MATTERS, 2012 Status of Women and Girls in Iowa, documents pay inequity between men and women for equal work at the national and statewide level. The Iowa Women's Leadership Project (IWLP) generated this secondary research from federal and state reports and data. Further, IWLP identified "Females and males are paid equally for equal work" as their number three issue in their top ten issues literature.

IWLP wanted to explore whether more localized data were available for analyses of this type. The Basic Education Data Survey (BEDS) is an annual data collection by the Iowa Department of Education (IDE) of area education agencies (AEAs) and school districts. One area of data which this collection of data contains is personnel. Recently, the collection was re-engineered at the request of the Legislature to also collect salary data in an analytical manner[1].

This analysis examines one particular area of male dominated jobs, technology, to see whether pay inequity exists between males and females. Specifically, it looks at the job classifications of technology and technology support. This analysis does concentrate on AEAs, as that is where technology staff are concentrated in K-12. However, the Des Moines Independent Community School District is examined, as well as an aggregation of school districts statewide (few have enough staff in this area for individual analysis).

Why focus on the technology jobs in school districts? Several crucial reasons:

1. IWLP's number one issue is "Increased number of Iowa's women are employed in STEM (Science, Technology, Engineering, Mathematics) careers."
2. Male dominated jobs have a history of gender pay inequity; technology in Iowa's K-12 is male dominated. (This will be shown with the data).
3. Private sector technology has a gender pay imbalance according to Iowa Workforce Development; technology in the public sector needs to ensure it does not. In 2010 the difference between the average male and female computer and mathematics occupational salaries was $4,000 for Iowa according to Iowa Workforce Development. [2]

This analysis is not a pay equity study: there are no job performance data involved. It is a statistical analysis comparing AEA and school district personnel by gender using job classification, salary, and demographic data. However, the finding within yields relationships in the data that would warrant having a comprehensive pay equity study conducted, at a minimum for these job classes.

[1] This process including several face-to-face meetings with AEA HR managers to design the collection.
[2] IOWA GENDER WAGE EQUITY STUDY 2010, Iowa Workforce Development

Why focus on these data?

The majority of court challenges and research findings on gender pay inequity in the workplace revolve around the impact of male dominated job classes on female wages. Anyone familiar with education is aware that this sector is female dominated overall. As Chart 1. notes, the BEDS data for 2011-12 show that AEAs overall have only 13% male employees. However, despite the overwhelming numeric superiority there are still some male dominated job classes at AEAs. Given that fact, it made sense to follow through on this established line of inquiry focusing on male dominated jobs.

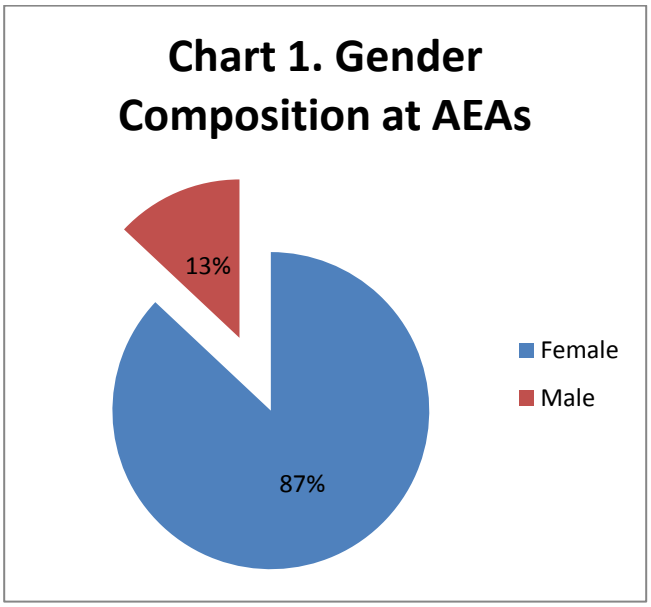


Table 1. lists all job classes that have a male concentration of double their percentage in the overall AEA personnel pool; males make up 13% overall. Based upon that, some would say all job classes in Table 1. are male dominated jobs. The table further highlights with yellow those job classes and their percentages that exceed 50%, as there can clearly be no definitional dispute these are male dominated. Using the strictest definition there are three groupings: 1) technology (technology and technology support); 2) leadership and 3) infrastructure support.

Table 1. AEA Male Dominated Jobs System wide	Percent
Technology	63.6
Business managers	50
AEA supervisors managers	42.4
Technology Support	57.1
Other Technical	37.9
Transportation - other than pupil	81.3
Operations and maintenance	63
Chief Administrator	88.9
Superintendent	100
Principal	80
Director (Spec Ed)	50
Zone Regional coordinator	31.4
Overall	13

Given these classes were male dominated in an overall female-dominated personnel pool, past research indicates a need to explore these data. Of those three job category areas, technology is also an area the IWLP is interested in, particularly STEM. IWLP's number one priority is to see more women in STEM careers, likewise, they want them to receive equal pay for equal work, issue number three. Therefore, given the intersection of these two issues

this analysis examines gender pay equity in AEA and school district full-time technology job classifications with the BEDS FY2011-12 data submission[3].

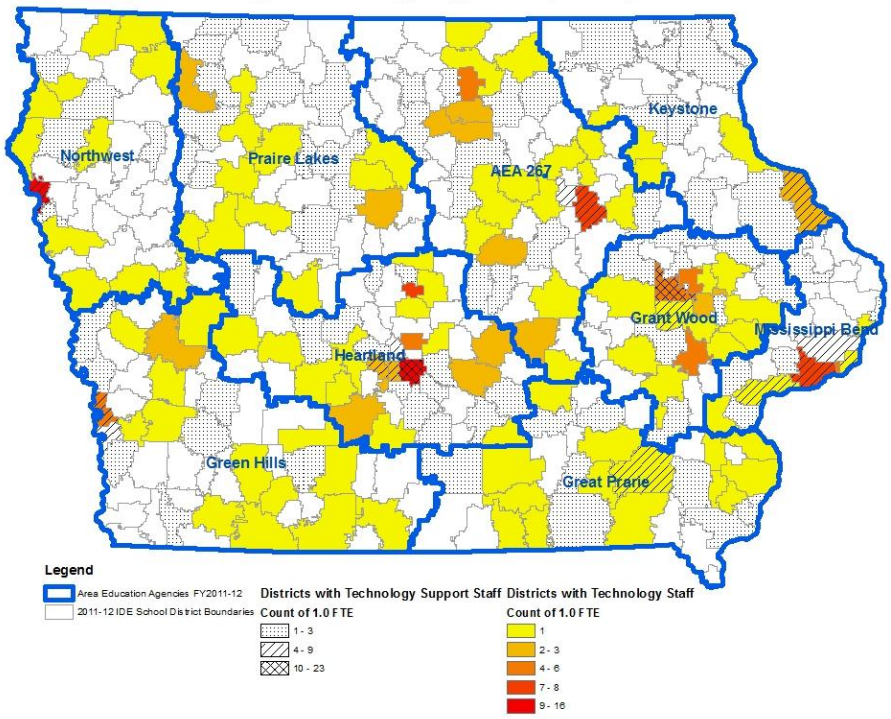
Is technology male dominated throughout K-12 in the State?

Technology job classifications are still a relatively small percentage of AEA total labor pools: 104 records [people] are in these classes for AEAs. Due to the small numbers, a concentration might disproportionately affect the technology job classification averages in Table 1. Given that fact, it made sense to discern whether male domination in the technology classes were truly widespread.

Both the technology and technology support positions are male dominated for nearly all AEAs. In the seven AEAs with the technology classification, each AEA had it staffed by 50% or more men. In seven of the nine AEAs the technology support classification was male dominated (over 50%).

Many districts have few, if any, dedicated technology staff, making it difficult to review this issue at the school district level. Even though there are not technology job classifications in every district, in aggregate, statewide K-12 reflects the same pattern as the AEAs. The BEDS data contain 490 people in the technology positions for all districts statewide and overall each position has significantly more males: 1) technology, 200 men (75%) and 65 women (25%) and 2) technology support, 140 men (62%) and 85 women (38%).

Map 1. Technology and Technology Support Staff (1.0 FTE) in School Districts.



[3] Leadership average salary data are often reported in the Annual Condition of Education report produced by the Iowa Department of Education. The other types of jobs include less than full-time personnel, which would require an agreed upon methodology for comparing everyone in the class.

To remove some issue of aggregation for school district data, the largest school district in the State is also examined. While it may not be representative of the State, it offers a look at the district level issue on an individual basis. Des Moines Independent School District has 15 technology and 23 technology support positions with 60% and 56.5% males per job class, respectively, which seems to mirror the other measures.

The findings of this investigation will be relevant throughout the State as: male domination in the K-12 technology field is throughout the State; a significant number of positions are involved; and K-12 technology, like technology, generally should be a growing labor market.

AEA analysis

AEAs represent themselves as a unified, statewide system; however, they are in fact independent: decisions, including hiring and firing chief administrators, ultimately rest with their particular board. Therefore, the examination of the technology positions in AEAs needs to take the same approach, overall first and then individual AEAs.

AEA system wide analysis

A regression model is used to analyze technology and technology support positions AEA system wide for a number of reasons. First, it is a powerful analysis, and it will allow everyone in the sample to be compared relative to each other. Second, it allows multiple variables to be considered simultaneously (life is more akin to a multivariate equation) while still allowing for examination of a single variable's effect. A regression is also one of the classical methods used to analyze data in a pay equity study.

For this analysis, the AEAs overall had 55 technology and 49 technology support positions. Arguably enough for a regression model, but clearly on the small end of a desirable sample size. The BEDS file contains many individual salary and demographic characteristics variables. Total experience and education level were originally considered as well in the original model. Unfortunately, providing these data fields are not required for these personnel and thus were not filled consistently for every AEA. Salary, which is total salary was chosen. Special categories exist to examine special pay and benefits, but those would should not to apply to these position classes.

salary = constant + district experience + gender + birth year + **total experience + education**

Before examining the models' (technology and technology support) results descriptive statistics about the individual variables puts the model in perspective.

Table 2. Technology Averages			
	Overall	Male	Female
District experience	11.9 years	11.4 years	12.7 years
Birth year	1966	1967	1964
Gender		63.60%	36.40%
Salary	$ 66,895	$ 71,093	$ 59,548

Table 3. Technology Support Averages			
	Overall	Male	Female
District experience	12.3 years	9.5	16
Birth year	1966	1971	1961
Gender		57.10%	42.90%
Salary	$ 46,920	$ 50,429	$ 42,241

The averages are clear from Table 2. and Table 3. On average men make more than women and men have less district experience than women overall at AEAs for both technology and technology support positions. Granted, these are averages with relatively small numbers of individuals, so they could be affected by an extreme outlier. Instead of exploring the spread of the individuals behind the averages (the standard deviation, etc.) we will instead turn to the regression findings.

For both technology and technology support position classes the following regression model where salary is dependent upon district experience, birth year, and gender was run. (SPSS in appendix) The models are both statistically significant and explain 14% and 12% of the differences in salaries, respectively. Within the model, gender is statistically significant in both classification models and the only independent variable with a significant coefficient for technology support. Birth year was also significant for technology. District experience was significant in neither classification model.

Coefficient values in the regression model represent slope, so they allow one to observe the impact of a one unit change in that variable. The Beta coefficients are -$13,246 (technology) and -$11,561 (technology support). Hence, as the gender value changes from male (value of 1) to female (value of two) the impact is -$13,246 and -$11,561, respectively.

Whether using a high powered regression or a simple average the results do not differ greatly. Unfortunately we limited to these variables, but some information is superior to total speculation. These data would indicate further study is warranted whether it be requiring more information be submitted to BEDS or an independent gender pay equity study.

AEA specific analysis

This analysis makes no attempt to compare equivalent work; that is a sticky methodological wicket. It only compares genders on equal work: males and females who were classified into the same position

classification by their employer as part of a submission to the federal government. Further, it is a statistical analysis.

For the individual AEAs the averages between salaries and available demographic variables will be compared. Only two variables are being compared simultaneously, (ANOVA) which is not nearly as robust an analysis as the regression model, which compared one dependent variable to three independent variables. However, it tells us whether the spread of salaries in one group overlaps another group's salary spread enough that they should or should not be considered separate, distinct groups.

At certain point a group gets too small to statistically to analyze. For instance, neither Green Hills nor Great Prairie have any technology positions (they do have technology support): none is too small. Likewise, no comparison group, there are not males and females at each AEA in each position class, limits the AEAs that can be analyzed. Prairie Lakes has only technology positions, all five are males, and no technology support positions, so their data will not be analyzed individually. Northwest has only one male for technology and Mississippi Bend and Keystone only have one female, which does not produce a standard deviation for the average - too few in the sample to possibly vary. Mississippi Bend has only one female for technology support. Therefore, these AEAs and classes of jobs at these AEAs will not be analyzed.

Technology positions for the AEAs are concentrated at AEA 267, Heartland, and Grant Wood. These have traditionally been the three large technology AEAs. Each had its own data warehouse it offered at one time. AEA 267 turned theirs off recently partnered with IDE when they brought a statewide education data warehouse online. Heartland currently still offers Heart database to school districts across the State. Grant Wood hosts student information systems (SISs) for many districts on its facilities.

For AEA 267 gender, birth year, and district experience all have a statistically significant relationship with salary. The ANOVA model has a significance less than .10 p value (significant for such a small sample) for gender, birth year, and district experience. Recall these are separate bi-variate relationships: men make more, younger people make more, and those with less district experience make more. The average male salary is $67,409.50 and most of the male population (one standard deviation) is plus or minus $17,251.31. The average female salary is $46,287.80 and most of the female technology population is plus or minus $15,344.11.

Overall, there are many senior women making less than junior men. Table 5. demonstrates that more women fall on the senior end of the scale, while Table 4. points out women also fall on the low end of the salary scale for the position.

Table 4. SALARY by Gender Crosstabulation

			Gender		
			Male	Female	Total
SALARY	$34,042	Count		2	2
		% within Gender		40.0%	18.2%
	$44,868	Count		1	1
		% within Gender		20.0%	9.1%
	$46,912	Count		1	1
		% within Gender		20.0%	9.1%
	$54,483	Count	1		1
		% within Gender	16.7%		9.1%
	$57,154	Count	1		1
		% within Gender	16.7%		9.1%
	$58,341	Count	1		1
		% within Gender	16.7%		9.1%
	$64,998	Count	1		1
		% within Gender	16.7%		9.1%
	$68,508	Count	1		1
		% within Gender	16.7%		9.1%
	$71,575	Count		1	1
		% within Gender		20.0%	9.1%
	$100,973	Count	1		1
		% within Gender	16.7%		9.1%
Total		Count	6	5	11
		% within Gender	100.0%	100.0%	100.0%

Table 5. District experience * Gender Crosstabulation

			Gender		
			Male	Female	Total
District experience	5	Count	2		2
		% within Gender	33.3%		18.2%
	9	Count	1	1	2
		% within Gender	16.7%	20.0%	18.2%
	10	Count	1		1
		% within Gender	16.7%		9.1%
	19	Count	1		1
		% within Gender	16.7%		9.1%
	22	Count		1	1
		% within Gender		20.0%	9.1%
	27	Count	1		1
		% within Gender	16.7%		9.1%
	28	Count		1	1
		% within Gender		20.0%	9.1%
	35	Count		2	2
		% within Gender		40.0%	18.2%
Total		Count	6	5	11
		% within Gender	100.0%	100.0%	100.0%

Grant Wood only has one significant relationship between the pairs of variables: birth year and salary. Older individuals tend to make more than younger individuals among the 24 technology positions at Grant Wood. There is not an overwhelming relationship between district experience and age (birth year): Pearson Correlation -0.259. Total experience may play into this equation, but collection of that variable for this job class was not mandated in the BEDs upload.

Heartland also only has one significant relationship between the sets of variables: gender and salary. The recently hired Chief Administrator at Heartland told IWLP affiliates, when she was hired she noticed inconsistencies in salaries among employees. So she made an effort to balance salaries. The salaries have been balanced between equal years of experience. However, the increases are not uniform and who gets them could be systematic. For instance, the two females making $52,835 have 5 years experience, where the male making $55,000 has less than 1 year experience. Kendall tau statistic shows a strong association between higher salaries and being male for Heartland technology job positions (See Appendix).

Table 6. SALARY by Gender Crosstabulation

			Gender		
			Male	Female	Total
SALARY	$50,000	Count		1	1
		% within Gender		25.0%	12.5%
	$52,835	Count		2	2
		% within Gender		50.0%	25.0%
	$55,000	Count	1		1
		% within Gender	25.0%		12.5%
	$64,118	Count	1	1	2
		% within Gender	25.0%	25.0%	25.0%
	$78,277	Count	2		2
		% within Gender	50.0%		25.0%
Total		Count	4	4	8
		% within Gender	100.0%	100.0%	100.0%

Technology support

For the reasons previously discussed, not all AEAs are considered in this individual AEA analysis. In addition to the three previously discussed - 267, Grant Wood and Heartland - Green Hills technology support staff will be analyzed. For technology support there is a particular emphasis on how district experience interacts with genders. Some would argue that district experience is particularly useful for technology support positions as they need to know local systems, common problems, and "work-around" solutions to help people use the technology.

For AEA 267, none of the pairs of variables had any relationship. For reference there are 9 individuals, 5 male and 4 female. Their respective salary averages were $40,468 (male) and $42,428 (female).

At Grant Wood females make statistically more than men. For reference, males have 12 or less years district experience, and females have 15 years or more district experience. Given this finding, in conjunction with the previous one on technology position, Grant Wood salaries appear to be based on experience and show no gender pay inequity *within* classes.[4]

Only gender and salary have a statistically significant relationship among the pairs of variables at Heartland. Eight men have an average salary of $59,811 compared to four women with a salary of $45,337. Table 7. matrix visualizes how women have more experience (clustered at the left of the chart)

[4] An actual pay equity study would also study equivalent jobs and promotion patterns.

and have lower salaries (clustered in the upper left of the chart) compared to their male counterparts at Heartland.

Table 7. Visualization of Technology Support Staff Salaries by District Experience with Gender Noted

	District experience											
Salary	1	2	3	7	11	12	13	15	16	22	27	33
$ 37,508												1 (Female)
$ 41,258									1 (Female)			
$ 47,442							1 (Female)					
$ 52,835	1 (Male)	1 (Male)	1 (Male)	1 (Male)								
$ 55,141						1 (Female)						
$ 58,788								1 (Male)				
$ 63,175					1 (Male)							
$ 68,665											1 (Male)	
$ 76,526										1 (Male)		

Green Hills has no statistically significant differences between any of the variables paired with salary. However, here is where small sample size does come into play. The average salary for the two female technology support staff is $46,061 and is $65,534 for the five males. Table 8 provides the opportunity for several obvious observations though they are not statistically significant. A women with 13 years of experience makes less than men with 4 and 9 years of experience. All women who are technology support at Green Hills make less than men.

Table 8. Salary by District Experience

2 Years (female)	Mean	$47,064
	N	1
	Std. Deviation	.
4	Mean	$54,736
	N	1
	Std. Deviation	.
9	Mean	$59,978
	N	2
	Std. Deviation	12623.27
13 Years (female)	Mean	$45,059
	N	1
	Std. Deviation	.
19	Mean	$88,660
	N	1
	Std. Deviation	.
25	Mean	$59,320
	N	1
	Std. Deviation	.
Total	Mean	$59,256.42
	N	7
	Std. Deviation	15251.33

School District Analysis

The impression that the gender pay inequity that exists in private sector IT only migrated to the AEAs would be inaccurate. As the IT culture migrated into Iowa's K-12 school districts gender pay inequity also appears to have migrated with it.

Following is a review of technology and technology support jobs for school districts in Iowa. It is worth noting that many technology and technology support functions in school districts are performed as part of another job in smaller districts or where budgets are tightest. However, this analysis is of 1.0 fulltime equivalents (FTEs) in those job classes. Hence, the analysis compares positions that solely fit into these classes: comparing salaries for equal work in the same job class. Given this as the comparison basis, even when a district has dedicated staff, most have so few staff that intra-district comparison cannot be done. So this analysis will first examine districts in the aggregate, realizing limitations. Then the focus will turn to the largest district in the State, Des Moines Independent, which has a large enough staff to support an anlysis. (Granted, there are limitations with a sample of one: Des Moines is not representative of all Iowa School districts).

Table 9. Technology Position Averages for School Districts Across Iowa									
		Technology				**Technology Support**			
Gender		District experience	Contract days	Salary	Birth Year	District experience	Contract days	Salary	Birth Year
Male	Mean	6.9	248.4	$ 56,151	1969.3	6.0	246.8	$ 43,776	1971.8
	N	200	200	200	200	140	140	140	140
	Std. Deviation	7.2	21.8	$ 15,219	10.4	6.3	24.6	$ 14,305	12.0
Female	Mean	10.7	235.5	$ 49,529	1964.4	10.2	231.9	$ 36,950	1962.5
	N	65	65	65	65	85	85	85	85
	Std. Deviation	8.2	30.3	$ 14,796	9.5	7.7	32.8	$ 12,971	10.0
Total	Mean	7.8	245.3	$ 54,527	1968.1	7.6	241.2	$ 41,197	1968.3
	N	265	265	265	265	225	225	225	225
	Std. Deviation	7.6	24.7	$ 15,356	10.4	7.1	28.8	$ 14,180	12.1

The difference in means for both gender and birth year are statistically significant differences for both technology and technology support. (See Appendix) Speaking generally about Table 9., one would say men earn approximately $6,000 more than women annually in these classes. This is relatively consistent with 2010 IWD report finding that women on average make $4,000 in the IT field. There is a negative linear relationship between age and salary for both technology and technology support: increases in age correspond to decreases in salary. For technology the relationship is slight to moderate(-.2) and for technology support this relationship is strong (-.4).

Des Moines Independent does not have any statistically significant relationships with a p value less than .10; it does however, have one with a p value of less than .11. (The level of what is statistically significant varies between fields of study and sample size.) Given that the test results are so near significant it is worth mentioning. The average salary for the nine male technology positions is $65,061 and $51,583 for the five females. (See Appendix)

Conclusion

The first goal IWLP lists for the pay equity is "Enforce pay equity at the state level." Awareness and identification are the first steps before enforcement can begin.

Technology has been brought into Iowa's K-12 education domain. Along with technology, many aspects of its culture, apparently including gender pay inequity has also been adopted. We must be vigilant to not integrate that aspect, too.

There may be disagreement about what these findings mean. Given the limits of the data set they are not conclusive. However, this analysis does leave the unequivocal conclusion that a gender pay equity study is necessary. These findings quantitatively raise enough serious questions with the limited public data to warrant at least this level of action. There appears to be liability exposure to all these State creations (entities) given these findings and the fact the Iowa Equal Pay Act allows for triple damages.

The public sector has a leadership role in this area, given its unique position. Public salary data are public - anyone can look at them - unlike private company data. Additionally, the public sector has labor management partners that are actively supporting compliance on this issue.

Further, there is a perceptual issue. The AEAs and school districts are the beginning of the STEM pipeline. Their data and practices are public. To genuinely promote such an initiative they are obligated to lead by example or be viewed as disingenuous by some.

Appendix

Regression Model - Technology

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	District experience, SEX, BIRTH_YR[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: SALARY

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.436[a]	.190	.142	18608.03

a. Predictors: (Constant), District experience, SEX, BIRTH_YR

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.1E+09	3	1.4E+09	3.983	.013[a]
	Residual	1.8E+10	51	3.5E+08		
	Total	2.2E+10	54			

a. Predictors: (Constant), District experience, SEX, BIRTH_YR

b. Dependent Variable: SALARY

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1174711	505123.0		2.326	.024	160634.1	2188788
	SEX	-13246.6	5255.322	-.320	-2.521	.015	-23797.1	-2696.093
	BIRTH_YR	-554.882	255.657	-.313	-2.170	.035	-1068.136	-41.629
	District experience	94.757	301.047	.045	.315	.754	-509.619	699.133

a. Dependent Variable: SALARY

Coefficient Correlations[a]

Model			District experience	SEX	BIRTH_YR
1	Correlations	District experience	1.000	-.007	.475
		SEX	-.007	1.000	.104
		BIRTH_YR	.475	.104	1.000
	Covariances	District experience	90629.053	-11002.3	36570.559
		SEX	-11002.274	2.8E+07	139781.06
		BIRTH_YR	36570.559	139781.1	65360.672

a. Dependent Variable: SALARY

Regression Model - Technology Support

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	District experience, SEX, BIRTH_YR[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: SALARY

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.417[a]	.174	.119	11874.26

a. Predictors: (Constant), District experience, SEX, BIRTH_YR

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.3E+09	3	4.5E+08	3.159	.034[a]
	Residual	6.3E+09	45	1.4E+08		
	Total	7.7E+09	48			

a. Predictors: (Constant), District experience, SEX, BIRTH_YR

b. Dependent Variable: SALARY

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	564679.7	423281.6		1.334	.189	-287853	1417213
	SEX	-11561.9	3860.068	-.457	-2.995	.004	-19336.4	-3787.296
	BIRTH_YR	-255.666	213.478	-.224	-1.198	.237	-685.633	174.302
	District experience	120.240	216.681	.097	.555	.582	-316.178	556.659

a. Dependent Variable: SALARY

Coefficient Correlations[a]

Model			District experience	SEX	BIRTH_YR
1	Correlations	District experience	1.000	-.038	.578
		SEX	-.038	1.000	.352
		BIRTH_YR	.578	.352	1.000
	Covariances	District experience	46950.769	-31927.6	26743.670
		SEX	-31927.579	1.5E+07	289903.75
		BIRTH_YR	26743.670	289903.8	45572.952

a. Dependent Variable: SALARY

Crosstabs Heartland Technology position

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SALARY * SEX	8	100.0%	0	.0%	8	100.0%

Table 6. SALARY by Gender Crosstabulation

			Gender		
			Male	Female	Total
SALARY	$50,000	Count		1	1
		% within Gender		25.0%	12.5%
	$52,835	Count		2	2
		% within Gender		50.0%	25.0%
	$55,000	Count	1		1
		% within Gender	25.0%		12.5%
	$64,118	Count	1	1	2
		% within Gender	25.0%	25.0%	25.0%
	$78,277	Count	2		2
		% within Gender	50.0%		25.0%
Total		Count	4	4	8
		% within Gender	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.000[a]	4	.199
Likelihood Ratio	8.318	4	.081
Linear-by-Linear Association	3.037	1	.081
N of Valid Cases	8		

a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .50.

Symmetric Measures

		Value	Asymp. Std. Error[a]	Approx. T[b]	Approx. Sig.
Ordinal by Ordinal	Kendall's tau-b	-.650	.157	-4.218	.000
	Kendall's tau-c	-.813	.193	-4.218	.000
N of Valid Cases		8			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

SALARY by Gender for Technology Support jobs all CSDs for 1.0 FTE

Report

SALARY		
male	Mean	43775.99
	N	140
	Std. Deviation	14304.75
Female	Mean	36949.91
	N	85
	Std. Deviation	12970.90
Total	Mean	41197.25
	N	225
	Std. Deviation	14179.95

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
SALARY * SEX	Between Groups	(Combined)	2.5E+09	1	2.5E+09	12.908	.000
	Within Groups		4.3E+10	223	1.9E+08		
	Total		4.5E+10	224			

SALARY by Gender for Technology jobs all CSDs for 1.0 FTE

Report

SALARY

male	Mean	56150.99
	N	200
	Std. Deviation	15218.73
Female	Mean	49529.23
	N	65
	Std. Deviation	14796.50
Total	Mean	54526.78
	N	265
	Std. Deviation	15356.03

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
SALARY * SEX	Between Groups	(Combined)	2.2E+09	1	2.2E+09	9.413	.002
	Within Groups		6.0E+10	263	2.3E+08		
	Total		6.2E+10	264			

DSM ICSD SALARY * SEX

Report

SALARY

male	Mean	65061.44
	N	9
	Std. Deviation	13353.58
Female	Mean	51583.00
	N	5
	Std. Deviation	15035.52
Total	Mean	60247.71
	N	14
	Std. Deviation	14973.69

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
SALARY * SEX	Between	(Combined)	5.8E+08	1	5.8E+08	3.006	.109
	Within Groups		2.3E+09	12	1.9E+08		
	Total		2.9E+09	13			

DSM ICSD SALARY * SEX Crosstabulation

			SEX		
			male	Female	Total
SALARY	30000	Count		1	1
		% within SEX		20.0%	7.1%
	45441	Count		1	1
		% within SEX		20.0%	7.1%
	46854	Count	1		1
		% within SEX	11.1%		7.1%
	51015	Count		1	1
		% within SEX		20.0%	7.1%
	55000	Count	1		1
		% within SEX	11.1%		7.1%
	56207	Count	1		1
		% within SEX	11.1%		7.1%
	58867	Count	1		1
		% within SEX	11.1%		7.1%
	62391	Count	1		1
		% within SEX	11.1%		7.1%
	62770	Count	1		1
		% within SEX	11.1%		7.1%
	65458	Count		1	1
		% within SEX		20.0%	7.1%
	66001	Count		1	1
		% within SEX		20.0%	7.1%
	74201	Count	1		1
		% within SEX	11.1%		7.1%
	81880	Count	1		1
		% within SEX	11.1%		7.1%
	87383	Count	1		1
		% within SEX	11.1%		7.1%
Total		Count	9	5	14
		% within SEX	100.0%	100.0%	100.0%

DSM ICSD District experience * SEX Crosstabulation

			SEX		
			male	Female	Total
District experience	0	Count	1	1	2
		% within SEX	11.1%	20.0%	14.3%
	1	Count	7		7
		% within SEX	77.8%		50.0%
	2	Count		1	1
		% within SEX		20.0%	7.1%
	3	Count		1	1
		% within SEX		20.0%	7.1%
	4	Count	1		1
		% within SEX	11.1%		7.1%
	14	Count		1	1
		% within SEX		20.0%	7.1%
	19	Count		1	1
		% within SEX		20.0%	7.1%
Total		Count	9	5	14
		% within SEX	100.0%	100.0%	100.0%