



Company Report: Koolearn (01797 HK)

公司报告: 新东方在线 (01797 HK)

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Constantly Innovating; Leading Position in the Industry; Initiate with "Buy"

持续创新, 处于行业领先地位, 首予“买入”评级

- **The market size of China's online education is estimated to be RMB400.4 bn in 2020, up 24.1% YoY, according to a report by iResearch.** China's K-12 online education users is projected to grow 139.0% YoY to 63.9 million in 2020, with a 35.0% penetration rate of K-12 online education, according to a report by the CAS Key Laboratory of Big Data Mining and Knowledge Management. It is the future development trend for online education institutions to continue to capitalize on the K-12 sinking market in low-tier cities due to its high growth rate and low penetration rate.
- **We forecast the net profit attributable to shareholders of Koolearn Technology Holding Limited ("Koolearn" or the "Company") to be -RMB476.0 mn/ -RMB276.2 mn/ RMB188.7 mn in FY2021-FY2023, respectively.** The continued loss in shareholders' profit is mainly due to increasing teaching staff, course research costs and selling and marketing expense for the expansion of K-12 business. The revenues from college education business and institutional customers business maintained steady growth with high gross margin; K-12 education business showed high-speed expansion, and the pre-school education business has started to contribute stable revenue growth after business optimization. As the current main development strategic direction, we expect that revenue from K-12 business will account for over 50% of total revenue by the end of FY2021 and the Company will start to generate positive profit in FY2023.
- **We initiate Koolearn with a Target Price of HK\$42.83 and a rating of "Buy".** Our target price represents to 17.0x/ 12.7x/ 9.4x FY21-FY23 PSR, respectively.
- **据艾瑞咨询的报告, 2020年中国在线教育市场规模约人民币4,004亿元, 同比增长24.1%。** 根据中国科学院大数据挖掘与知识管理重点实验室的报告, 到2020年, 中国K-12在线教育用户预计将达6,390万, 同比增长139.0%, K-12在线教育渗透率将达到35.0%。由于其高增长率和低渗透率, 继续开发K-12在低线城市的下沉市场成为线上教育机构的未来发展趋势。
- **我们预测新东方在线科技控股有限公司(“新东方在线”或“公司”)2021-2023财年的股东净利润分别为人民币-476.0百万元、-276.2百万元和188.7百万元。** 股东利润的持续亏损主要是由于K-12业务的拓展而增加的教学人员、课程研究费用以及销售和营销费用。大学教育业务和机构客户业务收入维持稳定增长以及高毛利率, K-12教育业务呈现高速拓展, 学前教育业务在业务优化后开始贡献稳定的收入增长。作为目前主要的发展战略方向, 我们预计到2021财年末K-12业务的收入将占总收入的50%以上, 并且到2023财年公司将开始产生正利润。
- **我们首次覆盖新东方在线并给予42.83港元的目标价以及“买入”的投资评级。** 目标价对应17.0倍、12.7倍和9.4倍2021-2023财年市销率。

Rating:

Buy
Initial

评级:

买入 (首次覆盖)

6-18m TP 目标价:

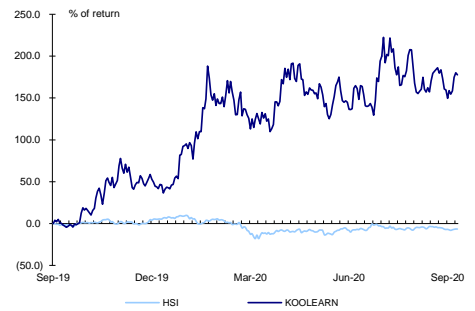
HK\$42.83

Share price 股价:

HK\$35.450

Stock performance

股价表现



Change in Share Price	1 M	3 M	1 Y
股价变动	1 个月	3 个月	1 年
Abs. % 绝对变动 %	(0.4)	3.4	180.9
Rel. % to HS Index 相对恒指变动 %	3.7	4.0	190.0
Avg. Share price(HK\$) 平均股价 (港元)	34.9	35.3	28.0

Source: Bloomberg, Guotai Junan International.

Year End	Turnover	Net Profit	EPS	EPS	PER	BPS	PBR	DPS	Yield	ROE
年结	收入	股东净利	每股净利	每股净利变动	市盈率	每股净资产	市净率	每股股息	股息率	净资产收益率
05/31	(RMB m)	(RMB m)	(RMB)	(Δ %)	(x)	(RMB)	(x)	(RMB)	(%)	(%)
FY19A	919	(40)	(0.060)	(160.0)	(528.2)	3.983	8.0	0	0	(2.3)
FY20A	1,081	(742)	(0.791)	1,218.7	(39.5)	1.987	15.7	0	0	(33.2)
FY21F	2,087	(476)	(0.506)	(36.0)	(61.7)	1.476	21.2	0	0	(29.3)
FY22F	2,790	(276)	(0.294)	(42.0)	(106.3)	1.182	26.4	0	0	(22.1)
FY23F	3,764	189	0.201	n.a.	155.6	1.383	22.6	0	0	15.6
Shares in issue (m) 总股数 (m)				940.0	Major shareholder 大股东			New Oriental 54.7%		
Market cap. (HK\$ m) 市值 (HK\$ m)				33,321.8	Free float (%) 自由流通比率 (%)			30.4%		
3 month average vol. 3 个月平均成交股数 ('000)				6,688.4	FY21 Net gearing (%) FY21 净负债/股东资金 (%)			Net cash		
52 Weeks high/low (HK\$) 52 周高/低 (HK\$)				43.450 / 12.100	FY21 Est. NAV (HK\$) FY21 每股估值 (港元)			47.9		

Source: the Company, Guotai Junan International.

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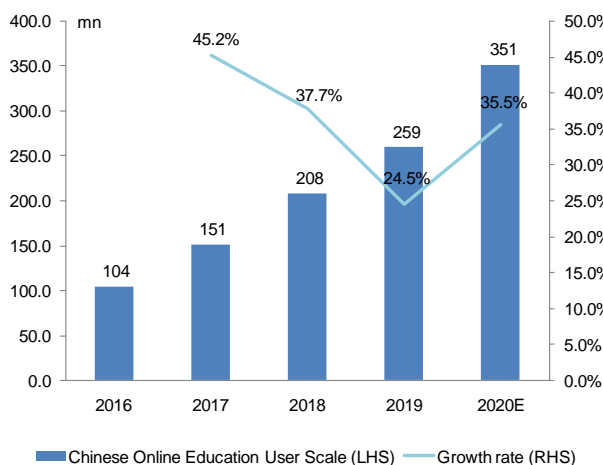
Industry Analysis

China's Online Education Industry and the Impact from the COVID-19 Outbreak

With the rapid development of information technology such as the Internet of Things, big data, cloud computing and artificial intelligence, as well as the vigorous implementation of education informatization by the government, the scale of online education users in China is in a stage of rapid growth. Due to the impact from the COVID-19 pandemic in 2020, demand for online education has intensified, including attempts from traditional schools and universities to offer online courses, to ensure the continuation of educational study. According to an iiMedia Research report, the number of online education users in China will reach 351 million in 2020, with a growth rate of 35.5% YoY and a CAGR of 35.5% in 2016-2019.

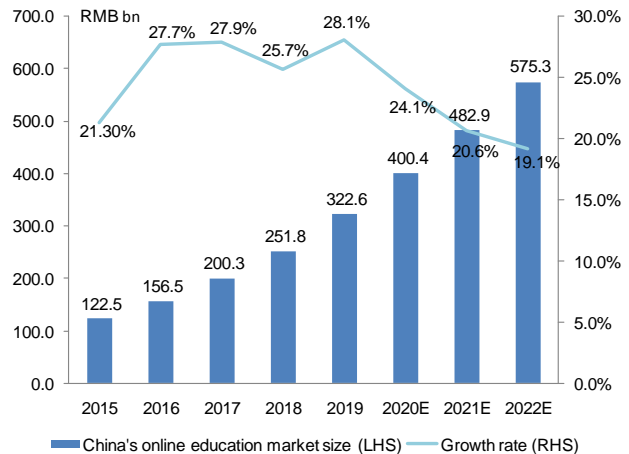
In the short term, due to the COVID-19 outbreak, the penetration rate of online education services will be greatly increased, and the online education industry will save hundreds of billions in customer acquisition costs and allow for large amounts of user data to be collected at low cost. According to a report by CAS Key Laboratory of Big Data Mining and Knowledge Management, the penetration rate of K-12 online education services is expected to reach its peak in March 2020, then stay at 35% for the whole year of 2020, and it is predicted to exceed 55% by 2022. However, in the medium and long term, the impact from the COVID-19 outbreak will not significantly expand the market size of online education, because most of the students receiving online courses are in public schools and free courses offered by internet companies receive low satisfaction levels for teaching standard and low willingness of students to pay. According to the report of IYIOU, the conversion rate of free courses to full-price courses is less than 5%. Although the COVID-19 outbreak has had a certain amount of positive impact on the online K-12 education market, the growth rate of the online market for higher education and vocational education has declined due to the postponement and cancellation of many examinations and obstacles to studying abroad, which may lead to a slowdown in the overall growth rate of the online education market in 2020. Although the COVID-19 pandemic has forced part of the market to migrate to online learning in the short term, it is expected that the majority of the market will return to offline learning. Taking this into account, according to an iResearch report, the market size of China's online education market would be about RMB400.4 bn in 2020, with YoY growth of 24.1%, which is lower than that of 2019. It is expected that the online education market will grow at a CAGR of 21.3% to RMB575.3 bn from 2019 to 2022.

Figure 1: Chinese Online Education User Scale and Forecasts in 2016-2020



Source: iiMedia, Guotai Junan International.

Figure 2: China's Online Education Market Size and Forecasts in 2015-2022



Source: iResearch, Guotai Junan International.

According to an iResearch report, higher education was the major component of online education in the first quarter of 2020, accounting for 42.0%. The proportion of K-12 online education users increased to 31.4%, mainly due to the COVID-19 outbreak in early 2020 leading to higher acceptance of online education by K-12 students and their parents. Vacation education and others accounted for 21.2% and 5.4%, respectively.

China's K-12 Online Education Industry

It is the future development trend for online education institutions to continue to exploit the sinking market of K-12 education. K-12 online education has become one of the most important branches in the online education industry due to the long age range of its users. K-12 online education is aimed at children and teenagers from kindergarten to high school, covering preschool early education, after-class guidance for primary and secondary schools, language learning, interest education, among other aspects. High-quality education resources are scarce in low-tier cities and rural areas, thus there is more potential for market development. Online education institutions will further expand their market share in low-tier cities by promoting the sharing of high-quality education resources. According to a report by CAS Key Laboratory of Big Data Mining and Knowledge Management, China's K-12 online education users is projected to grow 139.0% YoY to 63.9 million in 2020, with a penetration rate of 35.0% for K-12 online education. We think that the increase in national disposable income and parents' attention to students' after-school tutoring activities are the main intrinsic driving forces for the improvement in penetration rate. According to a report by IYIOU, the general improvement in parents' education level is a key factor in improving parents' attention to K-12 education, and the K-12 online education industry is expected to maintain its momentum.

Figure 3: China's K-12 Student and K-12 Online Education User Scale and Forecasts in 2016-2020

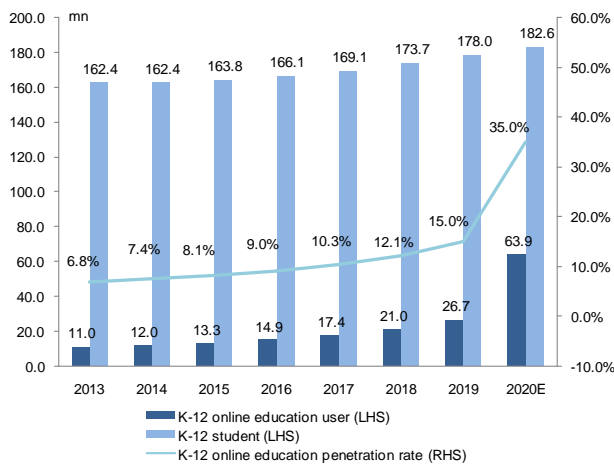
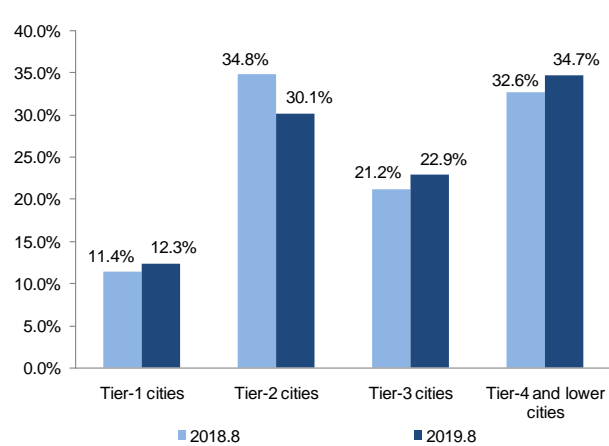


Figure 4: China's Online Education Users Distribution by Level of Cities in August 2018 and August 2019



Source: CAS Key Laboratory of Big Data Mining and Knowledge Management, National Bureau of Statistics, Guotai Junan International.

Source: MobTech, Guotai Junan International.

The K-12 online education market in tier-1 and tier-2 cities is relatively well developed, while the penetration rate and participation rate of K-12 online education in low-tier cities still needs to be improved. According to MobTech, the proportion of online education users in tier-3 and low-tier cities increased from 53.8% in August 2018 to 57.6% in August 2019, which indicates that people in low-tier cities are beginning to develop the habit of online learning. To sum up, there is still huge room to develop in the sinking market considering the low participation rate, low penetration rate and the upward trend in low-tier cities.

Competitive Landscape

At present, high customer acquisition cost is a challenge that all online education institutions are facing, and successful cost control, especially in selling and marketing expense, is the key to profit of online education. According to QuestMobile's "2019 Semiannual Report on Online Education", in 1Q19, the average customer acquisition cost of TAL Education Group and New Oriental Group in the online plus offline mode was RMB249 and RMB202, respectively. However, Sunlands and 51Talk, as pure online education institutions, recorded average customer acquisition cost of RMB4,970 and RMB821, respectively. According to iResearch's online advertising index, from January to June 2020, the online advertising index of the top ten corporate advertisers in education reached 433.1, up 146.5% YoY. Comparing the selling expense to revenue ratio of Koolearn in 2019 with that of seven of China's largest online education institutions listed in the US, the 80.7% selling expense to revenue ratio of Koolearn, which increased 32.4% YoY, is the third largest of the industry. In terms of cost control, Koolearn placed at the mid-level in 2019, with 45.6% gross margin, as it has been investing a lot in resources for curriculum development and K-12 business development over the past two years, especially during the COVID-19 pandemic.

Figure 5: Selling Expenses to Revenue Ratio of Eight Online Education Institutions

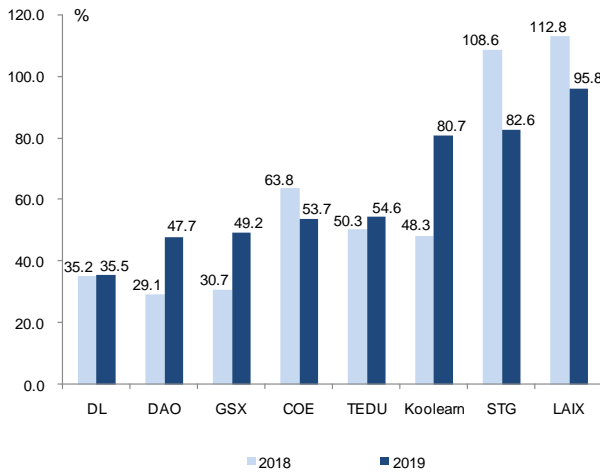
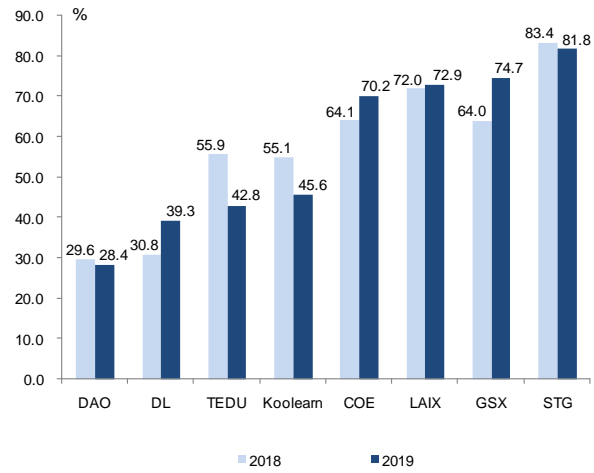


Figure 6: Gross Margin of Eight Online Education Institutions



Source: the Companies, Guotai Junan International.

Source: the Companies, Guotai Junan International.

Notes:

*Represents the figures of 2018 and 2019, except for Koolearn.
 Figures of Koolearn are based on results for the year ended 31 May in 2019 and 2020.
 DL stands for China Distance Education Holdings Ltd.
 DAO stands for Youdao, Inc.
 GSX stands for GSX Techedu, Inc.
 COE stands for China Online Education Group. Its main online education platform brand is 51Talk.
 TEDU stands for Tarena International, Inc.
 STG stands for Sunlands Technology Group.
 LAIX stands for LAIX, Inc.

Regulation Relating to Online After-School Tutoring

In terms of policies relating to online after-school tutoring, the past two years have seen strong supervision and standardization with K-12 education, as well as strong incentive and support for online education. Generally speaking, online after-school tutoring policies are divided into normative policies and encouraging policies. Normative policies play the most important role in the operation of online education institutions. Normative policies can be divided into five major directions, including tutoring qualifications, charging mechanism, course form and content, filing and supervision and information security. "The Implementation Opinions on Supervising Online After-school Tutoring" issued in July 2019 (hereinafter referred to as the "Implementation Opinions") is the most important policy to regulate online education, and also the first implementation opinion on online after-school tutoring issued at the national level.

The Implementation Opinions has had a comprehensive impact on the operation of K-12 online education institutions.

In terms of tutoring qualifications, the Implementation Opinions requires online after-school tutoring institutions not to employ in-service teachers of primary and secondary schools for tutoring, and at the same time requires teachers to have teacher qualifications. In terms of curriculum content, the Implementation Opinions requires that subject courses should not exceed the scope of children's grades. In terms of the form of the course, the Implementation Opinion requires that each class shall not exceed 40 minutes, and the course interval shall not be less than 10 minutes. The end time of the live tutoring activities for students in compulsory education shall not be later than 21:00. In terms of the charging mechanism, it is clearly pointed out in the Implementation Opinions that online tutoring institutions shall not charge tuition fees for more than 60 hours or for 3-month courses, and the charging items, standards and refund methods shall be marked prominently on the training platform. We believe that against the background of strict supervision and strong compliance, leading companies in the K-12 online tutoring market will have the opportunity to further expand market share. With regards to standardized operation, leading companies have a more mature internal management system and teacher training process, and it is easier to meet the requirements on tutoring qualifications and course form, while expanding. In terms of working capital, the limitation of advance tuition fees puts forward high requirements on the capital strength and operation ability of training institutions. Small and medium-sized institutions are much less able to withstand pressure from working capital than leading companies, thus improving the competitive advantage for leading companies instead.

Company Analysis

Company Profile

Koolearn is a leading online provider of extracurricular education services in China with a comprehensive portfolio of well-recognized brands known for its high-quality courses and content, with core expertise in online after-school tutoring and test preparation. Koolearn is striving to become a lifelong learning partner, empowering students to achieve their full potential. Koolearn provides courses and products through different online platforms and mobile applications in multiple formats across three core segments, namely college education, K-12 education and pre-school education segments.

Table-1: Key Milestones of Koolearn

Year	Event
2005	<ul style="list-style-type: none"> Koolearn established its business through now onshore operating entity, Beijing Xuncheng. Koolearn launched its first online education platform Koolearn.
2006	<ul style="list-style-type: none"> New Oriental (including Beijing Xuncheng) was listed on the NYSE under the symbol "EDU".
2007	<ul style="list-style-type: none"> Koolearn gained its first institutional customer.
2012	<ul style="list-style-type: none"> Koolearn launched its first English-learning mobile app Donut.
2014	<ul style="list-style-type: none"> Koolearn launched its self-adaptive learning system Zhixin.
2016	<ul style="list-style-type: none"> Linzi Tencent invested in Koolearn.
2017	<ul style="list-style-type: none"> Koolearn launched its location-based live interactive tutorial service for K-12 students DFUB.
2018	<ul style="list-style-type: none"> Koolearn was incorporated as an exempted company with limited liability in the Cayman Islands. Dragon Cloud and China City Capital, Koolearn's series B Pre-IPO Investors, invested in Koolearn. Mr. Yu, New Oriental's founder, Koolearn's director and chairman of the Board, through Tigerstep, invested in Koolearn by subscribing its series C preferred shares.
2019	<ul style="list-style-type: none"> Koolearn was listed on the HKEX under the symbol "Koolearn" and stock code "1797".

Source: the Company, Guotai Junan International.

The controlling shareholder of Koolearn is New Oriental, holding 54.71% share. The second largest shareholder is Image Frame Investment (HK) Limited, a subsidiary of Tencent Holdings, with a 9.89% stake. Koolearn cooperates with Tencent in technology and education as Tencent provides services to Koolearn in communication and cloud technology, and the two companies also plan to cooperate in areas such as education resource sharing and data analysis. The two largest shareholders together hold 64.6% of Koolearn's shares. Yu Minhong, Director and Chairman of the Board, holds a combination of 3.47% shares through the Share Option Schemes and Tigerstep Trust. Mr Yu also has 12.8% controlling shareholder interest in New Oriental.

Business Overview

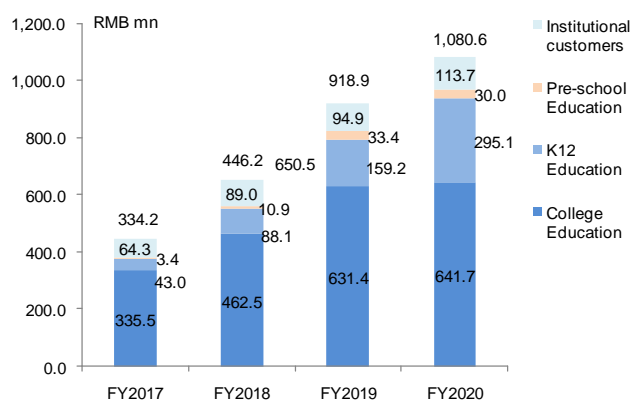
Koolearn's courses in the college and K-12 education segments are extracurricular in nature and do not count towards college or secondary school diploma requirements. This combination enables Koolearn to meet every student's lifelong education needs, and it utilizes specifically-designed course formats and business strategies to effectively target each student segment.

Table-2: Curriculums and Platforms Overview of Koolearn

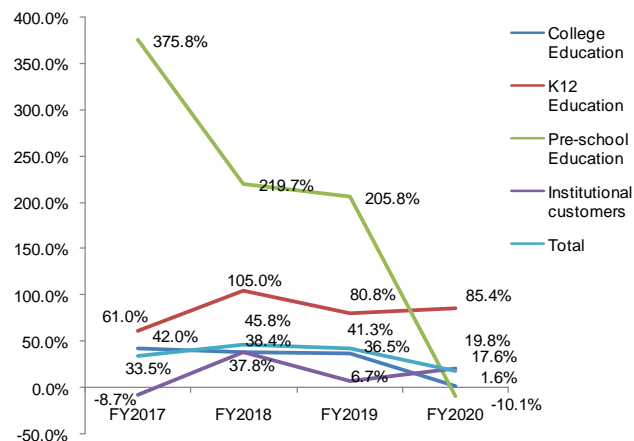
Segment	Course Content	Platform	Teaching Mode
College Education			
College test preparation	National graduate school entrance exams and CET 4/6	Koolearn	Live, pre-recorded, and a combination of both; 1-on-1 tutoring and unlimited homework correction for an additional fee
Overseas test preparation	TOEFL, IELTS, SAT, ACT, GRE and GMAT	Koolearn	Live, pre-recorded and a combination of both
English learning and others	New Concept English courses, 1-on-1 speaking practise sessions with foreign teachers, BEC courses, and review course in national professional qualification exams	Koolearn and Koo	Live and pre-recorded course formats
K12 Education			
Koolearn K-12 courses	All major subjects from primary to secondary school	Koolearn	"Dual-teacher model" live classes typically consist of 20 to 30 students
DFUB courses	All major subjects from primary to secondary school	DFUB	Live classes with a maximum of 25 students through web cameras, microphones, headphones and e-writing pads
SPOC courses	All major subjects from seventh grade to the twelfth grade	Koolearn	Pre-recorded video courses as supplementary study resources for New Oriental's offline courses
Pre-school Education			
	English-learning materials developed and licenced by Cambridge University	Koolearn and Donut	Small class (usually 50 minutes per class, 4 people on one practice class), subject class

Source: the Company, Guotai Junan International.

The revenues from college education business and institutional customers business maintained steady growth with high gross margin, K-12 education business showed high-speed expansion, and the pre-school education business has started to contribute stable revenue growth after business optimization. In FY2020, Koolearn's operating revenue was RMB1,080.6 million, up 17.6% YoY. Of which, revenue from the college education business increased by 1.6% YoY to RMB641.7 million, accounting for 59.4% of operating revenue as the main contribution to the Company. K-12 education is Koolearn's current main focus for expansion with revenue of RMB295.1 mn, up 85.4% YoY, and its percentage of operating revenue increased from 17.3% in FY2019 to 27.3% in FY2020. We expect the proportion of K-12 segment to continue to grow at a high rate in the future and revenue from the K-12 will account for over 50% of total revenue by the end of FY2021. The pre-school education business in FY2020 recorded revenue of RMB30.0 million, down 10.1% YoY, accounting for 2.8% of operating revenue. The pre-school segment's operational focus has been changed to the Donut English-learning APP and the gross margin improved from -0.9% in FY2019 to 28.3% in FY2020 after optimization of business structure. The institutional customers business recorded revenue of RMB113.7 million, accounting for 10.5% of operating revenue, with a gross margin of 82.4%.

Figure 7: Koolearn's Revenue Breakdown by Segment


Source: the Company, Guotai Junan International.

Figure 8: YoY Growth of Koolearn's Revenue by Segment


Source: the Company, Guotai Junan International.

College Education

Koolearn's college education segment primarily includes college test preparation, overseas test preparation, and English language learning. Koolearn's courses target college students and working professionals preparing for standardised tests or seeking to improve their English language proficiency. These students usually have specific learning objectives, and courses in this segment are presented in a combination of live streaming and pre-recorded formats to maximise the efficient delivery of its content. The services in the college segment were launched in 2005 and are provided through Koolearn and Koo platforms.

College Tests Preparation

College test preparation courses under Koolearn primarily cover national graduate school entrance exams and CET 4/6. The class formats of these courses include live streams, pre-recorded classes, and a combination of both. The graduate school entrance exam preparation courses cover all the public subjects and the vast majority of specialised subjects. The CET 4/6 preparation courses are divided into three categories: (1) entry courses with a focus on study planning, (2) subject-specific courses, and (3) full-length courses covering the full CET 4/6 preparation syllabus. To maximise learning results, Koolearn provides its students with a range of supporting materials and services, including lecture notes, homework correction, online study groups, online mock exams, online Q&As, and a dedicated mobile app specifically designed for CET 4/6 study. Students may also purchase premium services such as personalized study planning, 1-on-1 tutoring and unlimited homework correction for an additional fee.

Overseas Tests Preparation

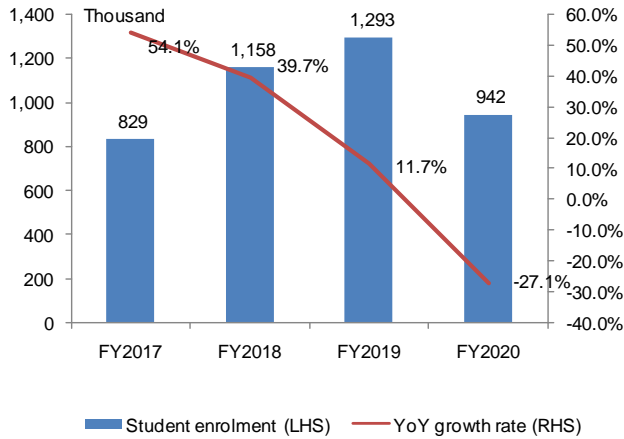
Koolearn offers online test preparation courses under Koolearn for major overseas standardised tests, mainly TOEFL, IELTS, SAT, ACT, GRE and GMAT. The class formats of these courses include live streams, pre-recorded classes, and a combination of both. The TOEFL and IELTS courses feature Koolearn's proprietary "Zhixin" self-adaptive learning system. Through sophisticated algorithmic and predictive analysis, Zhixin collects learning behaviour and results data from its students and assesses their individual study progress to provide personalized course content based on the students' knowledge deficiencies, which enables students to achieve better learning results.

English Learning and Others

The English learning courses under Koolearn and Koo help build general proficiency in speaking, listening, reading and writing, with an emphasis on developing English communication skills. The offering mainly includes New Concept English courses, 1-on-1 speaking practice sessions with foreign teachers, and BEC courses. Typically, the English learning courses are delivered in live and pre-recorded course formats. A variety of professional qualifications and other foreign language courses are also offered. Review courses are provided to students who participate in national professional qualification exams for physician designations on Koolearn, and fund management, securities and mid-level economist designations on Zhishang. The foreign language courses on Koolearn include courses for Japanese, Korean, German, French and Spanish languages.

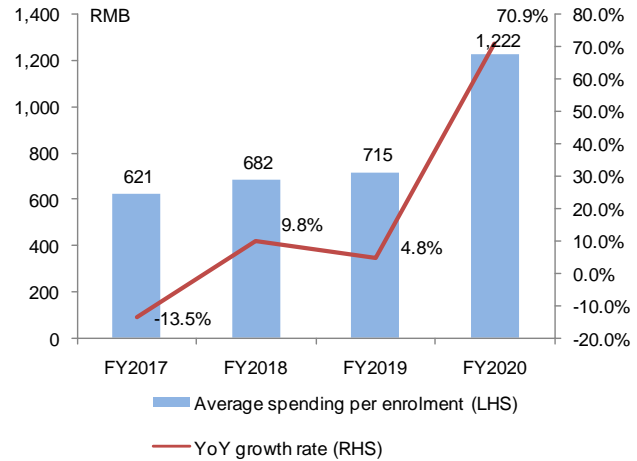
In FY2020, student enrolments in college education business was 942,000, down 27.1% YoY, and the average spending per enrolment in this segment was RMB1,222, up 70.9% YoY. Student enrolments went down mainly due to a significant decrease in the number of students in English language learning courses due to the optimization of product lines and delay or suspension of college and overseas exams due to the COVID-19 pandemic in the second half of FY2020. Although overall student enrolment had fallen, average spending per enrolment rose sharply due to product structure improvement by concentrating on higher-priced courses. We think that Koolearn's strengths and excellent tutoring quality in college education still leaves much room for price increases. We expect the higher prices are the main driver of future earnings in this segment.

Figure 9: Koolearn's Student Enrolment in College Education



Source: the Company, Guotai Junan International.

Figure 10: Koolearn's Average Spending per Enrolment in College Education



Source: the Company, Guotai Junan International.

K-12 Education

K-12 education services comprise of after-school tutoring courses which cover the majority of standard school subjects from primary to high school in China, and Koolearn offers preparation courses designed for standardized college and high school entrance exams. Leveraging the Company's expertise in K-12, in 2017, it launched its innovative DFUB courses, a location-based live interactive tutoring service targeting students in lower-tier cities where offline infrastructure may not be as convenient and there is growing demand for an effective online platform accessible anytime, anywhere. The comprehensive course offerings in the K-12 segment substantially covers all the subjects a K-12 student will take in China, and mainly consist of courses on Koolearn K-12 courses, DFUB location-based courses and SPOC courses.

Koolearn K-12 Courses

A vast selection of online after-school courses targeting primary and secondary school students is provided on this platform, covering all major subjects including Chinese, mathematics, English, physics, chemistry, and others. For secondary school students, Koolearn also offers study and review courses designed for high school and national college entrance exams. The K-12 education courses offered on Koolearn are organised and specifically designed according to an academic school year schedule in order for students to receive tutoring most relevant to their study progress. The vast majority of Koolearn's K-12 education courses adopt a "dual-teacher model" where the teacher delivers the courses online in a live format, while a designated tutor answers students' questions during and after class, and provides classroom support through pre-class communication, distribution of class materials and grading of assignments. Classes typically consist of 20 to 30 students, which is a size comparable to traditional offline tutoring classes, to facilitate sufficient in-class interactions and maximize learning efficiency.

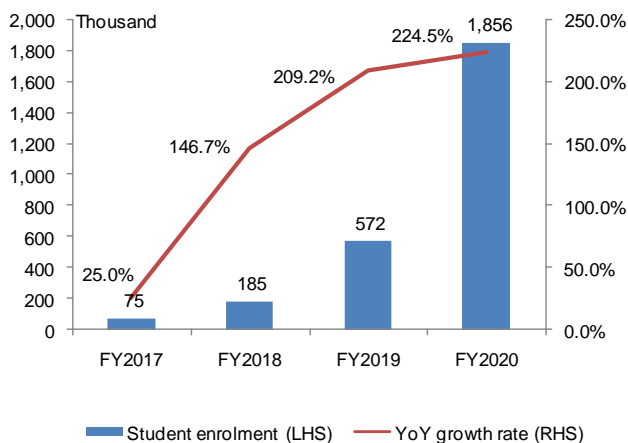
DFUB Courses

Launched in March 2017, DFUB location-based live interactive after-school tutoring courses target primary and secondary students in lower-tier cities and regions with limited education resources, such as Langfang, Zibo and Jixing. The courses are highly localized and designed to closely follow materials used by local schools, covering the most frequently tested areas in exams to improve student's exam performance. Each class consists of a maximum of 25 students enrolled from the same region, and is designed to foster close student interaction through web cameras, microphones, headphones and e-writing pads. DFUB courses are focused on delivering first-class education resources. As such, teachers of DFUB are generally graduates of leading universities in China and most have significant offline teaching experience. Koolearn has established experience centers in each city it has entered, where it showcases DFUB courses to students and parents who can experience course demos in person and communicate face-to-face with its on-site student recruiters. Each experience centre is staffed with three to four employees to communicate with local schools, facilitate content development, carry out promotions, address questions related to its courses and facilitate trial experiences in its courses. As of 31 May 2020, Koolearn established DFUB experience centers in 172 cities across 24 provinces in China.

SPOC Courses

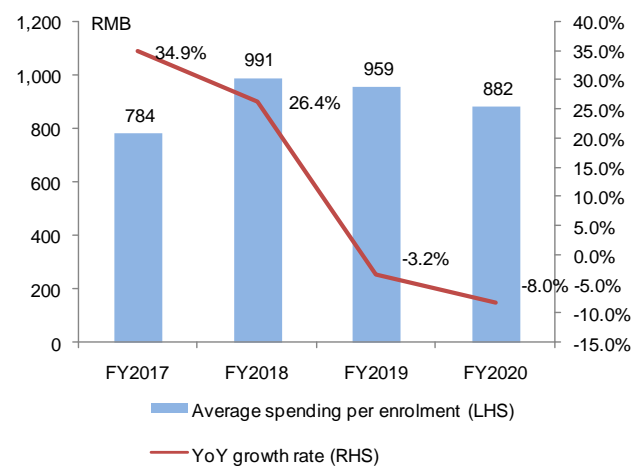
Launched in January 2017, SPOC courses are pre-recorded video courses designed to provide supplementary study resources to students who wish to continue their studies online after their completion of New Oriental's offline courses. Koolearn engages New Oriental's teachers to design and record SPOC courses supported by its technology and operation, and it enters into service contracts with the teachers and pays them commission fees considering the market rates and the amount of work. The SPOC courses cover all major subjects from seventh grade to the twelfth grade, including Chinese, mathematics, English, physics, biology, chemistry, history, geography, and others. Each SPOC course comprises of a series of 20-30 minute videos which condense key knowledge points in a given subject. Students can watch videos on PC or mobile apps during their spare time after class.

Figure 11: Koolearn's Student Enrolment in K-12 Education



Source: the Company, Guotai Junan International.

Figure 12: Koolearn's Average Spending per Enrolment in K-12 Education



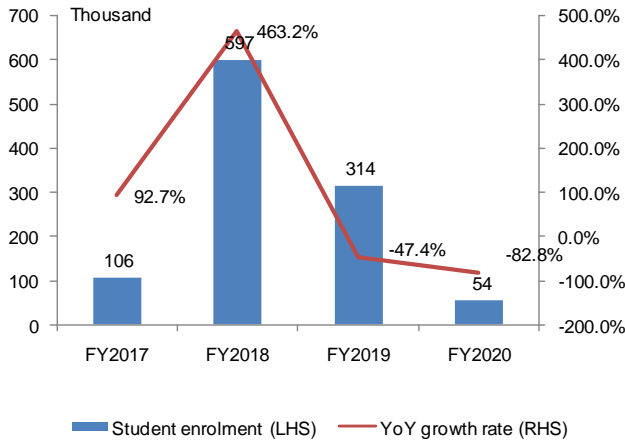
Source: the Company, Guotai Junan International.

As the current main development strategic direction, K-12 business will keep expanding at a high speed. Due to the vigorous expansion of the K-12 segment, specifically in DFUB, and the impact from the COVID-19 pandemic, the K-12 segment recorded 224.5% YoY growth in student enrolment to reach 1,856,000 in FY2020. More specifically, student enrolments for Koolearn K-12 courses recorded YoY growth of 269.4%, and student enrolment for DFUB courses grew 184.2% YoY in FY2020. We believe that the execution of expansion strategies will continue to rapidly increase enrolment in Koolearn's K-12 segment. As the Company has settled in 65 new cities within six months, we expect that Koolearn's K-12 business will maintain high-speed growth in the next few years. However, average spending per enrolment dropped 8.0% YoY in FY2020 because of intensive competition in the market. We expect that average spending per enrolment will increase slightly in FY2021 and gradually improve with the maturity of the business.

Pre-School Education

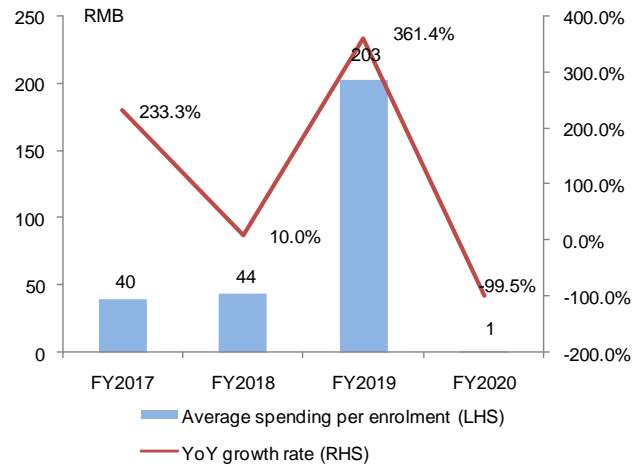
The pre-school education segment offers child-friendly online educational content delivered through Donut English learning and child education apps and Donut live online English classroom courses. Designed for children between the ages of three and seven, the Donut app series includes iOS/Android based English-learning and children education apps in content designed in collaboration with child psychology experts to tailor to the characteristics of child cognition and learning. Koolearn's main app, the Donut English-learning app, offers interactive graphic books with topics updated weekly to keep children engaged, as well as animated videos for English learning produced in-house. Koolearn's other Donut app provides various learning scenarios, such as food or transportation. The Company developed most of the content in its Donut apps in-house, and procures certain children education content from materials developed and licenced by Cambridge University. All readings within the apps are recorded by professional voice actors to ensure the accuracy of pronunciation. Donut apps are typically free to download, with in-app purchase items such as videos and interactive graphic books.

Figure 13: Koolearn's Student Enrolment in Pre-school Education



Source: the Company, Guotai Junan International.

Figure 14: Koolearn's Average Spending per Enrolment in Pre-school Education



Source: the Company, Guotai Junan International.

Koolearn's pre-school education business is also in a stage of rapid development although it just went through business adjustment. In FY2020, the number of enrolments in the pre-school segment dropped 82.8% YoY to 54,000 and the average spending per enrolment was only RMB1, primarily due to optimization and upgrade to the Donut English-learning app and the termination of live English courses for Donut online classroom. Of which, average spending per enrolment in formal courses of Donut English-learning app increased from RMB105 in FY2019 to RMB161 in FY2020. Although student enrolment dropped dramatically, relative to the decline in enrolment, the decline in revenue was not too great, down 10.1% YoY. Given that the optimized product line greatly improved efficiency of the segment and profitability and cost control ability has increased, the pre-school segment gross margin increased from -0.9% to 28.3% in FY2020. We expect the optimized pre-school segment to start to steadily contribute positive gross profit to Koolearn. In the future, we think that student enrolments will maintain steady and healthy growth due to more accurate positioning of customers after reorganization, and there is still room for improvement in average spending per enrolment.

Institutional Customers

In addition, using its online education modules from college as well as K-12 education courses, Koolearn also provides educational content packages to schools and institutional customers such as universities, public libraries, telecom operators and online video streaming providers in China. Koolearn typically enters into annual contracts with its institutional customers, which are annually renewed. Koolearn charges a fixed fee based on the online educational products and services. In addition, Koolearn is the exclusive partner of ETS's TOEFL Practise Online (TPO) modules in China, where it purchases TPO products from ETS for a fixed price per product and sells them to New Oriental to be used as New Oriental's TOEFL course materials.

Financial Analysis

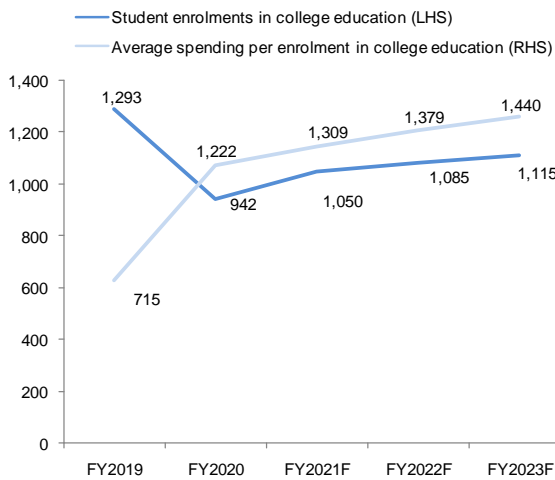
Revenue Analysis

College Education

As the foundation business of Koolearn, we expect the revenue from college education to grow steadily in FY21-23. Koolearn's college education segment recorded revenue of RMB641.7 million in FY2020, up 1.6% YoY. The growth of this segment is mainly driven by courses for preparation for college tests and preparation courses for overseas tests, whose revenues increased by 23.7% YoY and 1.6% YoY in FY2020, respectively. In FY2020, the growth rate of revenue from the college education segment slowed down mainly due to adjustments to English learning courses and upgrading of certain products as well as the impact from the COVID-19 pandemic. On the other hand, the performance of the other two divisions remained strong. Courses for graduate school entrance exams was the major component of the Company's college education business, whose revenue accounted for more than half of total revenue from college education business, with a 9.8% YoY growth; student enrolments and the average spending per enrolment both recorded steady growth. We expect that courses for

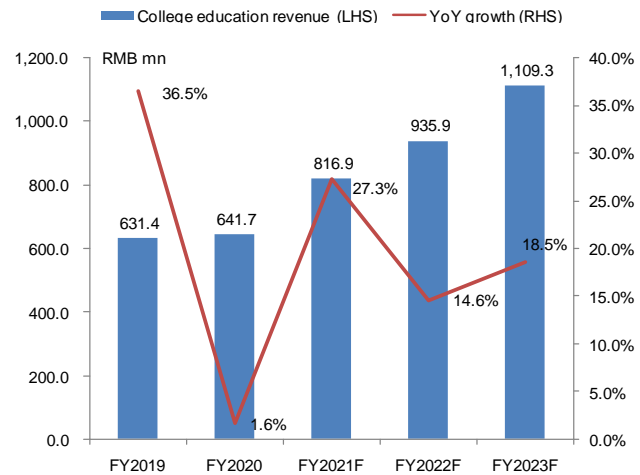
graduate school entrance exams will be the main driver of growth for college education business in the future, with an increasing proportion coming from college segment revenues.

Figure 15: Koolearn's Student Enrolments and Average Spending per Enrolment in College Education



Source: the Company, Guotai Junan International.

Figure 16: Koolearn's Revenue from College Education



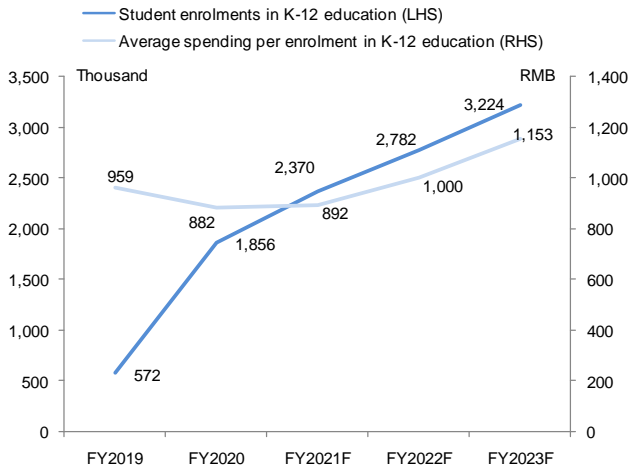
Source: the Company, Guotai Junan International.

We forecast that revenue from the college education segment will increase from RMB641.7 million in FY2020 to RMB1,109.3 million in FY2023, achieving a CAGR of 20.0% in FY2020-2023. Despite the large number of market participants and the homogenization of the industry, considering the reform of college entrance examinations and the expansion of college enrolment in China, Koolearn is expected to gain more market share as a leader in the field of college tutoring by relying on its strengths and the great reputation of New Oriental Group. As a whole, the COVID-19 outbreak has greatly increased the penetration rate of online education and played a positive role. However, as for higher education and overseas examination preparation, growth will be restricted due to reasons such as postponement or cancellation of examinations and obstruction of studying abroad. In addition, the penetration rate of online education for higher education was near the ceiling before the COVID-19 breakout compared with other tutoring areas, thus it will not be significantly improved in the short term. We believe that the courses for graduate school entrance exams will be a major driver of revenue growth in college education business with average spending per enrolment further increasing in the future. Taking into account that the reorganization of the English language learning products line lead a drop in students and students who delayed their higher education and overseas examination preparation which should cause a temporary explosive growth in FY2021, we expect student enrolments in college education business to grow 11.5% YoY to reach 1,050,000 in FY2021, with the average spending per enrolment reaching RMB1,309, up 7.8% YoY. At the same time, the successful conversion into online students during the COVID-19 pandemic will also increase enrolment in college education. Therefore, student enrolments will maintain a steady and considerable growth rate in 2021-2023. As a reputable brand as a college off-campus tutoring institution, Koolearn's leading position is likely unshakeable. Although market competition is fierce, the unit price of the course still has room to rise. We expect that the average spending per enrolment will increase steadily in the future.

K-12 Education

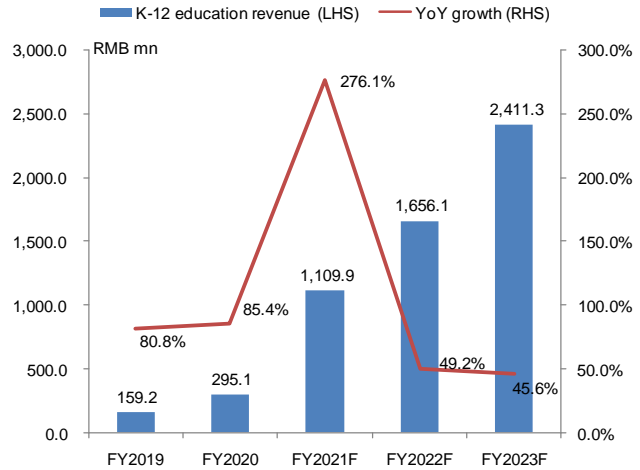
We forecast that K-12 education business revenue will grow from RMB295.1 million in FY2020 to RMB2,411.3 million in FY2023, achieving a CAGR of 101.4% in FY2020-2023. The success of DFUB in the development in third-tier and fourth-tier cities fully reflects that the Company's K-12 business has a huge room for growth. We expected that DFUB will settle in more than 200 cities in China by the end of 2020 and total student enrolments in K-12 will increase by about 27.7% to reach 2.4 million in FY2021. As a catalyst for the online education industry, the COVID-19 pandemic has improved the online education penetration rate of K-12 students in a short time. Given that almost all students in China have had experience of online tutoring after the outbreak of COVID-19, we believe that the future direction of the Company is to focus on increasing the proportion of student enrolments in full-price courses, thus the growth rate of total student enrolments will relatively slow down and average spending per student will improve gradually in the future. We expect little change in average spending per student in FY2021, but a significant improvement from FY2022, with YoY increase of 12.1% in FY2022 and 15.3% in FY2023.

Figure 17: Koolearn's Student Enrolments and Average Spending per Enrolment in K-12 Education



Source: the Company, Guotai Junan International.

Figure 18: Koolearn's Revenue from K-12 Education

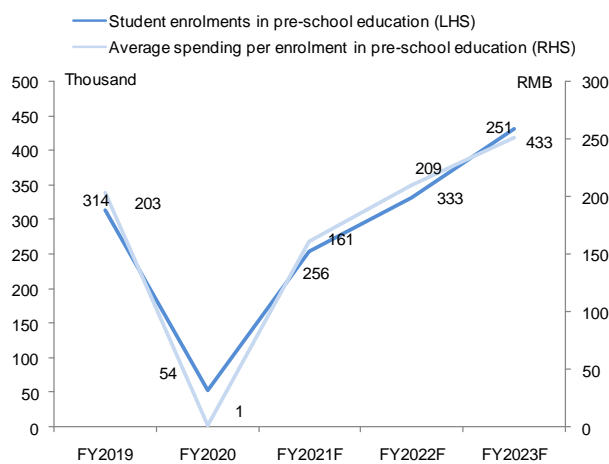


Source: the Company, Guotai Junan International.

Pre-School Education

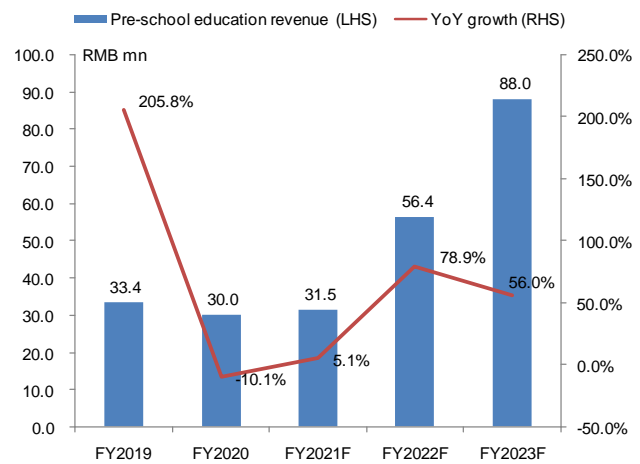
Koolearn's pre-school education business will contribute steady and rapid growth in revenue after business adjustment. Although the adjustment of the business resulted in a decrease in revenue, we believe that the adjustment of business operation makes the positioning of customers more precise and targeted, and the penetration rate of preschool online education is still quite low compared with college online education and K-12 online education, therefore there is still larger room for growth. Specifically, average spending per enrolment in formal courses increased from RMB105 in FY2019 to RMB161 in FY2020, up 53.3%. However, the conversion rate of online pre-school education is relatively low, and it is difficult to develop pre-school students' habit of online learning. The positive impact from the COVID-19 outbreak on the development of students' online learning habits is not as great as that on K-12 education. We forecast that revenue from preschool education business will increase from RMB30.0 million in FY2020 to RMB88.0 million in FY2023, achieving a CAGR of 43.1% in FY2020-2023. Performance in the past few years shows that the revenue growth rate of this segment has been maintained at a high speed, but it has not been cost efficient, leading to gross loss. We expect the profitability of the pre-school segment to be significantly improved by stripping out unprofitable product lines. In terms of average spending per enrolment, parents of early education students are relatively less price-sensitive as they pay more attention to teaching quality than price of courses; we believe that the average spending per enrolment of this business still has large room to rise. Combined with the above factors, we expect that student enrolment in pre-school business will be around 256,000 in FY2021 and pre-school revenue will continue to grow rapidly in 2021-2023, but at a slower pace than before.

Figure 19: Koolearn's Student Enrolments and Average Spending per Enrolment in Pre-School Education



Source: the Company, Guotai Junan International.

Figure 20: Koolearn's Revenue from Pre-School Education

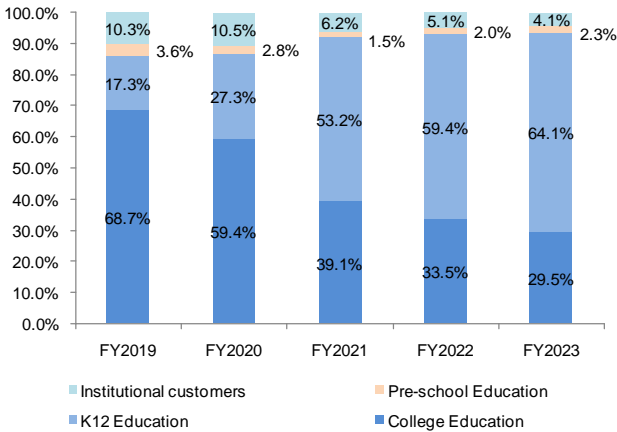


Source: the Company, Guotai Junan International.

Institutional Customers

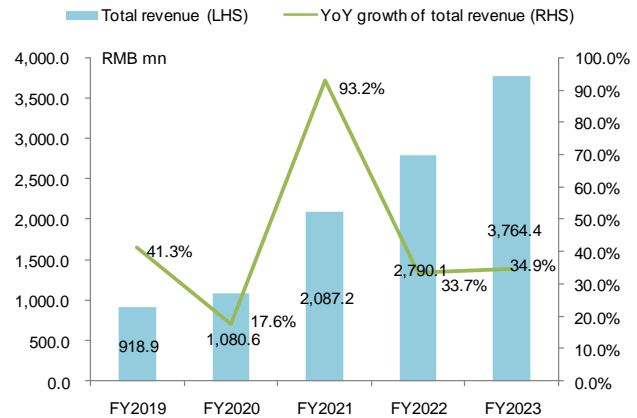
Institutional customers business continues to contribute stable growth and cash flow. The operating revenue from institutional customers business in FY2020 was RMB113.7 million, up 19.8% YoY. Although the revenue of this segment only accounted for 10.5% in FY2020, since these customers are universities, public libraries and other institutions, we believe that this part of revenue can maintain stable growth and contribute a stable cash flow to the Company. We forecast that institutional customers business revenue will increase from RMB113.7 million in FY2020 to RMB155.9 million in FY2023, achieving a CAGR of 11.1% in FY2020-2023.

Figure 21: Koolearn's Percentage of Revenue by Segment



Source: the Company, Guotai Junan International.

Figure 22: Koolearn's Total Revenue and Growth Rate

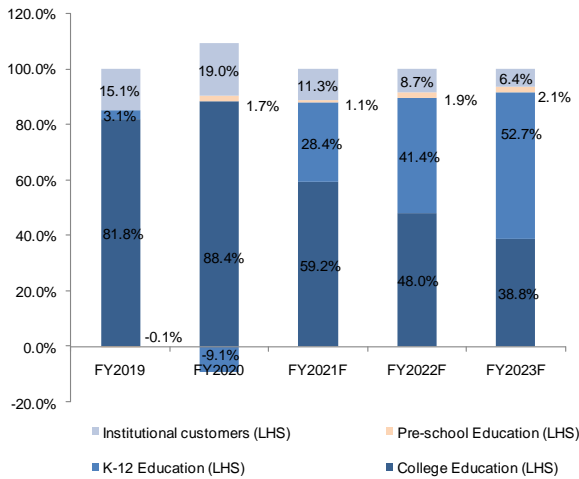


Source: the Company, Guotai Junan International.

Gross Margin Analysis

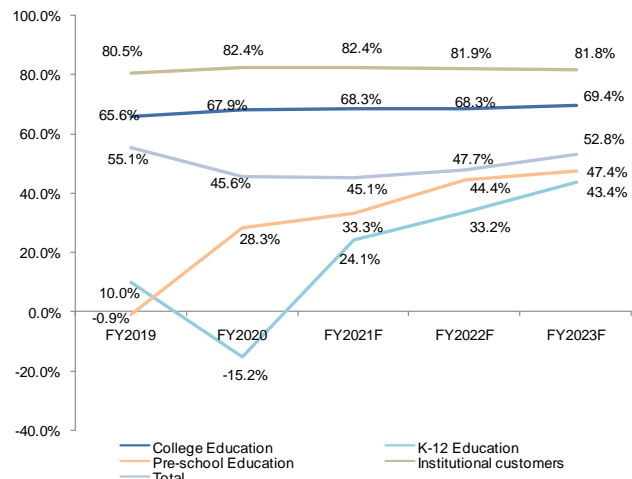
As college education maintained a high gross margin and a steady growth, it accounted for most of the gross profit. As the Company's fundamental business since the start, the college segment has experienced profound growth, and has always maintained a high gross profit rate. The gross profit margin of the college segment increased from 65.6% in FY2019 to 67.9% in FY2020, reflecting the company's absolute leading position in the market and excellent cost control capability. We expect the college segment to grow steadily while maintaining high gross margin. At present, the K-12 segment is in the stage of large-scale market expansion, so it will continue to increase investment and cost but customer unit price will be difficult to increase in a short term. The gross profit margin of K-12 business dropped to -15.2% in FY2020, and its gross profit proportion decreased to -9.1% in FY2020. We expect the gross profit margin to improve significantly from 2021. Preschool education has been in deficit in the past few years, but it has made a breakthrough after the business adjustment in FY2020, turning from gross loss to gross profit, with a gross profit rate of 28.3%. The institutional customers business has always maintained a very high gross margin. Although the growth rate has been slower than other businesses, it is very stable, contributing the most stable revenue and cash flow for Koolearn. Due to the Company's strategic focus on expanding K-12, the overall gross margin will continue to decline. Overall gross margin is expected to continue to decline as K-12 revenue is expected to account for an increasing proportion of total revenue in the future. We believe that the revenue cost of K-12 business will be key to the Company's control of gross margin in the future. We expect K-12 gross margin to start improving from FY2022.

Figure 23: Koolearn's Percentage of Gross Profit by Segment



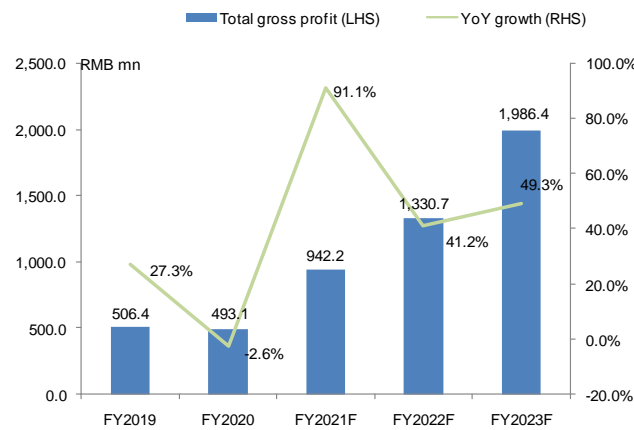
Source: the Company, Guotai Junan International.

Figure 24: Koolearn's Gross Margin of Each Segment



Source: the Company, Guotai Junan International.

Figure 25: Koolearn's Gross Profit and Growth Rate

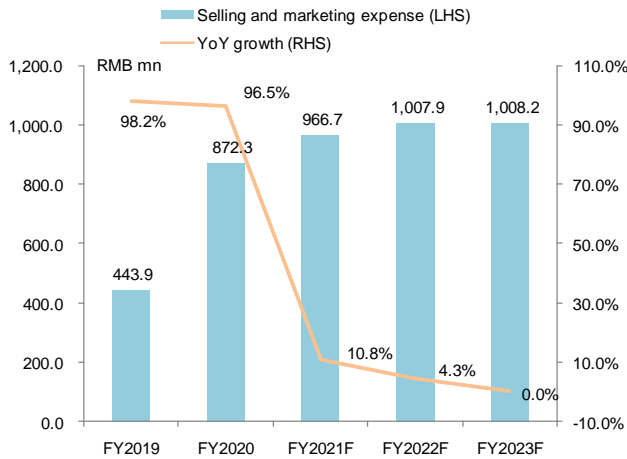


Source: the Company, Guotai Junan International.

Selling and Marketing Expense

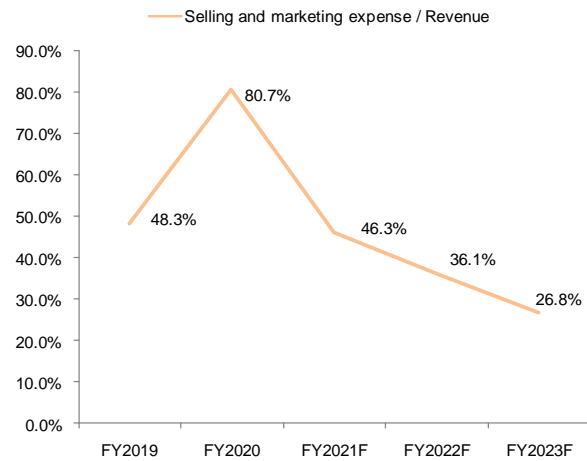
We expect selling and marketing expense to continue to increase in FY2021, but to begin to be under control in FY2022. The 96.5% YoY increase in selling and marketing expenses was mainly due to a substantial increase in marketing expenses and staff costs, in particular expenses relating to online media promotion for free course offerings during the COVID-19 pandemic period. To gain market share through a large amount of market advertising is the main competitive strategy of online education institutions. In order to establish a foothold in K-12 education for a long time, Koolearn has inevitably invested a lot of resources into marketing. However, as the only online education institution of New Oriental with 30 years of tutoring experience and good reputation, this is a natural competitive advantage that other institutions do not have. We think that the situation of K-12 online education institutions acquiring students through massive marketing expenditure in the past few years has changed as students all over China have been passively experiencing online education because of the COVID-19 outbreak. In the future, the Company's development focus will be to improve the quality of courses and improve the student retention rate, therefore sales and marketing expenditure will be relatively controllable. We expect 10.8% YoY growth in selling and marketing expense and that the selling expense to revenue ratio will stay at 46.3% in FY2021 and drop back to under 40% in FY2022.

Figure 26: Koolearn's Selling and Marketing Expense



Source: the Company, Guotai Junan International.

Figure 27: Koolearn's Selling and Marketing Expense to Revenue Ratio

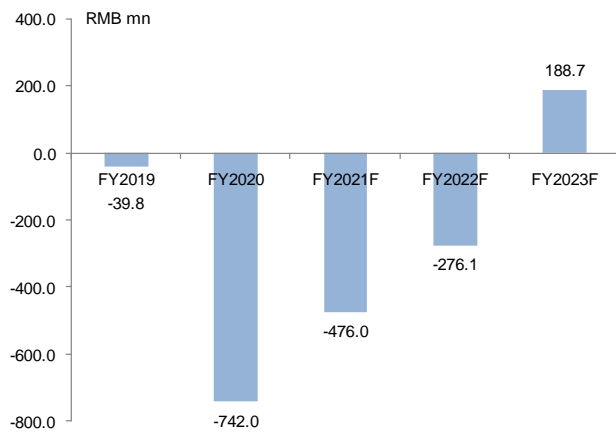


Source: the Company, Guotai Junan International.

Earnings Forecasts

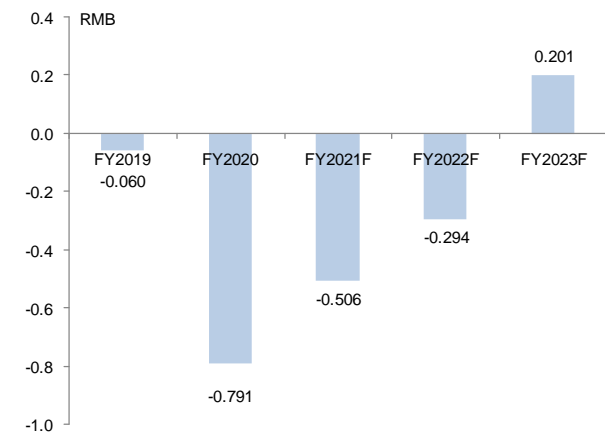
We forecast EPS to be -RMB0.506/ -RMB0.294/ RMB0.201 in FY21-FY23, respectively. Based on our forecasts on revenue growth and expenses, we forecast Koolearn's net profit attributable to shareholders to be -RMB476.0 mn/ -RMB276.2 mn/ RMB188.7 mn, respectively. The continued loss of shareholders' profit is mainly due to 1) the heavier cost burden from increasing teaching staff and course research costs for K-12 expansion; 2) slowing growth of student enrolment in college education; and 3) intensive competition in the K-12 market leading to low gross margin. Negative net profit margin is expected to continue, but is expected to turn into positive from FY2023.

Figure 28: Koolearn's Profit Attributable to Shareholders



Source: the Company, Guotai Junan International.

Figure 29: Koolearn's EPS



Source: the Company, Guotai Junan International.

Valuation & Investment Rating

We initiate Koolearn with a Target Price of HK\$42.83 and a rating of "Buy". According to our peers comparison of fast-growing internet companies, we gave FY21 PS of 17.0X in reference of the FY20 weighted PS of 19.6X (since Koolearn's FY2021 falls on May 31, 2021, we refer to FY20 weighted PS). Koolearn is expected to benefit from 1) projected relatively fast growth of K-12 online education market size in China, 2) the standardization of online education in China is good for leading enterprises, 3) the parent company's reputation in the field of education is conducive to future business expansion, and 4) relatively low customer acquisition cost in the industry is a competitive advantage. Our target price represents 19.0x/ 25.6x/ 31.9x FY21-FY23 PBR and 17.0x/ 12.7x/ 9.4x FY21-FY23 PSR, respectively.

Risk factors

- More-than-expected competition in China's online education.
- Less-than-expected acceptance of online education in low-tier cities.
- Changes in the regulatory environment concerning the after-school tutoring industry and online education industry.

Table-3: Peers Comparison

Company	Stock Code	Currency	Last price	Price/Sales			PE			PB	PEG	Market Cap
				20F	21F	22F	20F	21F	22F	20F	20F-22F	HKD mn
Fast-growing Internet												
Gsx Techedu Inc- Adr	GSX US	USD	105.45	23.4	12.9	9.0	384.9	167.4	96.0	78.5	3.8	195,033
Tal Education Group- Adr	TAL US	USD	75.74	9.9	10.2	7.1	(406.2)	92.1	52.7	5.9	1.5	352,388
Alibaba Health Information T	241 HK	HKD	18.86	14.7	13.2	8.2	(28,002.3)	698.5	342.9	39.5	6.8	253,673
Zoom Video Communications-A	ZM US	USD	413.13	28.6	50.0	38.5	4,590.3	181.8	178.0	138.1	13.4	910,648
Pinduoduo Inc-Adr	PDD US	USD	81.02	15.4	9.9	7.4	(107.9)	263.1	57.5	33.4	n.a.	856,349
Ping An Healthcare And Techn	1833 HK	HKD	114.60	15.9	11.6	8.4	(175.5)	(502.6)	326.5	11.8	n.a.	122,312
China Youzan Ltd	8083 HK	HKD	1.60	12.5	7.7	5.3	(57.1)	(66.7)	(88.9)	6.2	2.9	27,591
Simple				17.2	16.5	12.0	(3,396.3)	119.1	137.8	44.8	5.7	
Weighted				19.6	23.9	18.0	(1,143.1)	209.6	137.2	67.5	8.8	
Hong Kong Education												
Koolearn Technology Holding	1797 HK	HKD	35.45	25.0	16.4	10.0	(40.4)	(43.8)	(65.6)	16.5	0.6	33,322
Edvantage Group Holdings Ltd	382 HK	HKD	6.02	6.5	5.6	4.7	18.0	14.0	11.4	2.9	0.7	6,131
China East Education Holding	667 HK	HKD	17.38	8.0	6.4	5.4	37.1	27.8	22.9	4.9	1.4	38,122
China Education Group Holdin	839 HK	HKD	14.24	10.1	7.5	6.5	27.8	21.2	17.2	3.5	1.0	30,619
Hong Kong Education Internat	1082 HK	HKD	1.07	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	622
China Maple Leaf Educational	1317 HK	HKD	2.42	3.8	2.9	2.6	10.1	8.3	7.4	1.4	0.6	7,249
Shanghai Gench Education Gro	1525 HK	HKD	6.66	4.4	3.7	3.4	12.6	9.2	8.2	1.3	0.5	2,764
Vircend Education Co Ltd	1565 HK	HKD	2.40	3.6	2.9	2.4	18.3	12.4	9.8	2.3	0.5	7,413
Minsheng Education Group Co	1569 HK	HKD	1.15	3.6	3.2	2.8	9.4	8.0	7.1	1.0	0.6	4,850
Chen Lin Education Group Hol	1593 HK	HKD	2.09	4.9	3.3	2.6	n.a.	n.a.	n.a.	n.a.	n.a.	2,090
China 21St Century Education	1598 HK	HKD	0.65	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	759
Top Education Group Ltd	1752 HK	HKD	0.29	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	709
Huali University Group Ltd	1756 HK	HKD	2.99	3.9	3.3	2.8	10.7	8.5	6.8	1.3	0.4	3,588
Bojun Education Co Ltd	1758 HK	HKD	0.68	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	559
Hope Education Group Co Ltd	1765 HK	HKD	2.40	9.0	6.7	5.4	23.3	17.0	14.7	2.8	0.9	17,352
Scholar Education Group	1769 HK	HKD	23.70	12.7	8.9	6.4	71.8	49.8	37.3	14.6	1.9	13,170
Tianli Education Internation	1773 HK	HKD	8.07	12.0	9.1	7.1	39.0	30.1	22.5	5.5	1.2	16,745
Bexcellnt Group Holdings Lt	1775 HK	HKD	0.52	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	260
China Gingko Education Group	1851 HK	HKD	2.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,240
China Oriented International	1871 HK	HKD	0.24	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	96
China Kepei Education Group	1890 HK	HKD	6.30	12.0	9.3	8.1	18.0	14.6	12.5	3.2	0.9	12,696
Jh Educational Technology In	1935 HK	HKD	3.33	8.3	7.2	6.2	18.3	14.7	13.3	2.2	1.1	5,331
China Chunlai Education Grou	1969 HK	HKD	1.54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,848
China New Higher Education G	2001 HK	HKD	5.37	5.2	4.4	3.8	13.5	11.0	9.3	2.5	0.7	8,276
China Chuanglian Education F	2371 HK	HKD	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	215
China Xinhua Education Group	2779 HK	HKD	2.49	7.0	5.9	5.1	10.9	9.5	8.3	1.2	0.8	4,005
China Beststudy Education Gr	3978 HK	HKD	3.36	1.4	1.1	0.9	19.5	11.9	8.9	2.9	0.4	2,855
Wisdom Education Internation	6068 HK	HKD	3.14	3.2	2.5	2.2	11.6	9.5	8.1	2.2	0.6	6,836
China Yuhua Education Corp L	6169 HK	HKD	6.70	7.9	7.0	6.5	21.8	15.8	13.8	4.7	0.8	22,376
China E-Information Technolo	8055 HK	HKD	0.04	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	153
Goldway Education Group Ltd	8160 HK	HKD	0.07	1.9	n.a.	n.a.	(5.4)	n.a.	n.a.	1.0	n.a.	38
Shentong Robot Education Gro	8206 HK	HKD	0.10	3.0	n.a.	n.a.	(0.8)	n.a.	n.a.	5.1	n.a.	193
Sdm Group Holdings Limited	8363 HK	HKD	1.70	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	609
Dadi Education Holdings Ltd	8417 HK	HKD	0.02	2.3	n.a.	n.a.	(9.2)	n.a.	n.a.	0.6	n.a.	42
Dashan Education Holdings Lt	9986 HK	HKD	0.86	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	688
Simple Average				6.9	5.9	4.7	15.3	13.1	9.2	3.8	0.8	
Weighted Average				10.5	7.8	6.1	18.3	11.8	5.5	5.9	1.0	
Mainland-China Education												
Xiamen Unigroup Xue Co Ltd-A	000526 CH	CNY	59.73	2.2	1.7	1.5	3,982.0	72.8	46.1	54.5	4.8	6,597
Talkweb Information System-A	002261 CH	CNY	8.07	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10,190
Offcn Education Technology-A	002607 CH	CNY	31.95	16.1	12.0	9.3	79.1	57.6	43.8	34.4	2.3	227,741
Dalian My Gym Education Te-A	002621 CH	CNY	6.51	12.4	7.8	6.7	60.8	30.1	20.8	3.2	0.9	6,173
Beijing Kaiwen Education T-A	002659 CH	CNY	6.59	10.1	7.7	6.2	(94.1)	94.1	43.9	1.7	n.a.	4,516
Great Wall Of Cultural Gro-A	300089 CH	CNY	5.13	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,831
Sansheng Intellectual Educ-A	300282 CH	CNY	6.59	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,844
Changsha Kaiyuan Instrumen-A	300338 CH	CNY	8.87	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3,489
Qtone Education Group Guan-A	300359 CH	CNY	7.95	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5,783
Bybon Group Co Ltd-A	300736 CH	CNY	11.81	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,766
Shanghai Xin Nanyang -A	600661 CH	CNY	15.65	2.4	1.7	1.4	142.3	33.3	23.4	3.1	1.0	5,141
China Hi-Tech Group Co Ltd-A	600730 CH	CNY	4.95	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3,331
Eastern Pioneer Driving Sc-A	603377 CH	CNY	22.05	18.9	10.1	8.8	93.8	48.5	42.4	n.a.	1.9	14,900
Simple Average				10.4	6.8	5.6	710.6	56.1	36.7	19.4	2.2	
Weighted Average				15.5	11.3	8.8	174.9	56.9	42.9	32.9	2.3	
U.S. Education												
Gsx Techedu Inc- Adr	GSX US	USD	105.45	23.4	12.9	9.0	384.9	167.4	96.0	78.5	3.8	195,033
Bright Scholar Education-Adr	BEDU US	USD	6.75	1.6	1.3	1.2	17.4	12.1	10.5	n.a.	0.6	6,291
China Online Education-Adr	COE US	USD	21.08	1.5	1.3	n.a.	33.4	18.9	n.a.	n.a.	n.a.	3,497
Youdao Inc	DAO US	USD	27.68	7.0	3.8	2.6	(16.3)	(25.2)	(709.7)	(17.1)	0.2	23,977
China Distance Education-Adr	DL US	USD	9.12	1.5	1.3	1.2	22.2	19.8	9.0	2.6	0.4	2,391
New Oriental Educatio-Sp Adr	EDU US	USD	154.44	5.3	5.9	4.5	59.2	41.9	29.8	9.0	1.2	190,444
Four Seasons Education Cayma	FEDU US	USD	0.85	0.6	n.a.	n.a.	(1.3)	n.a.	n.a.	0.4	n.a.	306
Hailiang Education Group-Adr	HLG US	USD	47.89	n.a.	n.a.	n.a.	168.6	n.a.	n.a.	n.a.	n.a.	9,568
Laix Inc - Adr	LAIX US	USD	2.00	0.6	0.5	0.5	(1.3)	(1.5)	(3.0)	(0.8)	0.0	766
Meten Edtech Education Grou	METX US	USD	8.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3,502
Puxin Ltd-Adr	NEW US	USD	9.27	n.a.	n.a.	n.a.	25.2	9.2	6.4	n.a.	0.3	6,253

Onesmart International -Adr	ONE US	USD	4.32	1.4	0.9	0.8	(240.0)	13.6	9.3	6.7	n.a.	5,386
Rise Education Cayman - Adr	REDU US	USD	5.87	2.0	1.4	1.1	(27.8)	16.9	10.7	4.7	n.a.	2,565
Ryb Education Inc-Adr	RYB US	USD	3.00	0.7	0.4	0.4	n.a.	60.0	50.0	1.8	n.a.	641
Sunlands Technology- Sp Adr	STG US	USD	1.77	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,308
Tal Education Group- Adr	TAL US	USD	75.74	9.9	10.2	7.1	(406.2)	92.1	52.7	5.9	1.5	352,388
Tarena International Inc-Adr	TEDU US	USD	1.61	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	676
Joyy Inc	YY US	USD	82.32	1.8	1.6	1.4	22.4	15.5	11.8	1.2	0.6	51,551
Simple Average				4.4	3.5	2.7	2.9	33.9	(35.6)	8.4	1.0	
Weighted Average				11.2	8.9	6.3	(65.1)	87.6	32.0	22.8	1.9	

Source: the Company, Guotai Junan International.

Financial Statements and Ratios

Income Statement					
Year end 31 May (RMB 000')	FY19A	FY20A	FY21F	FY22F	FY23F
Revenue	918,911	1,080,587	2,087,169	2,790,113	3,764,405
Cost of revenue	(412,502)	(587,501)	(1,144,937)	(1,459,423)	(1,777,973)
Gross profit	506,409	493,086	942,232	1,330,690	1,986,431
Selling and marketing expenses	(443,930)	(872,293)	(966,696)	(1,007,922)	(1,008,223)
Research and development expenses	(147,520)	(317,286)	(349,015)	(383,916)	(420,772)
Administrative expenses	(103,373)	(184,692)	(277,038)	(387,853)	(504,209)
Operating profit	(188,414)	(881,185)	(650,517)	(449,002)	53,228
Listing expenses	(31,525)	0	0	0	0
Other income, gains and losses	142,728	195,653	178,731	189,753	205,948
Share of result of associates	3,111	(1,796)	1,108	2,128	1,138
Finance costs	0	(10,576)	(14,784)	(15,352)	(15,989)
Profit before tax	(74,980)	(715,451)	(503,041)	(291,811)	223,054
Income tax	10,871	(42,788)	26,997	15,661	(34,358)
Profit After Tax	(64,109)	(758,239)	(476,044)	(276,150)	188,696
Non-controlling Interest	24,336	16,234	0	0	0
Shareholders' Profit / Loss	(39,773)	(742,005)	(476,044)	(276,150)	188,696
Basic EPS (RMB)	(0.060)	(0.791)	(0.506)	(0.294)	0.201

Cash Flow Statement					
Year end 31 May (RMB 000')	FY19A	FY20A	FY21F	FY22F	FY23F
PBT	(74,980)	(715,451)	(503,041)	(291,811)	223,054
Depreciation of PPE	9,050	15,384	25,486	34,264	41,489
Depreciation of right-of-use assets	0	73,337	74,707	76,102	77,524
Loss on disposal of PPE	264	3,032	0	0	0
Share of profit of associates	(3,111)	1,796	(1,108)	(2,128)	(1,138)
Interest income	(5,574)	(65,381)	(5,386)	(6,040)	(10,286)
Finance costs	0	10,576	14,784	15,352	15,989
Share-based compensation expenses	54,221	120,496	0	0	0
Others	(135,672)	(117,638)	(53,865)	(65,424)	(79,798)
Change in working capital	134,625	136,196	649,916	482,174	623,309
Income tax paid	(5,690)	398	(6,079)	(6,079)	(18,250)
Interest received	2,156	15,821	5,386	6,040	10,286
Cash from operating activities	(24,711)	(521,434)	200,799	242,452	882,178
Change in financial assets	50,732	84,375	0	0	0
Change in PPE	(20,793)	(79,779)	(43,358)	(66,722)	(54,942)
Change in right-of-use assets	0	(7,664)	(15,795)	(16,090)	(16,391)
Payments for investments in associates	(14,059)	0	(19,272)	(20,774)	(12,253)
Proceeds on disposal of associate	0	24	0	0	0
Change in deposits	0	(1,430,335)	(288)	(293)	(298)
Cash from investing activities	15,880	(1,433,379)	(78,712)	(103,879)	(83,884)
Proceeds from share issuance	1,766,040	24,994	0	0	0
Payment of issue costs	(63,592)	(933)	0	0	0
Repayment of lease liabilities	0	(65,547)	(68,789)	(68,734)	(69,033)
Acquisition of a subsidiary	0	(94,000)	0	0	0
Cash from financing activities	1,702,448	(135,486)	(68,789)	(68,734)	(69,033)
Net changes in cash	1,693,617	(2,090,299)	53,298	69,839	729,261
Cash at beg of year	709,448	2,497,621	480,251	533,549	603,387
Effect of exchange rate changes	94,556	72,929	0	0	0
Cash at end of year	2,497,621	480,251	533,549	603,387	1,332,648

Source: the Company, Guotai Junan International.

Balance Sheet					
Year end 31 May (RMB 000')	FY19A	FY20A	FY21F	FY22F	FY23F
Property and equipment	29,548	81,676	104,896	134,680	149,470
Right-of-use assets	0	331,122	337,307	343,607	350,026
Interests in associates	84,025	82,458	102,837	125,739	139,130
Financial assets at FVTPL	146,855	183,328	228,859	285,699	356,656
Deferred tax assets	27,591	0	41,504	72,743	67,440
Deposits for acquisition of PPE	5,757	13,852	8,504	11,178	9,841
Refundable rental deposits	0	15,396	15,684	15,977	16,275
Total non-current assets	293,776	707,832	839,591	989,622	1,088,836
Trade and other receivables	35,478	41,993	45,736	50,766	55,386
Prepayments	81,870	70,838	141,989	190,701	255,717
Financial assets at FVTPL	352,943	277,800	286,134	294,718	303,560
Income tax recoverable	6,905	0	0	0	0
Term deposits	0	1,470,530	1,470,530	1,470,530	1,470,530
Cash & cash equivalents	2,497,621	480,251	533,549	603,387	1,332,648
Total current assets	2,974,817	2,341,412	2,477,938	2,610,102	3,417,841
Total Assets	3,268,593	3,049,244	3,317,530	3,599,724	4,506,677
Lease liabilities	0	77,263	92,716	108,457	124,492
Contract liabilities	400,928	420,103	937,169	1,265,166	1,670,391
Refund liabilities	19,414	36,491	49,221	66,107	88,646
Trade payables	41,541	34,067	35,770	37,559	39,437
Accrued expenses and other payables	219,645	343,752	537,063	726,306	989,611
Income tax payables	428	0	0	0	0
Total Current Liabilities	681,956	911,676	1,651,939	2,203,595	2,912,576
Deferred tax liabilities	16,530	25,648	34,076	43,575	54,380
Lease liabilities	0	248,220	243,859	241,048	239,519
Total Non-current Liabilities	16,530	273,868	277,935	284,623	293,899
Total Liabilities	698,486	1,185,544	1,929,874	2,488,218	3,206,476
Total Shareholders' Equity	2,601,586	1,863,700	1,387,656	1,111,506	1,300,202
Minority Interest	(31,479)	0	0	0	0
Total Equity	2,570,107	1,863,700	1,387,656	1,111,506	1,300,202

Financial Ratios					
	FY19A	FY20A	FY21F	FY22F	FY23F
Gross profit margin (%)	55.1	45.6	45.1	47.7	52.8
Cost to revenue (%)	44.9	54.4	54.9	52.3	47.2
Selling expense to revenue (%)	48.3	80.7	46.3	36.1	26.8
R&D expense to revenue (%)	16.1	29.4	16.7	13.8	11.2
Admin expense to revenue (%)	11.2	17.1	13.3	13.9	13.4
Operating profit margin (%)	(20.5)	(81.5)	(31.2)	(16.1)	1.4
Net margin (%)	(4.3)	(68.7)	(22.8)	(9.9)	5.0
ROE (%)	(2.3)	(33.2)	(29.3)	(22.1)	15.6
ROA (%)	(2.7)	(24.0)	(15.0)	(8.0)	4.7

Company Rating Definition

The Benchmark: Hong Kong Hang Seng Index

Time Horizon: 6 to 18 months

Rating		Definition
Buy	买入	Relative Performance > 15%; or the fundamental outlook of the company or sector is favorable.
Accumulate	收集	Relative Performance is 5% to 15%; or the fundamental outlook of the company or sector is favorable.
Neutral	中性	Relative Performance is -5% to 5%; or the fundamental outlook of the company or sector is neutral.
Reduce	减持	Relative Performance is -5% to -15%; or the fundamental outlook of the company or sector is unfavorable.
Sell	卖出	Relative Performance < -15%; or the fundamental outlook of the company or sector is unfavorable.

Sector Rating Definition

The Benchmark: Hong Kong Hang Seng Index

Time Horizon: 6 to 18 months

Rating		Definition
Outperform	跑赢大市	Relative Performance > 5%; or the fundamental outlook of the sector is favorable.
Neutral	中性	Relative Performance is -5% to 5%; or the fundamental outlook of the sector is neutral.
Underperform	跑输大市	Relative Performance < -5%; Or the fundamental outlook of the sector is unfavorable.

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