

# edCelerator™ vs. Extra Payments

How does *edCelerator's* system compare with just making extra payments to your mortgage? If you have \$50 extra each month in your budget, which method would pay off the debt with the least amount of expense? Using the *edCelerator™*? Or just making Extra Payments? We will use *edCelerator™* to generate estimates using both methods.

## **\$2,000 Loan**

Let's assume that you borrowed \$2000 with a one year loan at 8%. We'll assume that the monthly payment on the loan is \$175 and is due on the 25th of the month. Also assume that you have monthly income of \$4000, paid twice a month, on the 1st and 15th. Your expenses are paid twice a month: \$1880 on the 10th and \$1895 on the 20th. Your expense and income payment schedule looks like the following:

<b>Date</b>	<b>Financial Event</b>	<b>Amount</b>
1st	Income	\$2,000
10th	Expense	(\$1,880)
15th	Income	\$2,000
20th	Expense	(\$1,895)
25th	Loan Payment	(\$175)

This "budget" leaves \$50 of income left over each month after all the bills have been paid.

## ***\$2,000 Loan with \$50 Extra Payment***

How much sooner does the loan get paid off if the extra \$50 is paid toward the principal and how much is saved? *edCelerator™* generates the following results:

## **Debt Elimination Estimate 2K Loan \$50 Extra (No HELOC)**

### **Estimate Summary**

	Term	Interest Paid	Total Cost
Regular Debt Payment System	1 year	\$87.27	\$2,087.27
HELOC Based System	10 months	\$68.68	\$2,068.68
Savings	2 months		\$18.59

HELOC Interest: \$0.00 Loan Interest: \$68.68

Average Monthly Income: \$4,000.00  
Average Monthly Expenses: \$4,000.00

The results show that the loan will be paid off 2 month earlier this way, saving \$18.59 in interest. To request the detailed, three-page estimate, please e-mail us at [answers@edcelerator.com](mailto:answers@edcelerator.com).

## **\$2,000 Loan using edCelerator™**

So what do the results look like using *edCelerator™*? First we define the details of the HELOC. Use a HELOC with a \$5,000 credit limit at a 25% interest rate. (25%!?! We're going to borrow money at 25% to try to save money on an 8% loan? Yes, we are.) Next, define how much of an advance or injection we are going to take from the HELOC to pay down the loan. We could guess. Instead we'll use *edCelerator's* optimal injection amount calculation feature. It determines that the optimal injection amount is \$120. With all this information, *edCelerator™* generates the following results:

### **Debt Elimination Estimate 2K Loan w/ HELOC**

#### **Estimate Summary**

	Term	Interest Paid	Total Cost
Regular Debt Payment System	1 year	\$87.27	\$2,087.27
HELOC Based System	10 months	\$66.66	\$2,066.66
Savings	2 months		\$20.61

HELOC Interest: \$4.69 Loan Interest: \$61.97

Average Monthly Income: \$4,000.00  
Average Monthly Expenses: \$3,989.05

The results show that the loan will be paid off 2 months early - the same as the Extra Payment technique. The results also show that \$20.61 will be saved in interest. *That is a difference of \$2.02!* By advancing money from a HELOC charging a 25% annual interest rate, the \$2,000 loan was **paid off just as quickly and with less expense** than if you made extra principal payments of \$50 a month. To request the detailed, eight-page estimate, please e-mail us at [answers@edcelerator.com](mailto:answers@edcelerator.com).

The \$2,000 loan was used to demonstrate that the *edCelerator™* can do better and to keep the number of Transaction Details small so that the numbers could realistically be verified. However, no one would get a HELOC (and potentially pay closing costs) to save \$2.02 so let's look at a larger loan.

## ***\$100,000 Loan***

So let's change the loan to a \$100,000 30-year mortgage (perhaps this is a college loan), with an interest rate of 7%. The monthly payment is \$665.30 (which actually leaves a 361st payment of \$3.00 on the loan which would be added into the 360th payment.) The income will be kept the same, but the expenses will be adjusted to account for the larger loan payment. The new expense and income payment schedule looks like the following:

<b><u>Date</u></b>	<b><u>Financial Event</u></b>	<b><u>Amount</u></b>
1st	Income	\$2,000
10th	Expense	(\$1,642.35)
15th	Income	\$2,000
20th	Expense	(\$1,642.35)
25th	Loan Payment	(\$665.30)

Once again, this "budget" leaves \$50 of income left over each month after all the bills have been paid.

## ***\$100,000 Loan with \$50 Extra Payment***

*edCelerator*<sup>TM</sup> generates the following results:

### **Debt Elimination Estimate 100K Loan \$50 Extra (No HELOC)**

#### **Estimate Summary**

	Term	Interest Paid	Total Cost
Regular Debt Payment System	30 years and 1 month	\$139,511.00	\$239,511.00
HELOC Based System	24 years and 3 months	\$107,855.81	\$207,855.81
Savings	5 years and 10 months		\$31,655.19

HELOC Interest: \$0.00 Loan Interest: \$107,855.81

Average Monthly Income: \$4,000.00  
Average Monthly Expenses: \$4,000.00

The results show that the loan will be paid off nearly 6 years early, saving \$31,655.19 in interest. Definitely some results to get excited about! So how did the *edCelerator*<sup>TM</sup> do? To request the detailed, 50-page estimate, please e-mail us at [answers@edcelerator.com](mailto:answers@edcelerator.com).

**\$100,000 Loan using edCelerator™:**

The HELOC credit limit is \$5,000 and the interest rate is still 25%, but this time the optimal injection amount is calculated to be \$340. edCelerator™ generates the following results:

## Debt Elimination Estimate 100K Loan w/ HELOC

### Estimate Summary

	Term	Interest Paid	Total Cost
Regular Debt Payment System	30 years and 1 month	\$139,511.00	\$239,511.00
HELOC Based System	24 years and 3 months	\$107,477.34	\$207,477.34
Savings	5 years and 10 months		\$32,033.66

HELOC Interest: \$428.24    Loan Interest: \$107,049.10

Average Monthly Income: \$4,000.00

Average Monthly Expenses: \$3,997.24

Once again, the estimate demonstrates that the loan will be paid off in the same amount of time. This time **the HELOC Based System saved an additional \$378.47** over the extra payment method. To request the detailed, 150-page estimate, please e-mail us at [answers@edcelerator.com](mailto:answers@edcelerator.com).

***\$100,000 Loan using HBSDE with HELOC at 10%***

The above example is definitely interesting, but HELOC interest rates are currently 4.50%. An interest rate of 25% is not representative. What if the HELOC interest rate is only 10%, much higher than current but possible in the future? How would the numbers change? With the different interest rate, the optimal injection amount is now computed to be \$2,350. edCelerator™ generates the following results:

# Debt Elimination Estimate

## 100K Loan w/ HELOC @ 10%

### Estimate Summary

	Term	Interest Paid	Total Cost
Regular Debt Payment System	30 years and 1 month	\$139,511.00	\$239,511.00
HELOC Based System	24 years	\$105,305.16	\$205,305.16
Savings	6 years and 1 month		\$34,205.84

HELOC Interest: \$1,634.84    Loan Interest: \$103,670.32

Average Monthly Income: \$4,000.00  
 Average Monthly Expenses: \$3,993.02

Now the results are even more interesting. *At the 10% interest rate, the HELOC Based System paid off the debt **3 months earlier** and for **\$2,550.65 less** than the extra payment method!* To request the detailed, 312-page estimate, please e-mail us at [answers@edcelerator.com](mailto:answers@edcelerator.com).

The problem with the previous examples is that life doesn't work the way the scenarios were setup. Hopefully, our income increases over 25 years and doesn't remain static. Surely, our expenses don't stay the same over that period of time. Real life happens. That is one reason *edCelerator*<sup>TM</sup> creates estimates. All this tool can do is estimate (or simulate) what will happen over time if the income and expense information remains as predicted. So when real life happens, what does the HELOC Based System do to absorb the real life event?

### ***\$2,000 Loan with \$50 Extra Payment and \$300 Car Repair on Credit Card***

To demonstrate a "Real Life" event let's return to the \$2,000 loan example - just to keep the math simple. The "Real Life" event is a \$300 car repair bill that is paid the 3rd month into the loan term. The Extra Payment method only has \$50 available to pay for the car repair. Since \$50 isn't enough to cover it, the car repair is put on a credit card charging a 12% annual interest rate. Each month the extra \$50 will be used to pay down the credit card balance. To generate this result, we compute it manually:

Month	Loan Balance	Loan Payment	Loan Interest	Credit Card Balance	CC Payment	CC Interest
7/2008	2000.00	175 + 50	13.33			
8/2008	1788.33	175 + 50	11.92			
9/2008	1575.25	175	10.50	300.00	50	3.00
10/2008	1410.75	175	9.41	253.00	50	2.53
11/2008	1245.16	175	8.30	205.53	50	2.06
12/2008	1078.46	175	7.19	157.59	50	1.58
1/2009	910.65	175	6.07	109.17	50	1.09
2/2009	741.72	175	4.94	60.26	50	0.60
3/2009	571.66	175 + 39.03	3.81	10.86	10.97	0.11
4/2009	361.44	175 + 50	2.41	0		
5/2009	138.85	139.78	0.93	0		
6/2009	0			0		
TOTALS	2000		78.81	300		10.97

Total Cost: 2389.78

### **\$2,000 Loan using edCelerator™ with \$300 Car Repair**

Thankfully, we can let edCelerator™ generate this result! We will go back to using a HELOC with a \$5,000 credit limit at a 25% annual interest rate and an injection amount of \$120. If you look closely at the Transaction Details, you will see that the car repair was paid by taking \$300 directly out of the HELOC. edCelerator™ generates the following results:

## **Debt Elimination Estimate 2K Loan w/ HELOC (Car Expense)**

### **Estimate Summary**

	Term	Interest Paid	Total Cost
Regular Debt Payment System	1 year	\$87.27	\$2,087.27
HELOC Based System	11 months	\$85.06	\$2,085.06
Savings	1 month		\$2.21

HELOC Interest: \$14.42 Loan Interest: \$70.64

Average Monthly Income: \$4,000.00

Average Monthly Expenses: \$4,009.60

Just like the Extra Payment method, the loan and car repair were paid off in 11 months. The total cost using the edCelerator™ is \$2,385.06 (\$2085.06 + \$300.) **This is cheaper by \$4.72!** To request the detailed, ten-page estimate, please e-mail us at [answers@edcelerator.com](mailto:answers@edcelerator.com).

In the "Real Life" example, the edCelerator™ paid off the debt in the same amount of time and increased the amount that was saved overall. It did this while not overly stressing out the financial situation - more money was available if needed from HELOC - whereas the Extra Payment method is strapped - the only extra money available is from the credit card. (Technically, both cases are borrowing money to get the bills paid.)

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*Does the edCelerator™ always perform better?*

Perhaps not; we could not test every possible scenario. But, we have not yet been able to construct an example using the optimal injection amount as calculated by *edCelerator*™ where the Extra Payment (no Heloc) method wins.

For rapidly paying off college loans, and then going on to pay off one's home, there is no better, more affordable solution than the *edCelerator*™. Contact your college planner now for more details. If you do not yet have a college planner, contact us ([answers@edcelerator.com](mailto:answers@edcelerator.com)) and we will provide you with information about the edCelerator™-certified college planning specialist nearest you.