CHINA EDUCATION RESOURCES INC.

Management's Discussion and Analysis
For the year ended December 31, 2018

FORM 51-102F1

This Management Discussion and Analysis ("MD&A") reviews the activities of China Education Resources Inc. ("CER"), its Chinese operating subsidiaries, Today's Teachers Technology & Culture Ltd. ("TTTC"), CEN Smart ("CEN") and Zhong Yu Cheng Yuan Education Technology Ltd. (previously known as Zhong Yu Cheng Yuan Curriculum Development Center Ltd.) ("ZYCY") (and/or collectively the "Group") and compares the financial results for the year ended December 31, 2018 with the same period of 2017. The MD&A should be read in conjunction with the audited consolidated financial statements and accompanying notes for the year ended December 31, 2018, copy of which is filed on the SEDAR website.

All financial information in this MD&A is prepared in accordance with International Financial Reporting Standards ("IFRSs"), except those exceptions specially mentioned.

All dollar amounts presented are expressed in United States dollars unless otherwise noted.

FORWARD LOOKING INFORMATION

Except for statements of historical fact, the discussion and analysis of financial performance and position including, without limitation, statements regarding projections, future plans, and objectives of CER are forward-looking statements that are subject to various risks and uncertainties. Forward-looking statements are based on management experience, historical results, current expectations and analyses, trends, government policies, and current business and economic conditions, including CER's analysis of its product and distribution system and its expectations regarding the effects of anticipated product and distribution changes and the potential benefits of such efforts and activities on CER's results of operations in future periods. There can be no assurance that such statements will prove to be accurate; actual results and future events could differ materially from those anticipated in such statements.

DATE OF REPORT – April 29, 2019

DESCRIPTION AND OVERVIEW OF BUSINESS

CER is a corporation organized under the predecessor to the *Business Corporations Act* of British Columbia. CER is a public company traded on the TSX Venture Exchange with the trading symbol "CHN" and OTC Markets with the trading symbol "CHNUF". The Group, through its subsidiaries in China, is a leading provider of kindergarten to grade 12 ("K-12") education resources and services through its national internet portal, China Education Resources and Services Platform ("CERSP"), www.cersp.com, to China's kindergarten to grade 12 education market.

The Group has worked in all areas of education resources development, marketing and sales. Working with the Curriculum Development Center ("CDC") of China's Ministry of Education ("MOE") and Chinese Society of Education ("CSE") the largest academic association in China, CER has developed a unique national education portal (www.CERSP.com) to help the Central Government implement policy reform. This reform effort is designed to bring China's education system into the twenty first century by changing teaching methods from rote memory learning to a more individualized and creative approach. Teachers completed the national or provincial online training programs on CERSP.com will receive teacher's continuing education credit from either MOE or provincial education authorities. In collaboration with China's various education authorities and experts, the CERSP portal is designed to support all stakeholders and participants in the K-12 education domain; teachers, students, administrators, subject matter experts, and parents.

The Group's comprehensive Education Services Portal ("ESP") is a natural extension of CERSP, and helps to organize the wealth of teaching, learning, and administrative resources available through CERSP at the individual school level.

CERSP is the equivalent of a mega-portal. It is designed to be accessible by everyone associated with K-12 education across China and is loaded with robust features and resources that enable the development, delivery, and support of resources and activities related to the national K-12 education reform initiative. CERSP is a primary venue for teacher training in schools, districts, cities, and provinces. It is also the aggregator for subject matter experts in all K-12 subject areas and a place where they can gather virtually to improve upon the work they have done in response to national mandates.

ESP, on the other hand, is a commercial service for the K-12 education marketplace that extends the reach and relevance of the CERSP portal at the school and individual level. Its primary function is to support the administrative, teaching, learning, testing, and assessment needs of an individual school, and it does so in a way that is standardized, allowing for combined results to the district, city, province, or national level. CERSP can be regarded as a large "back-end" resource that greatly enriches each instance of ESP. ESP can be considered as a way to monetize the momentum of CERSP by creating a direct, revenue producing relationship with every school, administrator, teacher, parent and student that subscribes.

Currently, our ESP provides the following services:

(a) School Platform

The school platform provides a link between a school with its teachers, students and parents. Through the platform, the school can send messages to the teachers, students and parents. The teachers can upload homework and tests to the platform and the students can go to the platform to complete and submit their homework and write the tests. The school can automatically collect the markings received by each student. Each teacher and student has his or her own account number registered with the platform. Currently, the Group is adding mobile learning solutions to the School Platform for both of the students and teachers.

(b) Online tutoring program

Online tutoring program is a platform developed for a teacher to provide online tutoring services through the internet to his or her students. This program still has not started to generate revenue. Students have to prepay for the services to TTTC and TTTC pays the net amount to the teachers after deducting our share of revenue.

(c) Digital education products

Digital education products are the products containing digital textbook tutorial materials, digital supplementary materials such as lesson plans, course modules and tests. CER has had more than 100,000 lesson plans, course modules and continues to develop the materials.

The Group, through TTTC, acquired a 60% interest ZYCY, a distributor of education products in China for RMB6,000,000 ($878,460) paid in 2,860,000 shares of common stock of the CER at a deemed value of CND0.35 ($0.30) per share. On top of increasing its book selling business, the Group can also strengthen its sales and distribution of its national CERSP and ESP web portal services in China through the sales team of ZYCY.

Due to the size of the Group, the provision of education internal portal services and distribution of educational textbooks and materials were considered in one segment based on the organizational structure, strategies, decision making and the availability of financial information.

Four Step Growth and Revenue Strategy

The Group has implemented a four-step growth and revenue strategy which is now being commercialized and expanded nationwide.

The first step of the strategy involves working with various levels of government to deliver government-funded online teacher training programs. The Group has developed more than 2,000 online teacher training courses for the continuous education of teachers. This means teachers can obtain government certificates upon successful completion of any of these courses through national, provincial and municipal teacher training programs. More than 600,000 teachers were trained in the Group's teacher training programs. CER is the only public company endorsed by China's Ministry of Education ("MOE") for national level online teacher training programs.

The second step of the strategy involves integrating the Group's products and services into teachers' daily routines. This will allow teachers to interact and communicate with each other while establishing a close relationship with the Group and its products. These products include online teacher training, professional development and sharing of lesson plans. The CERSP portal is one of the largest and most popular K-12 teacher blog systems in China with more than one million registered and active K-12 teachers. The CERSP portal has developed into a strong national brand and it has a reputation for offering best-in-class online learning products and services. The first two steps are well underway and are expanding into more provinces.

The third step involves promoting products directly to teachers through CER's School Platform. The School Platform provides a link between a school with its teachers, students and parents. Through the platform, the school can send messages to the teachers, students and parents. The teachers can upload homework and tests to the platform and the students can go to the platform to complete and submit their homework and write the tests. The school can automatically collect the markings received by each student. Each teacher and student has his or her own account number registered with the platform.

The fourth step of the growth strategy is to target students by offering a number of products and services. This includes offering our collection of online tutoring courses, customized education resources, formative assessment tools and education games. Currently, CER is adding mobile learning solutions to both of the students and teachers.

Please refer to the Outlook section at the end of this MD&A on the current achievement made by the Group.

OVERALL PERFORMANCE

During the three months ended December 31, 2018, the Group generated revenue of $2,232,014 as compared with $2,110,938 for the same period of last year. The net loss attributable to the shareholders of the Group for the period was $1,208,176 as compared with $243,314 for the same period of last year. The net loss per share was $0.03 for the three months ended December 31, 2018 as compared to $0.01 for comparable period ended December 31, 2017.

During the year ended December 31, 2018, the Group generated revenue of $11,863,341 as compared with $11,825,995 for the same period of last year. The net loss attributable to the shareholders of the Group for the year was $151,698 as compared with net income attributable to the shareholders of $1,357,757 for the same period of last year. The net loss per share was $0.00 for the year ended December 31, 2018 as compared to net income per share of $0.03 for comparable period ended December 31, 2017.

Selected Annual Information

	2018	2017	2016
Total revenue	$ 11,863,341	$ 11,825,995	$ 13,420,347
Net (loss) income	(210,367)	1,403,009	1,157,048
Net (loss) income per share	(0.00)	0.03	0.02
Total assets	7,788,227	9,101,643	7,907,685
Long-term liabilities	-	-	-

The Group changed from a net income position in 2017 to a net loss position in 2018. This was mainly due to the increase in cost of sales from book sales and distribution services as a result of increase in printing costs.

The increase in net income for 2017 compared to 2016 was mainly due to the recovery of current income tax recorded during the year since the change of management's estimate on income tax accrual from previous years.

Results of Operations

For the three months ended December 31, 2018:

For the three months ended December 31, 2018, the Group reported aggregate sales revenue of $2,232,014 (2017: $2,110,938). The revenue from book sales and distribution service was $1,828,057 and revenue from online products was $403,957. There was an increase in revenue from the book sales and distribution services and decrease in revenue from online products for the current quarter as compared to the same period in 2017. The decrease in revenue from online products was mainly due to the delay in conducting teacher training by some cities in China.

The following is a discussion of certain expense categories:

General and administrative expenses

For the three months ended December 31, 2018, general and administrative expenses were $573,548 as compared to $507,399 for the same period in 2017. The increase was mainly due to provision for bad debt of $144,914 as compared to $107,385 for the same period in 2017.

Accounting and audit were $41,734 for the three months ended December 31, 2018 as compared to $46,223 for the same period in 2017.

Consulting expense were $30,348 for the three months ended December 31, 2018 as compared to $35,830 for the same period in 2017.

Salaries, wages, commission and benefits were $147,208 for the three months ended December 31, 2018 as compared to $169,043 for the same period in 2017.

Amortization

The amortization was $9,605 for the three months ended December 31, 2018 as compared to $9,765 for the same period in 2017.

Selling and marketing expenses

The selling and marketing expenses were $313,116 for the three months ended December 31, 2018, which were decreased as compared to $525,907 incurred in the same period in 2017. The decrease was mainly due to the decrease in commission, education and research expenses incurred.

Finance cost

The Group incurred finance costs of $4,976 for the three months ended December 31, 2018 as compared to $7,867 for the same period of 2017. The decrease was mainly due to the decrease in loan interest paid.

For the year ended December 31, 2018:

For the year ended December 31, 2018, the Group reported aggregate sales revenue of $11,863,341 (2017: $11,825,995). The revenue from book sales and distribution service was $6,450,715 and revenue from online products was $5,412,626. The increase in sales revenue in 2018 as compared with the same period of 2017 was mainly due to the exchange rates used to convert Renminbi to U.S. dollars.

The following is a discussion of certain expense categories:

General and administrative expenses

For the year ended December 31, 2018, general and administrative expenses were $1,811,716 as compared to $1,647,715 for the same period in 2017. The increase was mainly due to provision for bad debt of $144,914 as compared to $107,385 for the same period in 2017.

Accounting and audit were $172,902 for the year ended December 31, 2018 as compared to $192,945 for the same period in 2017.

Consulting expense were $140,768 for the year ended December 31, 2018 as compared to $140,457 for the same period in 2017.

Salaries, wages, commission and benefits were $735,623 for the year ended December 31, 2018 as compared to $731,777 for the same period in 2017.

Amortization

The amortization increased to $37,881 for the year ended December 31, 2018 as compared to $34,880 for the same period in 2017.

Selling and marketing expenses

The selling and marketing expenses was $3,101,264 for the year ended December 31, 2018, which was decreased as compared to $3,179,954 incurred in the same period in 2017. The decrease was mainly due to the decrease in promotion and commission expenses.

Finance cost

The Group incurred finance costs of $62,215 for the year ended December 31, 2018 as compared to $76,528 for the same period of 2017. The decrease was mainly due to the decrease in loan interest paid.

SUMMARY OF QUARTERLY AND ANNUAL RESULTS

All amounts are expressed in United States dollars. In addition, all amounts are in thousands except for per share amounts.

	For the Quarters Ended			
	12/31/2018 ($'000)	**9/30/2018** ($'000)	**6/30/2018** ($'000)	**3/31/2018** ($'000)
Revenue	2,232	1,519	5,361	2,751
Net (loss) income for the year	(1,353)	(417)	1,479	81
Net (loss) income per share	(0.03)	(0.00)	0.02	0.00
Total assets	7,788	10,426	11,905	9,352
Total liabilities	7,527	8,997	9,906	8,654

	For the Quarters Ended			
	12/31/2017 ($'000)	**9/30/2017** ($'000)	**6/30/2017** ($'000)	**3/31/2017** ($'000)
Revenue	2,111	1,538	5,389	2,787
Net income (loss) for the period	(496)	317	1,229	353
Net income (loss) per share	(0.01)	0.01	0.02	0.01
Total assets	9,102	9,938	11,229	7,580
Total liabilities	8,652	9,109	10,690	8,352

FINANCIAL POSITION, LIQUIDITY AND CAPITAL RESOURCES

Working capital decreased by $156,849 to an amount of $174,775 at December 31, 2018 from $331,624 at the beginning of the year, primarily as a result of the decrease in accounts and other receivables during the current period.

Cash provided by operating activities was $686,133 for the year ended December 31, 2018, compared to cash used in operating activities of $1,407,278 for the year ended December 31, 2017.

Cash used in investing activities was $12,113 for the year ended December 31, 2018, compared to $52,235 for the year ended December 31, 2017. The cash outflow for investing activities was related to acquisition of equipment for the respective periods.

Cash provided by financing activities was $25,796 for the year ended December 31, 2018, compared to $259,080 for the year ended December 31, 2017.

At December 31, 2018, accounts and other receivables decreased to $4,146,847 from $6,031,319 at December 31, 2017. The decrease was mainly due to the shorter collection period of outstanding receivables.

The Group has increased its types of services provided through its education service portal. The revenue of the Group is expected to increase through providing additional services to the customers. The Group also plans to have equity or debt financing to maintain the Group's capacity, meet planned growth and fund development activities.

Equipment

At December 31, 2018, the Group's net equipment cost was $86,823 as compared to $118,441 as at December 31, 2017. This decrease was mainly attributed to the amortization and depreciation of $37,881 for the current year.

Liabilities

The Group's total liabilities were $7,526,629 as at December 31, 2018, compared to $8,651,578 as at December 31, 2017, mainly due to the bank loan was fully repaid during the current year.

Shareholders' Equity

There was a deficiency of $443,117 as at December 31, 2018 as compared to $363,431 as at December 31, 2017, which included the net loss attributable to shareholders of $151,698 for the year ended December 31, 2018 as compared to net income of $1,357,757 attributable to shareholders for the same period in 2017.

Outstanding share data

The Group's common shares outstanding as at April 29, 2019 were 47,364,983.

On March 15, 2017, 1,000,000 stock options with an exercise price of $0.40 each were expired and unexercised.

On May 29, 2017, the Group granted 1,000,000 stock options with an exercise price of $0.14 each expiring on May 29, 2022.

At April 29, 2019, the Group has outstanding stock options of 3,700,000. Details are as follows:

Exercise Prices (CND)	Number	Expiry Date
$ 0.10	2,700,000	November 25, 2020
$ 0.14	1,000,000	May 29, 2022
	3,700,000	

As at April 29, 2019, there were no outstanding stock purchase warrants.

Dividend

The payment of dividends to shareholders will depend on a number of factors such as earnings, CER's financial requirements and other factors that the Board of Directors considers relevant in the circumstances. The Group currently does not have intention to pay dividends on the common shares. The Board of Directors will review this policy, from time to time, as circumstances change. To date, CER has not declared or paid any dividends on any of its shares.

OFF-BALANCE SHEET ARRANGEMENTS

The Group does not have any off-balance sheet arrangements.

TRANSACTIONS WITH RELATED PARTIES

All related party transactions are recorded in the normal course of operations on normal commercial terms and conditions and at market rates, which is the amount of consideration established and agreed to by the related parties.

Key management personnel and director transactions

Directors of the Group control approximately 13.7% percent of the voting shares of the Group as at December 31, 2018 and 2017.

A number of key management personnel, or their related parties, hold positions in other entities that result in them having control or significant influence over the financial or operating policies of those entities.

The aggregate value of transactions and outstanding balances relating to key management personnel and entities over which they have control or significant influence were as follows:

Director/Officer	Transaction	Year ended December 31, 2018	2017
C F Zhou (director and CEO)	Consulting fees (i)	$ 140,768	$ 140,457
C F Zhou (director and CEO)	Interest expense (ii)	18,834	18,793
Danny Hon (director and CFO)	Accounting fees (iii)	68,412	65,112
Danny Hon (director and CFO)	Interest expense (iv)	8,110	8,092
		$ 236,124	$ 232,454

Director/Officer	Outstanding balance	Year ended December 31, 2018	2017
C F Zhou (director and CEO)	Consulting fees payable (i)	$ 1,232,893	$ 1,208,549
C F Zhou (director and CEO)	Loan payable (ii)	119,264	129,693
C F Zhou (director and CEO)	Loan interest payable (ii)	107,359	97,294
Danny Hon (director and CFO)	Accounting fees payable (iii)	522,823	517,862
Danny Hon (director and CFO)	Loan payable (iv)	51,351	55,841
Danny Hon (director and CFO)	Loan interest payable (iv)	56,366	52,919
		$ 2,090,056	$ 2,062,158

(i) The consulting fees owing to C F Zhou as at December 31, 2018 is unsecured, due on demand with no interest.

(ii) The short-term loans were unsecured and due on demand with an annual interest rate of 15%. As at December 31, 2018, there was an interest payable balance of $107,359 (December 31, 2017: $97,294) owed to C F Zhou.

(iii) The Group engaged a Group, which is controlled by Danny Hon, to provide accounting services. The balance owing to this Group controlled by Danny Hon as at December 31, 2018 is unsecured, due on demand and bears no interest.

(iv) The short-term loans were unsecured and due on demand with an annual interest rate of 15%. As at December 31, 2018, there was an interest payable balance of $56,366 (December 31, 2017: $52,919) owed to Danny Hon.

AREAS OF ASSUMPTIONS AND JUDGEMENTS

(i) Expected credit loss

Trade and other receivables are assessed for impairment at each reporting date by applying the "expected credit loss" impairment model under IFRS 9 – Financial Instruments. Expected credit loss represents management's best estimate and assumptions based on actual credit loss experience and informed credit assessment, and also taking into consideration of forward-looking information. If actual credit losses differ from estimates, future earnings would be affected.

As at December 31, 2018, impairment allowance is $130,836 (December 31, 2017 - $145,019) based on management's assessment of credit history with the customers and current relationships with them.

(ii) Deferred taxes

The Group recognizes the deferred tax benefit related to deferred tax assets to the extent recovery is probable. Assessing the recoverability of deferred tax assets requires management to make significant estimates of future taxable profit. In addition, future changes in tax laws could limit the ability of the Group to obtain tax deductions in the future periods. To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Group to realize the net deferred tax assets recorded at the reporting date could be impacted.

(iii) Income Tax

Tax regulations are very complex and changing regularly. As a result, the Group is required to make judgments about the tax applications and probability of certain tax exposure. Also, all tax returns are subject to further government's reviews, with the potential reassessments. All those facts can impact income tax provisions and operation results. For the year ended December 31, 2017, the Group reassessed the tax provision and penalty accrued 10 years ago due to the uncertainty of deductibility of certain expenses. Based on the laws and regulations in China and management's best estimates, it is not probable that the deductibility of the expenses would be challenged by the tax authority in the future. Therefore, the tax provision of $635,088 and accrued penalty of $270,289 have been reversed during the year ended December 31, 2017.

(iv) Going concern

Management has applied judgments in the assessment of the Group's ability to continue as a going concern when preparing its consolidated financial statements for the years ended December 31, 2018 and 2017. Management prepares the financial statements on a going concern basis unless management either intends to liquidate the entity or to cease trading, or has no realistic alternative but to do so. In assessing whether the going concern assumption is appropriate, management takes into account all available information about the future, which is at least, but is not limited to, twelve months from the end of the reporting period. Management considered a wide range of factors relating to current and expected profitability, debt repayment schedules and potential sources of replacement financing. As a result of the assessment, management concluded there are significant doubt as to the ability of the Group to meet its obligations as they fall due and, accordingly, the ultimate appropriateness of the use of accounting principles applicable to a going concern.

RISK AND UNCERTAINTY FACTORS

History of losses and anticipate that we may continue for the foreseeable future

The Group has recognized a net loss attributable to shareholders of $151,698 (2017: net income of $1,357,757) for the year ended December 31, 2018 and has incurred a cumulative loss of $33,543,882 since inception. The Group's future business plan includes the further development and operation of CER's education service portal and soccer education program. The Group's ability to continue as a going concern is depending upon achieving acceptance by the users and profitable level of operations of the education service portal and on the ability to obtain necessary financing to fund our operations. The outcome of these matters cannot be predicted at this time.

Seasonality

Historically in its traditional distribution business, the operations of the business are highly seasonal. The Group is attempting to lessen the seasonality of the business by expanding its business into other related areas in the education sector through its internet education service portals.

Reliance on Government Relationships

The Group is relying upon continued good working relationships and acceptance from both the national and regional governments it works with. If the CERSP portal was no longer acceptable or it failed to meet acceptable government standards for the K-12 sector, it would seriously impact the continued successful deployment of the CERSP portal and education service portal.

Tax and Legal Systems in China

The Group, through its subsidiaries, conducts a significant amount of its business in China. China currently has a number of laws related to various taxes imposed by both federal and regional governmental authorities. Applicable taxes include value added tax, corporate income tax (profits tax), and payroll (social) taxes, together with others. Laws related to these taxes have not been in force for a significant period, in contrast to more developed market economies; therefore, implementing regulations are often unclear or nonexistent. Often, differing opinions regarding legal interpretation exist both among and within government ministries and organizations; thus, creating uncertainties and areas of conflict. Tax declarations, together with other legal compliance areas (as examples, customs and currency control matters) are subject to review and investigation by a number of authorities, which are enabled by law to impose extremely severe fines, penalties and interest charges. These facts create tax risks in China substantially more significant than typically found in countries with more developed tax systems.

Management believes that the Group is in substantial compliance with the tax laws affecting its operations; however, the risk remains that the relevant authorities could take different positions with regard to interpretive issues and the effect could be significant. The fact that a year has been reviewed does not close that year, or any tax declaration applicable to that year, from further review.

Competition

Foreign direct investment in China has increased rapidly and the investment environment has further improved to encourage foreign and local investors to invest in fields, such as education, high-tech, modern agriculture and infrastructure construction. A number of large companies are involved in the publishing and distribution of educational products in the mainstream areas of math, science and language arts. There is no guarantee that other competitors will not become involved in business similar to that of the Group.

Management

The Group currently has a small executive management group, which is sufficient for its present stage of development. Although the Group's development to date has largely depended and in the future will continue to depend upon the efforts of certain current executive management, the loss of a member of this group could have a material adverse effect on the Group.

Funds Remittance

Provided that conversion of Renminbi into foreign exchange and the remittance of foreign exchange are duly arranged in accordance with the relevant laws and regulations on foreign exchange, a Foreign Investment Enterprise ("FIE") is able to remit dividends and other payments from China.

According to the 1999 Circular on Relevant Questions Concerning the Remittance of Profits, Dividends and Bonuses out of China Through Designated Foreign Exchange Banks, effective from October 1, 1999, an FIE is permitted to remit profits, dividends and bonuses out of China in proportion to the amount of registered capital that has been paid up, notwithstanding that its registered capital has not been paid up pursuant to its constitutional documents.

Financial Instruments

The Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The Group's financial instruments consist of cash, trade and other receivables, due from related parties, long term other receivable, and trade and other payables.

The Group's financial instruments are exposed to the risks described below:

(a) Credit risk

Credit risk is the risk of an unexpected loss if a party to a financial instrument fails to meet its contractual obligations. The Group's credit risk is primarily attributable to cash and cash equivalents and accounts and other receivables. The Group has no significant concentration of credit risk arising from operations. Management assesses the credit risk concentration with respect to accounts and other receivables annually and adjusts them accordingly. The Group limits its exposure to credit risk by holding its cash in deposits with high credit quality Chinese and Canadian financial institutions.

(b) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. At December 31, 2018, the Group had a working capital of $174,775 (December 31, 2017: $331,624). The Group is focused on generating sales revenue and is actively pursuing additional sources of financing to ensure that it can meet its ongoing operating requirements and planned capital expenditures.

(c) Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, foreign exchange rates and equity prices.

(d) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. From time to time, the Group is exposed to short term interest rates through the interest earned on cash. The Group only has debt with fixed interest rates. The Group's current policy is to invest excess cash in short-term deposits with its banking institutions. The Group periodically monitors the investments it makes and is satisfied with the credit ratings of its banks.

(e) Foreign currency exchange rate risk

Foreign currency exchange rate risk is the risk that the fair value of financial instruments or future cash flows will fluctuate as a result of changes in foreign exchange rates.

The majority of the Group’s assets, liabilities, revenues and expenses are denominated in Chinese Renminbi (“RMB”), which was tied to the U.S. dollar and is now tied to a basket of currencies of China’s largest trading partners, is not a freely convertible currency. The appreciation of the RMB against the U.S. dollar would result in an increase in the assets, liabilities, revenues and expenses of the Group and a foreign currency gain included in comprehensive income. Conversely, the devaluation of the RMB against the US dollar would result in a decrease in the assets, liabilities, revenues and expenses of the Group and a foreign currency loss included in comprehensive income.

The Group's functional currency is the Canadian dollar and the functional currencies of its subsidiaries are RMB. The Group maintains Chinese RMB bank accounts in China to support monthly forecasted cash outflows. Management believes the foreign exchange risk derived from currency conversions is minimal and therefore does not hedge its foreign exchange risk.

Fluctuation in the value of Canadian dollar relative to US dollar has some impact on the Group’s head office financial results. However, such exchange rate fluctuations have not materially affected the overall financial earnings and results on a consolidated basis.

SIGNIFICANT ACCOUNTING POLICIES

The preparation of financial data is based on accounting principles and practices consistent with those used in the preparation of the audited consolidated financial statements as at December 31, 2018.

New standards and interpretations adopted during the year

The Group adopted the following new standards during the year:

IFRS 9 Financial instruments ("IFRS 9")

On January 1, 2018, the Group adopted IFRS 9, *Financial Instruments*, which introduces new classification and measurement models for financial assets, using a single approach to determine whether a financial asset is measured at amortized cost or fair value. To be classified and measured at amortized cost, assets must satisfy the business model test for managing the financial assets and have certain contractual cash flow characteristics. All other financial instrument assets are to be classified and measured at fair value. This standard allows an irrevocable election on initial recognition to present gains and losses on equity instruments (that are not held-for-trading) in other comprehensive income, with dividends as a return on these investments being recognized in profit or loss. In addition, those equity instruments measured at fair value through other comprehensive income would no longer have to apply any impairment requirements nor would there be any 'recycling' of gains or losses through profit or loss on disposal. The accounting for financial liabilities continues to be classified and measured in accordance with IAS 39, with one exception, being that the portion of a change of fair value relating to the entity's own credit risk is to be presented in other comprehensive income unless it would create an accounting mismatch.

The standard also amends the impairment model by introducing a new "expected credit loss" model for calculating impairment. It also includes a new general hedge accounting standard which aligns hedge accounting more closely with risk management. The adoption of this standard did not have material impact to the Group's consolidated financial statements. The Group's policies and procedures surrounding the identification of credit risk and the recognition of credit losses comply with the requirements of this standard.

As a result of the adoption of IFRS 9, the Group has changed its accounting policy with respect to financial instruments. Under IFRS 9, the Group's financial assets are classified for as follows when compared to the Group's previous policy in accordance with IAS 39.

	IAS 39	IFRS 9
Cash and cash equivalents	Fair value through profit and loss	Amortized cost
Accounts receivable and other receivable (excluding GST/VAT)	Loans and receivables	Amortized cost
Trade and other payables, due to related parties	Other financial liabilities	Amortized cost
Loans payable (including related parties loan) and bank loan	Other financial liabilities	Amortized cost

There were no adjustments to the carrying amounts of financial instruments as a result of the change in classification from IAS39 to IFRS 9.

IFRS 15 Revenue from Contracts with Customers ("IFRS 15")

IFRS 15 was issued to replace IAS 18 *Revenue* and IAS 11 *Construction* Contracts and related interpretation. IFRS 15 introduces a single contract-based five-step model that applies to contracts with customers and two approaches for the recognition of revenue: at a point in time or over time. The five steps are: identify the contract(s) with the customer, identify the performance obligations in the contract, determine the transaction price, allocate the transaction price, and recognize revenue when the performance obligation is satisfied. Revenue is recognized when a customer obtains control of a good or service and has the ability to direct the use and obtain the benefits from the good or service. IFRS 15 also requires enhanced disclosures about revenue to help investors better understand the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers and improve the comparability of revenue from contracts with customers.

The Group adopted IFRS 15 on the required effective date of January 1, 2018, using the modified retrospective approach. The Group has evaluated the impact of applying IFRS 15 by performing a comprehensive review of existing revenue contracts, control processes and revenue recognition methodology. For the Group's revenue earned from the sale of textbooks, the Group concluded there is no change in the timing of revenue recognized under the new standard, as the point of transfer of risk and reward for goods and transfer of control with the fulfillment of performance obligations occurs at the same time. For online training programs, the Group may defer and recognize the revenue over time as the performance obligation within the contracts are fulfilled. The Group concluded there is no change in the amount of revenue recognized as the Group recognizes revenue over time based on the project stage of completion.

The Group will continue to recognize revenue by applying the five-step model under IFRS 15. The Group continues to recognize revenue at a contract level as performance obligations are satisfied over time, using project stage of completion or as performance obligations are satisfied at a point in time as the control of services are transferred to the customer.

New standards and interpretations not yet adopted during the year

Standards issued but not yet effective up to the date of issuance of the Group's consolidated financial statements are listed below. This listing is of standards and interpretations issued, which the Group reasonably expects to be applicable at a future date. The Group intends to adopt those standards when they become effective. The Group does not expect the impact of such changes on the consolidated financial statements to be material.

IFRS 16 Leases ("IFRS 16")

In January 2016, the IASB issued IFRS 16, replacing IAS17, "Leases". IFRS 16 provides a single lessee accounting model and requires the lessee to recognize assets and liabilities for all leases on its balance sheet providing the reader with greater transparency of an entity's lease obligations. IFRS 16 is effective for annual periods beginning on or after January 1, 2019 with early adoption provided. The Group does not expect that the new standard will have a significant impact on its consolidated financial statements.

OUTLOOK

The Group's objective is to become the leading kindergarten to grade 12 education service platform, content provider and social networking system in China's education sector. The Group provides a range of services to government education authorities, schools, teachers, students and their parents.

As part of our four-step growth and revenue strategy, the Group has achieved the followings:

CER has developed digital textbooks and started to provide the digital textbooks to the students in China. This is a significant step for CER to combine the Group's internet portal with traditional textbooks, which also provides significant opportunities for CER's textbook business.

The Group has developed more than 2,000 online teacher training courses for the continuous education of teachers and also developed more than 100,000 K-12 online lesson plans and is continuing to develop new educational content and upgrade the technology and functions of its portal.

CER has launched mobile APP and integrated it into the WeChat platform for teacher training program. The APP allows users to participate teacher training program through using their smartphones, i.e. watch user friendly video contents, discuss and communicate with other teachers on the training topics in virtue classrooms, get experts help, read training calendar, complete homework of the training program, read newsletters from the training program, retrieve personal training status report, share photos with other teachers, have social networking with other teachers, etc.

On top of the mobile APP for teacher training program, CER is the education service provider in China that can provide a "total solution" to satisfy the requirements from the Ministry of Education of China ("MOE") to ensure that Chinese teachers can really use and apply their education technology skills in the classrooms after completion of the teacher training program. CER has developed a formative assessment program which integrates the functions of CER School Platform as part of the teacher training program. The formative assessment program emphasizes on practicing the skills of delivering education contents to and interacting with the students through information and communications technology ("ICT") in the classrooms.

CER signed a Memorandum of Understanding with SOXNA S.L. to develop soccer education program for China K-12 teachers and students. SOXNA S.L. is a Spanish company that has cooperated with some of the most famous international soccer clubs such as Real Madrid C.F., Manchester United, Manchester City, Oporto.

CER also signed a three-party agreement with Encyclopedia of China Publishing House and SOXNA S.L. to develop soccer education textbooks for China K-12 teachers and students. Encyclopedia of China Publishing House is one of the major national publishers in China with national distribution networks and publishes various classes of professional, educational and general books. It also engages in the publishing of cross-media, multimedia and digital books. SOXNA S.L. has been running several significant sport programs, such as The Evergrande Real Madrid Foundation Football School, which is the largest soccer school in the world. SOXNA S.L. has created a series of unique teaching methodology through collecting and analyzing the most successful experiences of the soccer specialists and authoritative sources from Europe.

Partnership with Encyclopedia of China Publishing House and SOXNA S.L. results in a premier team creating brand new soccer textbooks with the best content and leading edge online training platform for K to 12 students and teachers.

Soccer education has emerged as a new horizon in China education sector and is rapidly spreading throughout China. Soccer game is very popular in China and the Chinese central government has announced the China School Soccer Master Plan in 2015 and declared soccer as a national priority and harbors an ambition to see the country host and win the World Cup. It is the first time ever in China that it introduces soccer textbook to China K to 12 school system as mandatory courses. As a result, Chinese students urgently need leading edge soccer education materials from the latest international soccer industry.

CER, together with its partners, has completed the most comprehensive high-quality soccer textbooks with online/offline solutions for soccer education program. The soccer textbooks include thirteen student soccer textbooks (one book per grade) and four teacher's books for teaching the student soccer textbooks. The soccer textbooks also have soccer training video contents for students and teachers.

The online training platform of soccer education provides a vertical blended learning, teaching, research and management system for "student-teacher-school community"; highlights the central role of personal studio, provides various forms of curriculum resources and interactive learning tools. Users can choose courses and services, combine district, school, class and individual as a whole group for different levels of learning, teaching and research activities. Users can scan the QR code on the soccer textbooks to enter the learning & training platform via their mobile phones.

Work with the sports companies of Spain and U.K., CER can arrange registered UEFA soccer coaches to go to China for face-to-face tutoring and teaching on soccer training activities to Chinese students and local coaches, or arrange Chinese students to go to overseas for soccer summer camp programs. These activities will be available for different ages of students.

Chinese central government has announced the development plan of China sports industry to achieve $800 billion or more by 2025, and the biggest segment is soccer. Management believes that CER will benefit from the China soccer market through providing various types of soccer education programs.

CER has also signed a Memorandum of Understanding (MOU) with World Book, Inc. The two parties are discussing cooperation opportunities in certain areas including: partnering together to create custom contents around CER’s programs such as soccer and K to 12 education resources; distribution of World Book’s books and digital products in English to schools and libraries in China; licensing and translating into Chinese World Book’s titles and selling the books in China; book club with the direct to consumer model, etc. World Book can also work with CER for the education programs of NBA, FIFA, NHL, NASA, STEM and provide content, books, pedagogical support.

World Book, Inc. is a part of Berkshire Hathaway and the publisher of the famous World Book Encyclopedia. It produces original non-fiction reference contents for children and young adults and has great STEM and Social Studies related contents. World Book can adopt existing programs to the needs of CER’s clients and China market

Through our comprehensive high-quality textbooks, video contents, training programs, on-line platform and smart phone technology, CER will out-perform our competitors with our total solutions to both the students and teachers in soccer learning and training in China.

We are excited of the great opportunity to integrate the functions of our online teacher training platform and school platform, and provide a unique blended online/offline contents and services to teachers and students for soccer education program. We expect it will generate more revenue to CER.