

Example - Change in the Estimate of Useful Life

Purpose:

The ministry amended the District School Board and School Authority Tangible Capital Assets - Provincial Accounting Policies and Implementation Guide (TCA Guide). The estimated useful life of computer hardware has been changed from 5 years to 3 years. The updated document is available on the FAAB website:
<https://efis.fma.csc.gov.on.ca/faab/CAImplementation.htm>

This document illustrates how the change in the estimate of useful life affects the amortization of existing computer hardware, as well as future purchases, and the related journal entries that would be posted by boards.

Example Details:

2016-17 Additions

In 2016-17 school year, the board has purchased, with GSN funding, computer hardware items such as iPads and Chromebooks and depreciated the assets over the expected useful life of 5 years. The cost of the computer hardware was \$50,000 with zero salvage value. The board depreciates asset on straight line basis and uses the half-year rule in the year they acquire depreciable assets or additions to the asset class.

The depreciation expenses in 2016-17 is calculated as follows:

Depreciation expenses = (Cost - Salvage Value) / Useful Life

Depreciation expenses = (\$50,000- 0) / 5 years *1/2 (half-year rule) = \$5,000

Journal entries:

The journal entry to record the purchase of assets is:

DR. Cash	\$50,000		
		CR. GSN Deferred Revenue (DR-GSN)	\$50,000
DR. Asset- computer hardware	\$50,000		
		CR. Cash/Accounts payables	\$50,000
DR. DR-GSN	\$50,000		
		CR. Deferred Capital Contribution (DCC)	\$50,000

For simplification purposes, in the following entries, Cash/GSN Deferred Revenue will be omitted, and entries will be directly recorded as Dr. Asset/Cr. DCC.

The journal entries to record the amortization expense and amortization of the DCC balance are:

DR. Amortization expense	\$5,000	
	CR. Accumulated amortization – computer hardware	\$5,000
DR. DCC	\$5,000	
	CR. DCC Revenue	\$5,000

2017-18 Additions

On February 5th, 2018, the board has purchased new computer hardware items at a cost of \$100,000 with zero salvage value.

The depreciation expenses in 2017-18 is calculated as follows:

Computer hardware items purchased in 2016-17

$$\text{Depreciation expenses} = \$50,000 / 5 \text{ years} = \$10,000$$

Computer hardware items purchased in 2017-18

$$\text{Depreciation expenses} = (\$100,000 - 0) / 5 \text{ years} * 1/2 \text{ (half-year rule)} = \$10,000$$

Total depreciation expenses in 2017-18: \$20,000

Accumulated amortization in 2017-18: \$25,000

Journal entries:

The journal entry to record the purchase of assets is:

DR. Asset- computer hardware	\$100,000	
	CR. DCC	\$100,000

The journal entry to record the amortization is:

DR. Amortization expense	\$20,000	
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	CR. Accumulated amortization – computer hardware	\$20,000
DR. DCC	\$20,000	
	CR. DCC Revenue	\$20,000

2018-19 Additions

On January 31, 2019, the board purchased additional computer hardware items in the amount of \$60,000 with zero salvage value.

The depreciation expenses in 2018-19 is calculated as follows:

Computer hardware items purchased in 2016 -17

Depreciation expenses = $50,000 / 5 \text{ years} = \$10,000$

Computer hardware items purchased in 2017-18

Depreciation expenses = $100,000 / 5 \text{ years} = \$20,000$

Computer hardware items purchased in 2018 -19

Depreciation expenses = $(60,000 - 0) / 5 \text{ years} * 1/2 \text{ (half-year rule)} = \$6,000$

Total depreciation expenses in 2018-19: \$36,000

Accumulated amortization in 2018-19: \$61,000

Journal entries:

The journal entry to record the purchase of assets is:

DR. Asset- computer hardware	\$60,000	
	CR. DCC	\$60,000

The journal entry to record the amortization is:

DR. Amortization expense	\$36,000	
	CR. Accumulated amortization – computer hardware	\$36,000
DR. DCC	\$36,000	
	CR. DCC Revenue	\$36,000

2019-20 Additions

On November 2, 2019, the board has purchased additional computer hardware items in the amount of \$90,000 with zero salvage value.

The depreciation expenses in 2019-20 is calculated as follows:

Computer hardware items purchased in 2016 -17

Depreciation expenses = $50,000 / 5 \text{ years} = \$10,000$

Computer hardware items purchased in 2017-18

Depreciation expenses = $100,000 / 5 \text{ years} = \$20,000$

Computer hardware items purchased in 2018 -19

Depreciation expenses = $60,000 / 5 \text{ years} = \$12,000$

Computer hardware items purchased in 2019 -20

Depreciation expenses = $(\text{Cost} - \text{Salvage Value}) / \text{Useful Life}$

Depreciation expenses = $(\$90,000 - 0) / 5 \text{ years} * 1/2 \text{ (half-year rule)} = \$9,000$

Total depreciation expenses in 2019-20: \$51,000

Total accumulated amortization 2019-20: \$112,000

Journal entries:

The journal entry to record the purchase of assets is:

DR. Asset- computer hardware	\$90,000	
		CR. DCC
		\$90,000

The journal entry to record the amortization is:

DR. Amortization expense	\$51,000	
		CR. Accumulated amortization – computer hardware
		\$51,000
DR. DCC	\$51,000	
		CR. DCC Revenue
		\$51,000

2020-21 Additions

Effective 2020-21 the estimated useful life of the computer hardware has been changed from 5 years to 3 years. Also, the board has purchased additional computer hardware items in the amount of \$120,000 with zero salvage value.

The depreciation expenses in the 2020-21 is calculated as follows:

Computer hardware purchased in 2016-17

Depreciation expenses = NBV / remaining useful life

Depreciation expenses = \$15,000 / (3 years – 3.5 years = (0.5) => to be fully amortized in 2020-21) = \$15,000

2016-17 additions will be deemed disposed in 2020-21

Computer hardware purchased in 2017-18

Depreciation expenses = NBV / remaining useful life

Depreciation expenses = \$50,000 / (3 years – 2.5 years = 0.5 => to be fully amortized in 2020-21) = \$50,000

2017-18 additions will be deemed disposed in 2020-21

Computer hardware purchased in 2018-19

Depreciation expenses = NBV / remaining useful life

Depreciation expenses = \$42,000 / (3 years – 1.5 years = 1.5 years) = \$28,000

Computer hardware purchased in 2019-20

Depreciation expenses = NBV / remaining useful life

Depreciation expenses = \$81,000 / (3 years – 0.5 years = 2.5 years) = \$32,400

Computer hardware purchased in 2020-21

Depreciation expenses = (Cost - Salvage Value) / Useful Life

Depreciation expenses = (\$120,000 - 0) / 3 years * 1/2 (half-year rule) = \$20,000

Total depreciation expenses in 2020-21: \$145,400

* Estimated useful life of the computer hardware has been changed from 5 years to 3 years in 2020-21 due to new information available.

** Computer hardware items purchased in 2016-17 and 2017-18 are fully amortized in 2020-21 and therefore are deemed to be disposed of.

Per PS 2120.25 and .28, estimates must be revised when new information becomes available and/or significant events occur, which indicates a change in circumstance upon which the estimates were formed. Changes in accounting estimates must be accounted for prospectively in the financial statements. The change in the estimate is reported in the current and prospective periods. In other words, previously reported statements and opening balances do not need to be adjusted to reflect the changes in the useful life estimates.