

GSX Techedu Inc – The Most Blatant Chinese Stock Fraud since 2011

Up to 70% of revenues are fabricated and the Chinese media agrees

Despite having over 4500 stores in China, Luckin Coffee (LK) recently saw its stock price vaporized as the company disclosed that it had overstated revenue by 40%. While admittedly we were startled at the brazen fraud, many in China were not and Luckin's fortunes were questioned by many "in the know" in the Chinese business community.

Luckin's cautionary tale teaches us several valuable lessons:

- No matter how "front facing" a company is, certain Chinese company's willingness to commit fraud cannot be ignored or understated
- 2. Chinese people have taken a vigilant interest in exposing fraud and are not complicit as illustrated by much if not all LK investigative work being done Chinese citizens
- 3. If a company presents financials that cannot be relied upon, the stock should be immediately halted even if there is "some revenue"

And <u>most importantly</u>, the one common denominator of all fraud that has come out of China – **If it seems too good to be true, it is.**

With that understanding, Citron introduces what many in China already know and what will become obvious to the reader:

GSX Techedu Inc is overstating revenue by up to 70% and should immediately halt trading and launch an internal investigation.

This report is Part 1 of a series of reports on GSX. The presentation of our complete set of on-the-ground findings in China has been delayed due to Beijing being shutdown but we will soon present even more evidence of the extent of the fraud and mechanisms behind student brushing.

Background



Let us start from IPO. Last June, GSX was priced at the mid-point of its targeted range at \$10.50 a share to not much fanfare. Every news agency reported on this as just another Chinese Education IPO with nothing spectacular.

http://www.xinhuanet.com/english/2019-06/06/c 138122631.htm

Reception to the IPO was lukewarm but the market was steady enough to allow GSX to do a follow on secondary netting \$250 million for selling shareholders less than 6 months later at \$14 a share.

But did anyone care to look at the believability of these numbers or was it rubber stamped under the JOBS Act?

GSX claimed that in the year up to IPO its growth was 432% along with gross margins of 75%? Note, this is in the highly competitive and transparent world of online education. Yet, when GSX went IPO not one piece of media in China or the US referred to them as hyper growth or disruptive or gave any praise.

This is not Luckin with 4500 stores, this is more like a 2011 Chinese RTO with a too good to be true nonsense story.

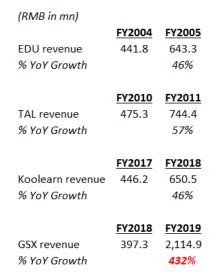
The SEC must halt trading in this security.

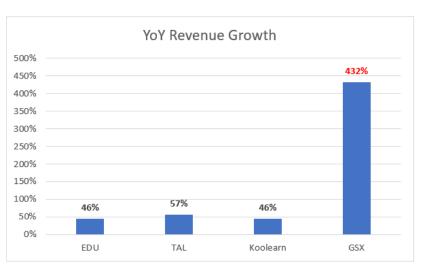
To Put Scale of Fraud in Perspective – Let's Compare to Legitimate Companies

Let's compare GSX to two undisputed leaders in online education in China, TAL and EDU (both respected companies), along with HK traded Koolearn. Look at how all four companies performed while coming off the same historical revenue base.

*Note – when EDU and TAL had that revenue, the online education market was much less competitive making GSX's growth look even more unbelievable given the current levels of competition.







You cannot hide a fast-growing education company in China. China's media covers the education industry the same way the U.S. media covers the Kardashians. If this company had 432% revenue growth in one year on that scale – it would be widely known and widely reported.

Not Just the Opinion of Citron – We now Show Chinese Government, Media, and Think Tanks – All with the Same Conclusion

China Consumer News, which is backed by the State Administration for Market Regulation, sent out a survey and questionnaire to the major players in Chinese online education including TAL, Tencent Lecture, Zuoyebang, Chinese Uni MOOC, Yuanfudao, and EDU. However, GSX was not included in this survey.

https://www.thepaper.cn/newsDetail forward 6721156

China Consumer News published a different survey on the Chinese online education market last month. GSX was missing again.



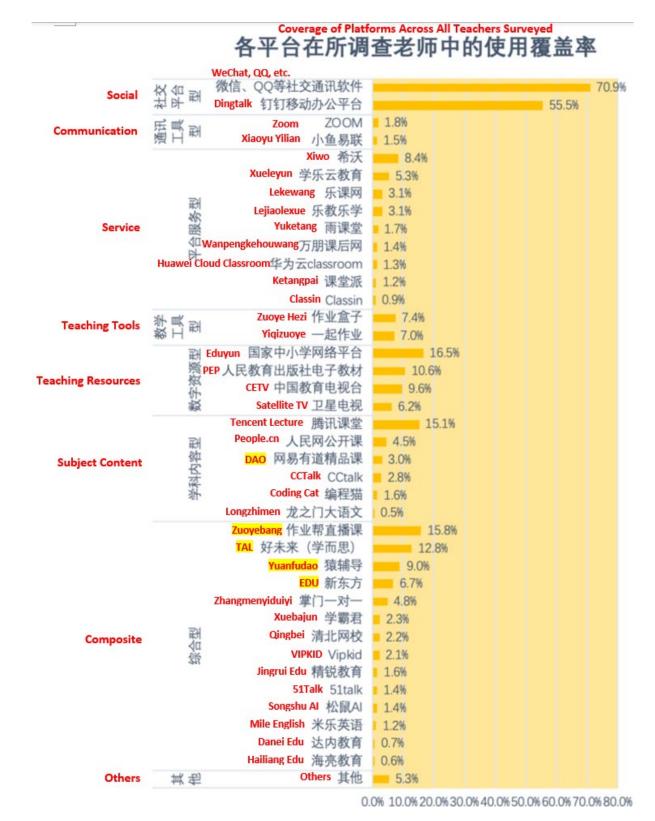
Appendix 1: Online Education Platform Consumer Experience Rating and Evaluation

Tencent Lecture Chaoxing Xuexitong Zhangmen Yiduiyi Zhixuewang VIPKID 附件 1: 在线教育平台消费体验各维度和指标义工评价 掌门 学而思 VIPKID DaDa 腾讯 网易 超星 综合 指标/平台 猿辅导作业帮智学网 英语 英语 医课堂学习通 网校 课堂 得分 对 证照资质 5 5 5 5 5 10 10 5 5 5 5 62.50 10 课程介绍 5 10 10 10 5 10 10 5 10 10 10 10 87.50 明码标价 5 5 5 5 5 5 5 3 5 5 5 5 96.67 用户评价 5 0 5 10 0 10 10 5 10 10 10 5 66.67 57.14 57.14 85.71 85.71 57.14 85.71 94.29 57.14 85.71 85.71 85.71 75.71 信息披露 71.43 教师资质 10 5 10 10 10 10 5 5 5 Û 70.00 100.0 课程规范 10 10 10 10 10 10 10 10 10 10 10 10 0 答疑解惑 5 5 96.67 5 有否 "三 100.0 10 10 10 10 10 10 10 10 10 10 招" 0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 课程品质 85.71 85.71 65.71 92.38 85.71 85.71 0 0 0 0 0 合同签订 Ô Û 5 5 10 5 54.17 10 Ô 10 10 10 Û 课程退换 5 5 5 75.00 10 10 10 10 10 10 10 0 发票开具 5 5 5 5 5 3 3 3 5 0 3 0 70.00 5 5 客服响应 5 5 2 5 5 5 2 76.67 2 100.0 100.0 100.0 优质服务 66.67 50.00 60.00 90.00 76. 67 | 33. 33 | 76. 67 | 16. 67 | 40. 00 | 67. 50 0 0 总分/得分 75.00 80.00 80.00 83.00 |82.00|95.00|93.00| 73.00 | 70.00 | 85.00 | 58.00 | 65.00 | 78.25 桽

http://www.ccn.com.cn/html/news/xiaofeiyaowen/2020/0324/483464.html

The Guangming Daily, which is sponsored by the Central Committee of the Communist Party of China, published a research report this month on the Chinese online education market. GSX was missing again.





http://edu.gmw.cn/2020-04/02/content 33708443.htm



During GSX's conference call last week, the company failed to acknowledge Grizzly Research's criticism that GSX was noticeably absent in a 2018 online education report by iResearch highlighting the major players in the industry.

Citron's suspicions were corroborated by the fact that GSX is missing from the list of top online education companies in both the 2019 iResearch report and the most recent iResearch report from last month as well, while supposed peers TAL, Yuanfudao, and Tencent Lecture all make the list.

And this is supposed to be a company growing 10x as fast as the competition?





Growth - High Quality Education Institutes are Gaining Online Users 增长—优质教育机构收割线上用户



免费是带来流量的方式,但关键在于内容和效果

停学不停课呼声下,大片互联网教育企业开启免费服务,既是在特殊社会危机下的公益之举,也将流量大战烧到前线。优质教育机构如老牌的学而思、年轻的猿辅导等等都获得超过200%的月活环比增长率。在月独立设备增长TOP10的APP中,有4个APP单机日使用时长也获得TOP10的增长。

mUserTracker - Feb 2020 Education Monthly Distinct Device Count and Daily Usage MoM Growth Top 10 mUserTracker-2020年2月学习教育行业月独立设备数和单机日使用时长环比增长TOP10APP



CCTalk

Daily Usage per Device (Minute); Month-over-Month Growth (%)

(%)

来源:UserTracker 多平台网民行为监测数据库(桌面及智能珍诺)。 ©2020.3 iResearch Inc.

www.iresearch.com.cn

排名	APP名称	一级行业	二级行业	触媒偏好	目标用户月独立设备数
1-20				TGI	(万台)
1	智学网 Zhixuewang	学习教育	职业教育	377.72	101.52
2	安全教育平台 Safety Edu	学习教育	教育工具	373.26	439.59
3	洋葱学院 Onion Colleg	e学习教育	职业教育	360.07	133.88
4	升学e网通 EWT	学习教育	职业教育	353.31	127.75
5	学而思网校 TAL	学习教育	教育工具	349.45	163.56
6	猿辅导 Yuanfudao	学习教育	职业教育	342.75	131.10
7	一起学 (家长通) Yiqixue	通讯聊天	即时通讯	331.38	130.91
8	企业微信 WeChat Wor	k通讯聊天	即时通讯	279.21	232.95
9	央视频 CCTV	视频服务	聚合视频	275.50	130.51
10	学习强国Xuexi Qianggu	10学习教育	教育工具	267.36	505.86
11	小猿搜题 Yuanfudao	学习教育	职业教育	266.53	407.49
12	晓黑板 Xiaoheiban	学习教育	教育工具	259.50	120.46
13	腾讯课堂Tencent Lectu	ur学习教育	职业教育	254.66	104.45
14	腾讯课室Tencent Lectu <u>Yiqixiaoxue Xuesl</u> 一起小学学生	neng 学习教育	职业教育	249.29	252.30
15	作业帮 Zuoyebang	学习教育	职业教育	243.81	1569.91
16	快点阅读Kuaidian Yue	du电子阅读	在线阅读	234.83	104.62
17	快对作业 Kuaidui Zuoy	e学习教育	职业教育	231.35	350.59
18	元气骑士Yuanqi Knigh		冒险闯关	217.77	116.91
19	有道翻译官	ator 学习教育	教育工具	202.99	100.58
20	影视大全-Le123 Le123	视频服务	聚合视频	198.67	324.70

来源:UserTracker 多平台网民行为监测数据库(桌面及智能终端)。 注释:1、排除所在一级行业APP进行TGI排序;2、目标用户月独立设备为所选行业用户的在该APP月独立设备数,3、仅选择MAU > 100万APP进行排序。

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When questioned on the recent conference call about their lack of presence in web analytics the company referred investors to QuestMobile, yet we don't see GSX ranked as a top online education platform by QuestMobile.



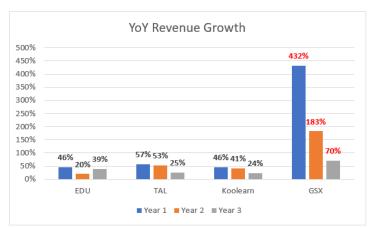
GSX plans on continuing to commit securities fraud.

Citron believes that GSX overstates their revenue by up to 70% and has not intention of slowing down the fraud.

Whereas the previous chart showed the 2 years leading up to IPO, this is the completely obscene lies that GSX attempts to tell going forward. This revenue growth chart shows GSX expectations going forward vs. the actual results of EDU, TAL, and Koolearn coming off the same historical revenue base.



(RMB in mn)				
	FY2004	FY2005	FY2006	FY2007
EDU revenue	441.8	643.3	770.3	1,070.7
% YoY Growth		46%	20%	39%
	FY2010	FY2011	FY2012	FY2013
TAL revenue	475.3	744.4	1,139.3	1,422.7
% YoY Growth		57%	53%	25%
	FY2017	FY2018	FY2019	FY2020
Koolearn revenue	446.2	650.5	918.9	1,140.1
% YoY Growth		46%	41%	24%
	FY2018	FY2019	FY2020	FY2021
GSX revenue	397.3	2,114.9	5,975.4	10,158.6
% YoY Growth		432 %	183%	70 %



They are not even in a "fake it till you make it" situation. Their forward growth trajectory is as foolish and fraudulent as their previous financials.

What Is Their Claimed Secret for such Spectacular Growth?

In their IPO and in their corporate materials they sold the company as "making education better through technology".

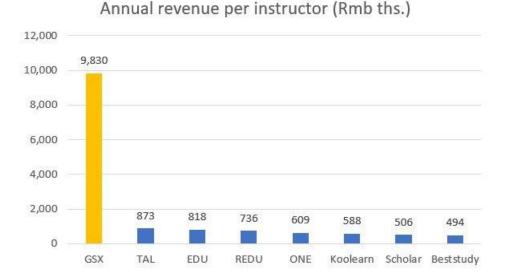
https://www.sec.gov/Archives/edgar/data/1768259/000119312519140662/d709 082df1.htm

But, once they realized that their minuscule technology spend would not sell the story, they changed the story to having "Star Teachers."

Yes, these "Star Teachers" which are never named and not on any website generated 10x more productivity than any of the teachers from the established and respected players. Yet, these teachers for GSX are not under contract and do not have their own websites and are not listed anywhere. This is right out of the China Hustle.

The only analogy that comes to mind is my baseball team has a collection of hitters who each hit 400 home runs A SEASON, but you have never heard of them and you are not allowed to know their names.





*Note – teacher productivity and "Star Teachers" were never part of their business plan.

Luckin is by far a more prominent coffee shop than GSX is an education provider.

It is interesting to note that GSX's auditor is Deloitte. This is the same auditor that was used in the Longtop and China Media Express frauds – both exposed by Citron. We are not saying that all of their clients commit fraud, but don't for a minute think because GSX has a Big Four auditor they are clean and that history won't repeat.

The Analysis Behind the Obvious Assumptions

Even though we believe our case has been made, here are the takeaways from Citron's extensive due diligence (some of which is highlighted in more detail at the end of this report):

- After tracking >20% of available GSX classes, Citron estimates that 2019 revenue was overstated by 70%
- Our data indicates that most students are not from lower-tier cities, as GSX claims, when trying to explain how the company can grow so quickly when most Chinese parents in Tier 1 and 2 cities have never heard of them
- Wuhan and the surrounding area make up almost 50% of the student composition in Q1 2020, which further supports our thesis that a large % of



revenues are fudged given the large number of free classes offered to students of Wuhan during the Covid-19 crisis and, just as importantly, implies that GSX couldn't have a strong diversified student base to begin with, and that the previous sales revenues are largely exaggerated

- Duplicated classes (i.e., counted more than once) could be one way that revenues are inflated
- GSX management has deflected criticism with unconvincing explanations that show a greater interest in protecting their stock price than operational integrity, and their filings are riddled with suspicious transactions

As a result of our investigation, Citron calls on the internal audit team at GSX to look into student enrollment numbers and revenue more closely. Our research suggests a huge discrepancy between reported figures and reality.

Systematic Overstatements of Revenue

We thought there was no better way to determine the scope of the financial shenanigans than to track the actual number of students in paid classes directly. This weeds out the noise, and with a large degree of certainty we can estimate the number of students in the paid classes—and hence the company's revenue.

We selected and paid for the most popular classes taught by "Star Teachers" with a significant sample size of >20% of total available classes in Q1 2020. See the below table for the breakdown.



Total programs/lessons tracked versus total programs/lessons available during 1 st Quarter 2020								
K-12 Levels	Elementary (7-12)	Middle (13-15)	High School (16-18)	Total				
Total available paid programs	20	37	76	133				
Total available lessons	459	418	875	1752				
No. of tracked programs	4 (1 postponed)	11	3	18				
% of total available prgms	20%	30%	4%	14%				
Total tracked lessons	133 (44 postponed)	165	64	362				
% of total available lessons	29%	39.4%	7.3%	20.6%				

Quick definition:

Program = the actual subject of a particular K12 level that is available
Lessons = the number of classes in a particular program, this ranges from 15 - 44 lessons per program.
Each lesson lasts 1 to 1.5 hours.

With the exception of one elementary English program that was postponed because the start of the Spring school term in China was delayed (yes, GSX online classes mirror actual school schedules), we successfully tracked and captured the number of students and actual discounted course fees (we know because we negotiated and bought these programs ourselves) for >20% of total available classes during Q1 2020.

As shown in the table below, there are a total of 34,726 IDs across 18 programs. This was sieved out from the 478,229 comments that were captured during these lessons. Of the total 34,726 IDs, 27,558 are unique, meaning that a percentage of them have purchased two or more programs simultaneously. This is a conservative figure since we also included all the potential planted users in these classes who have participated actively in the class.

Average no. of users



No.	Levels	Subject	Class name	Instructor	# of lessons Class dates	Course fees (net	No. of paid users R	Revenue
1	Elemtry	English	2020【春】《超级拼读》彻底搞定单词	Sam	44 9/2 - 9/7	3,498	Class delayed	due to virus
2	Elemtry	Chinese	2020【春】《无忧作文》第12期精讲-上	张镇	26 1/2 - 25/7	3,288	2,401	7,894,488
3	Elemtry	Chinese	2020【春】《无忧阅读》第12期精讲-上	张镇	26 20/3 - 16/6	1,600	2,068	3,308,800
4	Elemtry	Chinese	高效学习系列课	陈晓丹	37 15/2 - 2/6	2,098	811	1,701,478
				Subtotal	133		Subtotal	12,904,766
5	Middle 1	Chinese	【2020-春】七年级语文目标班	木木	15 22/2 - 6/6	1,899	1,664	3,159,936
6	Middle 1	Math	【2020-春】七年级数学目标班	傲德	15 22/2 - 6/6	1,899	2,596	4,929,804
7	Middle 1	English	【2020-春】七年级英语目标班	李军	15 22/2 - 6/6	1,899	4,333	8,228,367
8	Middle 2	Chinese	【2020-春】八年级语文目标班	木木	15 23/2 - 6/7	1,899	1,082	2,054,718
9	Middle 2	Math	【2020-春】八年级数学目标班	傲德	15 22/2 - 6/6	1,899	1,357	2,576,943
10	Middle 2	English	【2020-春】八年级英语目标班	李军	15 22/2 - 6/6	1,899	5,158	9,795,042
11	Middle 2	Physics	【2020-春】八年级物理目标班	一森	15 22/2 - 6/6	1,899	239	453,861
12	Middle 2	Chinese	【2020-春】九年级语文目标班	木木	15 23/2 - 6/7	1,799	1,082	1,946,518
13	Middle 3	Math	【2020-春】九年级数学目标班	傲德	15 23/2 - 6/7	1,799	3,999	7,194,201
14	Middle 3	English	【2020-春】九年级英语目标班	李军	15 22/2 - 6/6	1,899	2,885	5,478,615
15	Middle 3	Physics	【2020-春】九年级物理目标班	一森	15 22/2 - 6/6	1,599	1,871	2,991,729
				Subtotal	165		Subtotal	48,809,734
16	High 1	Chinese	2020-春 高一语文拔高班	何信	16 23/2 - 7/6	2,898	840	2,434,320
17	High 1	Math	2020-春 高一数学拔高班 (海) (4+3)	程玲海	16 23/2 - 7/6	2,898	233	675,234
18	High 1	English	2020-春 高一英语拔高班 (瑶)	张冰瑶	16 15/2 - 7/6	2,898	1,260	3,651,480
19	High 1	Physics	2020-春 高一物理拔高班	马红旭	16 22/2 - 6/6	2,898	847	2,454,606
	_			Subtotal	64		Subtotal	9,215,640
				Total	362		Total Revenue	70,930,140
								24.70
							Total paid users	34 72

The total revenues from these 34,726 IDs sum up to around RMB 70.9 million. We then extrapolated the revenues from this sample onto the rest of the remaining untracked classes and have arrived at an estimate of K-12 Q1 2020 revenue of RMB 316 million, which amounts to a 60% discrepancy with reported K-12 Q4 2019 revenue of RMB 773 million. Considering the consistent growth rates of nearly doubling every quarter for the past four quarters, we believe the revenue overstatement for 2019 could be as much as 70%.

	Total tracked revenue	Tracked lessons	Total lessons	% of total	Extrapolated revenues		
Elementary sch	12,904,766	89	459	19%	66,553,793		
Middle sch	48,809,734	165	418	39%	123,651,326		
High Sch	9,215,640	64	875	7%	125,995,078		
	Actual Q1 2020 revenue from K12						
	Reported Q4 2019 revenue from K12						
		% discrep	oancy assumed a	zero growth	-59.1%		

The implications are devastating. With K-12 revenues making up more than 80% of GSX total revenues, it is clear that total actual revenues are likely to be much lower that reported revenues. One other thing: the company said that they have a large number of paying students that have paid for the RMB 99 and RMB 199 trial classes. It is unlikely that revenues from these trial classes make up for a significant portion of total revenues. We have taken a conservative approach to our estimates and we believe that the buffers given should more than make up for this potential gap.



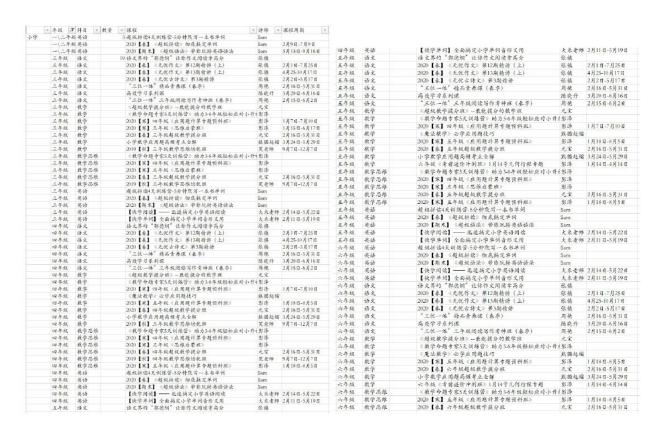
Untangling the web of lies – how GSX has potentially fudged their numbers using duplicate classes

We suspect that GSX has fluffed their numbers by using duplicated classes. This is done with the elementary-school programs, which GSX has claimed in their reports to be the fastest growing segment.

GSX CFO Shannon Shen:

"Among K-12, I want to highlight our primary school business, whose revenue grew by 894% year over year in the fourth quarter."

Below is a list of all elementary school level programs.



When we tabulated the total number of courses from the GSX website, we recorded 100 different programs across the six primary levels. That is before we looked closer into each of the programs to select the ones to purchase and track.



年级 温	科目 十 数量	* 浸程 **		课程周期
三年级	教学思维	《数学命题专家5天训练营》助力3-6年级轻松迎对小丹	The second second	
三年级	新华思维	2020【家】四年级《应用题计算专题刊科班》	形泽	
5年级	數學思维	2020【家】三年級《思维启蒙班》	影泽	
- 年级	截季思维	2020【春】三年飯超級被學提分班	充宝	2月16日-5月31日
- 年級	教学总维	2019【秋】三年級數學思維場优雅	笑老师	9月7日-12月7日
三年级	表语	超級舒誘4天網絡營.5分种联另一本书單词	Sam	7/4-12/4
三年级	表语	2020【春】《超級拼读》彻底搞定单词	Sam	
三年級	表語	2020【期末】《超級语法》带你此榜英语语法	Sam	
9年級	语文	格文界的 "郭德朝" 让你传文阅读拿高分	张 韩	
甲年級	语文	2020【泰】《无枕传文》第12期精計(上)	松饒	2月1日-7月25日
9年级	语文	2020【春】《无忧传文》第13期精評(上)	化铁	4月25-10月17日
9年級	语文	2020【录】《无忧古诗文》第3期精讲	松鎮	2月2日-5月17日
中华级	语文	"三位一体"特品资源保(春季)	用艳	2月16日-5月31日
中年级	语文	高效学习系列课	陈晓丹	3月20日-6月16日
9年級	传文	"三位一体"三年版阅读写作者神疏(表導)	用枪	2 R 15 B - 6 R 2 B
中华级	教学	《超級数學提分班》一般能提分的數學班	光宝	70100-005d
	教学			
中华级		《教學命題专家5天训练營》助力3-6年級輕松应对小升		17-0-7100
9年级	教学	2020【宋】四年級《应用題计算者題所科班》	影準	1月7日-7月10日
中年级	教予	小學教学应用題高领考点全解		3月24日-5月29日
平年级	教予	2019 【秋】三年級數學思維時代班	気老师	9月7月-12月7月
中年級	教学思维	《教學命題专家5天训练營》助力3-6年級輕松应对小升		
中年级	数学思维	2020【宋】四年級《应用題计算寺題預料班》	影泽	
中年级	教学思维	2020【宋】三年版《思维启蒙推》	影泽	
中級	教学思维	2020【素】四年级超级数学提分班	元宝	2月16年-5月31日
中級	教学思维	2020【宋】五年级《应用题付算专题预料班》	影净	1月18日-8月5日
中级	美術	超級拼號4天训练營-5分針联写一本书单词	Sam	
中级	美語	2020【来】《超级拼读》彻底搞定华词	Sam	
平级	美語	2020【朝末】《超級语法》帶你跳将英语语法	Sam	
中級	美排	【快学阅读】—— 迅速指定小平英语阅读		2月14日-5月22日
中年级	美語	【快学单例】全面搞定小学单例音形又用		2月11年-5月19日
五年级	语文	语文界的"郭德娟"让作作文阅读拿高分	依執	
五年級	语文	2020【未】《无忧作文》第12船精詩(上)	依慎	2月1日-7月25日
五年級	语文	2020【本】《无忧怍文》第13翰精詩(上)	依執	4月25-10月17日
五年級	语文	2020【本】《无忧古诗文》第3期精诗	花葉	2月2日-5月17日
五年级	语文	"三位一体" 精品素振课 (春半)	用拖	2月16日-5月31日
五年级	语文	高效學习系列课	陈晚丹	3月20日-6月16日
五年级	语文	"三位一体"三年级阅读写作考神迎 (奉李)	用艳	2月15年-6月2日
五年级	教 学	《超级数学提合疏》最能提分的数学班	光宝	
五年级		《數學命題专家5天訓練營》助力3-6年級輕松应对小作		
五年级		2020【家】四年飯《应用超计算专题预科班》	影泽	1月7日-7月10日
五年级	截季	《魔法教學》必學应用題技巧	無獨巡信	
五年級	教学	2020【寒】五年級《应用避计算专题预料班》	影泽	1月18日-8月5日
五年级	教学	小學裁学应用超高频考点全解	無獨巡信	3月24日-5月29日
五年级	教学思维	《截學命題专家5天训练營》助力3-6年級極於应防小丹	多年	
五年級	数学思维	2020【寒】四年級《应用避计算专题预料班》	影泽	
五年级	数学思维	2020【米】三年级《思维启蒙雅》	影泽	
五年版	数学思维	2020【春】五年级超级数学提分班	充定	2月16日-5月31日
五年級	教学思维	2020【宋】五年版《应用题计算专题预料班》	影泽	1月18日-8月5日
五年级	类语	超级拼读4天训练营-5分钟联写一本书单词	Sam	
五年超	表语	2020【本】《超级析法》彻底搞定单词	Sum	
三年报	类語	2020【期末】《超級语法》带你此转处语语法	Sum	
三年級	表話	【快学阅读】—— 迅速构定小学英语阅读	大米老师	2月14日-5月22日
5.年级	表語	【快学单词】全面确定小学单词音形义用		2月11日-5月19日
中级	表話	超級將請4天訓练營-5分钟戰器一本书單词	Sum	
1年级	表語	2020【春】《超级桥法》彻底搞定单词	Sum	
4年級	美語	2020【潮末】《超级语法》带诉托特英语语法	Sum	
1年級	妄語	【快學阅读】—— 迅速构定小學英語阅读		2月14日-5月22日
牛銀	英語	【快争单词】全面薪定小争单词音形义用		2月11日-5月19日
4年級	语文	语文界的"郭德纳"让你传文阅读全高分	张饒	-//11/4
中級	诗文	2020 【本】《光优作文》第12期稿詩(上)	依執	2月1月-7月25月
1年級	得文 得文	2020 [本] 《元代行义》 第12册标符(上)	依條	4月25-10月17日
7年級		2020【春】《无忧古传文》第3期精讲	伝统	2月2月-5月17日
r 年級 F 年級	福文 28 中			
	福文	"三住一体"精品素兼課 (春季)	月柱	2月16年-5月31日
中級	得文	高效學习系列课	陈晚丹	3月20日-6月16日
4年級	得 史	"三位一体"三年级阅读写作者神迹 (春季)	月枪	2月15日-6月2日
七年級	航华 航华	《超級数学提合班》 在能提分的数学班 《教学命题专家5天训练营》助力3-6年級轻松应对小作	元宝	

We found out that 24 are free classes (hence excluded), 10 summer classes (hence excluded), and 46 programs are duplicates. Effectively, there are only 20 paid programs out of the 100 programs that we've initially recorded (100 total - 46 duplicates - 10 summer classes - 24 free classes = 20 paid classes).



The duplicates are classes that are exactly the same (taught by the same instructor and during the same time) for the different levels of elementary school. The duplicates appear in each of the elementary levels' menu of programs but end up with the same program ID number just before purchase (i.e., an elementary 1 student would purchase the exact same program as an elementary 6 student).

One may ask: How can a level 1 student take the same class as a level 6 student? The company could explain by saying duplicate classes are usually the ones that teach the techniques of language or math, for instance in the example below, how to learn English Vocabulary effectively. Like you, we are still very skeptical about the large number of duplicate classes and suspect that duplicate classes were used mostly to give the impression that there are a large number of elementary courses offered.

一\二年约	及英语	2020	【春】	《超级拼读》	彻底搞定单词	
三年级	英语	2020	【春】	《超级拼读》	彻底搞定单词	
四年级	英语	2020	【春】	《超级拼读》	彻底搞定单词	
五年级	英语	2020	【春】	《超级拼读》	彻底搞定单词	
六年级	英语	2020	[春]	《超级拼读》	彻底搞定单词	

One example of duplicates: elementary levels 1 to 6 have the same program called "2020 Spring: Super Puzzles, Conquer English Vocabulary"

Because these duplicates only appear for elementary levels—touted by GSX as their fastest growing segment—we can't help but wonder if this is a trick that GSX has conveniently used to fool the auditors and 'make up' for the shortfall in revenue (why not just claim twice the revenue for the same class).

*In the Appendix, we have included our methodology. Needless to say Citron has employed an extensive on the ground team in China who has come to these conclusions with web scraping, interviews, and deduction. While it is impossible to obviously capture the workings of any fraud 100% without being in court, we believe the work is complete enough to get us to our deduction of 70% fake revenues. Part 2 will provide more details with additional government documentation.



GSX management's behavior mimics all of the others in the past who have been guilty of fraud.

"The lady doth protest too much" – William Shakespeare

After going public less than a year ago at \$10.50 per share and insiders dumping stock in a secondary shortly thereafter at \$14 per share, the company's recent reaction to a small correction in its share price highlights GSX management's "sensitivity" when being called out on the accuracy of their numbers.

When asked about the accuracy of his traffic compared to respected sources of data information, the CEO responded in the most non-quantitative way.

"If you treat traffic as traffic, traffic is traffic. If you treat traffic as people, then it spreads from people to people."

Later in the US, the CFO responded,

"The most effective approach will always be visiting the company physically and in person to fully understand that the company, the management and the people. Did you may visit GSX to know those GSX people who devoted their full heart to our parents and students, those work day and night and still could jam the traffic and those young men and girls who fight for their beautiful life and serve each parents and students to their satisfaction."

What does all that mean? Why does no one know of your success but yourself?

When asked if there is any share pledge financing, the Chairman stated that until now the core management hasn't sold any of their shares and that he is even considering "purchasing some more shares."

GSX still didn't explain why so many co-founders are leaving. For instance, GSX Chairman Larry offered the simple explanation that Huaiting Zhang resigned for personal reasons and that Yuxiao Song left the company due to family reasons.

Why do GSX's Chinese Official Government Financials Differ from the Ones Filed with the SEC?



Lastly, and not to be tedious, we will discuss the answer that gives away that they are in way over their head with covering up the fraud.

For this, we analyze why their PRC credit reports and SEC filings do not reconcile.

In response to criticism of their PRC credit reports and SEC filings showing a 75% discrepancy in net profits, the company answered:

"The gap between the company's credit report and S-1 filing was actually GAAP difference between China and U.S. after the group's restructured to spin-off 2B business in 2017. The difference is totally reasonable and legitimate and has nothing to do with operational numbers."

Revenues (RMB'000)	2017	2018
Beijing Lexuebang (WFOE)	0	971
Beijing BaiJiaHuLian (VIE)	91,132	368,583
Beijing Genshuixue	0	0
BaiJiaChengXi	3,949	20,086
Beijing Jiazi	449	0
GaoTuYunJi	644	1,028
Shanghai Jinyou ¹	0	11,794
Sum Based on Credit Reports	96,174	402,462
SEC Reported Revenues	97,580	397,306
Overstatement in %	1.5%	<mark>-1.3%</mark>

Note 1: Assume full year revenues of Shanghai Jinyou for 2018.

Net Profit (RMB'000)	2017	2018
Beijing Lexuebang (WFOE)	(36,466)	(40,385)
Beijing BaiJiaHuLian (VIE)	(13,394)	164,513



Beijing Genshuixue	18	(2)
BaiJiaChengXi	(11,826)	901
Beijing Jiazi	(6,795)	(3,703)
GaoTuYunJi	(17,494)	(109,449)
Shanghai Jinyou	(168)	(623)
Sum Based on Credit Reports	(86,125)	11,252
SEC Reported Net Profit	(86,955)	19,650
Overstatement in %	1.0%	<mark>74.6%</mark>

Citron along with accounting experts dug through the F-1 and 20-F filings for any disclosures around a spin-off or divestiture, and the conclusion is that management is lying.

Page F-27 of F-1 filing notes that:

"Disposal of Beijing Baijia Shilian Technololy Co., Ltd ("Baijia Shilian") and Beijing Baijia Yuntu Technology Co. Ltd ("Baijia Yuntu")

In September 2017 and December 2017, the Group disposed 100% equity interest in Baijia Shilian and Baijia Yuntu to the existing shareholders of the Company for no consideration. The disposals were accounted as a pro rata distribution to the Group's shareholders and accordingly, any gains and losses resulting from the transaction were recorded as contribution from and distribution to shareholders.

The operations of Baijia Shilian and Baijia Yuntu prior to the disposal were insignificant and thus, did not have a major effect on the Group's operation."

<u>Page F-47 of 20-F filing</u> shows an RMB 6 million decrease GSX's valuation allowance related to subsidiary disposals in 2017. A RMB 6 million decrease in valuation allowance is in no way immaterial.



	Year e	ber 31,	
	2017	2018	2019
	RMB	RMB	RMB
Balance at beginning of the period	25,976	31,387	42,797
Additions	11,743	11,410	36,138
Decrease related to subsidiary disposals	(6,332)	_	_
Reversal			(38,583)
Balance at end of the period	31,387	42,797	40,352

How does an "insignificant" transaction drive a 75% difference in net profit between your SEC filings and PRC credit reports?

GSX also failed to address the main concern that these related parties exist to remove expenses off the company's books. Instead, they deliberately misconstrued the previous criticisms of Grizzly Research's and said that "Beijing Youlian transferred its profit to GSX." Moreover, the company failed to address the job postings that Grizzly Research found which basically signals that related parties are alter egos for GSX, as we have seen in other fraudulent Chinese companies over the years.



Another Red Flag – Fake Students

Several reports have accused the company of inflating its revenues by planting fake student users in WeChat groups. This can be spotted in their overly positive, frequent, and identical comments below.





During the video conference, Chairman Larry shared a story about how thorough auditors were, claiming they went through various sampling and complicated statistical models to ensure GSX operating data was not fake. However, we believe if the company showed the auditors the screen shots from their promotional WeChat groups that clearly signal duplicate accounts and fake students, auditors will not hesitate to issue an adverse opinion.





Credit to @leaps_capital for uncovering recent evidence showing that comments under GSX courses came from fake accounts. According to their research, 70% of the course comments were given by accounts with names that correspond to students of the ancient Chinese philosopher and politician, Confucius, and that many accounts used fake profile pictures. According to them, about 80% of the users are fabricated.

Note: Leaps Capital also analyzed their streaming software and found that there was nothing innovative about it. In fact, GSX cannot even support two-way communication, which is crucial to live streaming. Hence, they claim that 50% of the so-called large streaming classes are, in fact, videotaped.

Conclusion

Citron has uncovered more fraud in China than anyone. In 2011, the Chinese government was arresting locals who helped short sellers expose fraud. 2020 is completely different. The beauty of this whole thing is that we must give credit to the local Chinese consumers who helped expose fraud at GSX. This report could



not have happened without the diligence and tech-savvy of the locals who assisted us.

Cautious Investing to All

Appendix

The following information provided was compiled by a group of sophisticated on the ground researchers in China. We recommend readers read <u>Grizzly Research</u> and <u>Leaps Capital</u> for additional information.

Methodology

To estimate the companies' revenues for Q1, we dove deep into GSX operations. This included more than 1,000 hours of class time and cleaning up data over a span of a full quarter from January to March 2020. This represents >20% of the total available class hours during Q1 2020. We selected the more popular classes taught by GSX's star teachers in order to capture higher quality paid users and revenue.

The work has allowed us to clearly identify:

- Number of unique paid users
- Quality of comments to differentiate actual from automated users or bots
- Geographic distribution of users across China
- User patterns over the span of the classes to understand trends such as plateauing of user growth and potential drop-out rates

This has given us a high degree of confidence that our estimate of users and revenue of GSX is accurate.

Since K-12 classes make up more than 80% of the total revenue of GSX, we only chose to buy, track, and analyze the K-12 classes that were available during Q1 2020. To ensure we have a healthy and representative sample size, we selected >20% of total available lessons and picked the more popular classes with the so-called "star teachers." We believe our sample was a high-quality representation of GSX's student body as the classes that we did not select had below-average adoption rates.



Below is a list of the classes we've selected, and the teachers' names:

	Levels	Subject	Class name		Instruct or	Total classes	Class dates	Course fees (net)
1	All Elmtry	English	2020【春】《超级拼读》 搞定单词	彻底	Sam	44	9/2 – 9/7	3498
2	All Elmtry	Chinese	2020【春】《无忧作文》 期精讲-上	第12	张镇	26	1/2 – 25/7	3288
3	All Elmtry	Chinese	2020【春】《无忧阅读》 期精讲-上	第12	张镇	26	20/3 – 16/6	1600
4	All Elmtry	Chinese	高效学习系列课		陈晓丹	37	15/2 – 2/6	2098
			s	ubtotal		133		
5	Middle 1	Chinese	【2020-春】七年级语文	目标班	木木	15	22/2 – 6/6	1899
6	Middle 1	Math	【2020-春】七年级数学	目标班	傲德	15	22/2 – 6/6	1899
7	Middle 1	English	【2020-春】七年级英语	目标班	李军	15	22/2 – 6/6	1899
8	Middle 2	Chinese	【2020-春】八年级语文	目标班	木木	15	23/2 – 6/7	1899
9	Middle 2	Math	【2020-春】八年级数学	目标班	傲德	15	22/2 – 6/6	1899
10	Middle 2	English	【2020-春】八年级英语	目标班	李军	15	22/2 – 6/6	1899
11	Middle 2	Physics	【2020-春】八年级物理	目标班	一森	15	22/2 – 6/6	1899
12	Middle 2	Chinese	【2020-春】九年级语文	目标班	木木	15	23/2 – 6/7	1799
13	Middle 3	Math	【2020-春】九年级数学	目标班	傲德	15	23/2 – 6/7	1799



14	Middle 3	English	【2020-春】九年级英语目标班	李军	15	22/2 – 6/6	1899
15	Middle 3	Physics	【2020-春】九年级物理目标班	一森	15	22/2 – 6/6	1599
			Subtotal		165		
16	High 1	Chinese	2020-春 高一语文拔高班	何信	16	23/2 – 7/6	2898
17	High 1	Math	2020-春 高一数学拔高班(海) (4+3)	程玲海	16	23/2 – 7/6	2898
18	High 1	English	2020-春 高一英语拔高班(瑶)	张冰瑶	16	15/2 – 7/6	2898
19	High 1	Physics	2020-春 高一物理拔高班	马红旭	16	22/2 – 6/6	2898
			Subtotal		64		
			Total class hours tracked		362		

To date, we have bought and tracked 29% / 39% / 7% of the total available lessons of elementary / middle / high school classes, respectively. The reason why we tracked fewer high school classes is simply because there are more subjects and programs for high school students than for middle and elementary school students.

尚二	类增	2020集尚有受路被尚胜(断)	位: 22	1,698	8	1月19日-2月9日
高三	物理	2020尚考物理二轮复习春季症	联佩	2,898	16	2月16日-5月10日
商三	物理	2020高考物理二轮复习寒假症	联佩	1,698	7	1月20日-1月31日
高三	化学	2020高考化学二轮复习寒假班	更树赋	1,698	7	1月20日-1月31日
药三	化学	2020尚考化学二轮复习春李班	交树斌	2,898	16	2月16日-5月10日
高三	化学	2020尚考化学二轮复习寒假症	张站站	1,698	7	1月20日-1月31日
商三	化学	2020尚考化学二轮复习春季班	非故故	2,898	16	2月16日-5月10日
高三	生物	2020高考生物二轮复习寒假斑	周莹	1,698	7	1月20日-1月31日
药三	生物	2020尚考生物二轮复习春李维	周堂	2,898	16	2月15日-5月9日
商三	生物	2020高考生物二轮复习寒假症	张继光	1,698	7	1月20日-1月31日
高三	生物	2020高考生物二轮复习春季班	张继光	2,898	16	2月15日-5月9日
高三	地理	2020高考地理二轮复习寒假班	李伟俊	1,698	7	1月20日-1月31日
高三	地理	2020尚考地理二轮复习春季症	李伟俊	2,898	16	2月16日-5月10日
商三	历史	20/20高考历史二轮复习寒假班	被消	1,698	7	1月20日-1月31日
高三	历史	2020高考历史二轮复习春季班	緒洞	2,898	16	2月16日-5月10日
高三	政治	2020商考政治二轮复习寒假班	徐微微	1,698	7	1月20日-1月31日
高三	政治	2020高考政治二轮复习春季班	徐微微	2,898	16	2月16日-5月10日

More subjects for high school as seen in the high school program list above, including history, politics, geography, and so on, that middle and elementary school do not have



Also, there are sometimes more than one teacher for the same high school program, and these programs are also split into shorter and longer sessions, just to give high school students more selection, since they are older and usually are given more freedom from their parents than the younger middle and elementary school crowd.

170 -175	212 - Co.	■ ACCES (19) (2) ■ 119 (2) (1) (2) (2) (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	179,999,79-	1,030 10	TITOM OND
尚三	数字	2020高考数学二轮复习春季班(数)	殷方展	2,898 16	2月15日-5月9日
商三	数学	2020高考数学二轮复习寒假班 (鼓)	殷方展	1,698 7	1月20日-1月31日
高三	数学	2020高考数学二舱复习森季班 (超)	赵礼显	2,898 16	2月13日-5月9日
高三	教学	2020高考新学二轮复习寒假班(赵)	赵礼巫	1,698 7	1月20日-1月31日
高三	教学	2020高考較学二轮复习春季班 (胡)	胡金利	2,898 16	2月15日-5月9日
高三	数学	2020高考数学二轮复习寒假班 (朝)	胡金利	1,698 7	1月20日-1月31日

Three different teachers for the same math program for High School level 3; the same math programs are split into a shorter lessons (7) and longer ones (16)

Hence, we only selected the more popular teachers and programs to track. For example, English programs would definitely be more popular than politics programs. This also supports our conservative selection process in order to obtain more accurate extrapolated numbers.

We captured a total of 478,229 comments made by a total of 27,558 unique users whom we believe are paid users in these classes. Of the 27,558 unique users, we found that 22% of them enrolling in 2 or more classes.

Breakdown of students enrolling in 2 or more classes					
	Student numbers	% of total students			
2 classes	5,025	18.2%			
3 classes	981	3.6%			
4 classes	64	0.2%			
5 classes	2	0.0%			
Number of students in 2 or more classes	6,072	22.0%			

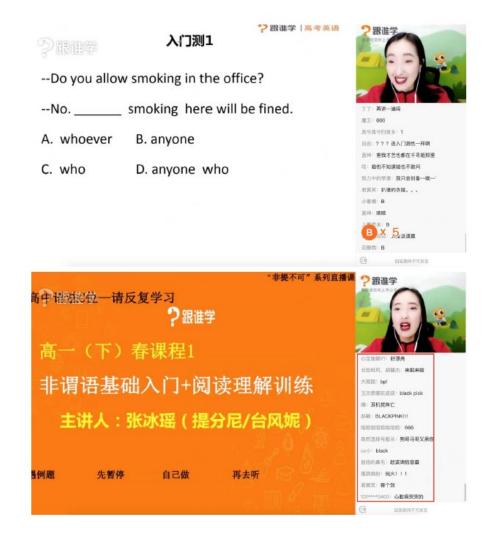
Total number of unique	27,558	
paid users		



How are unique paid users captured?

Paid users participate actively throughout these classes, responding to the teachers' questions or asking teachers questions in the comment section (see red box in the image below). These classes are only available to paid users. As long as a user makes a comment once over the entire duration of the class (10-12 weeks) their unique ID will be captured.

Below are snapshots of an English lesson with live comments on the right-hand corner.



We believe that most paid students would engage in the class at some point. This can range from posting a single "1" during the start of class to acknowledge the teacher, or answering and asking questions. Every student leaves a mark in class



and as long as they leave one comment, we can capture the unique ID of the paid user. Social interaction is highly encouraged during the online class and based on our interviews with numerous students and parents, most if not all of them confirm that online engagement is high and is a barometer for parents to gauge their child's participation in the online lesson.

We believe that we have captured >95% of students in all classes tracked and that it would be extremely rare for the less motivated students to have paid for a class and not participate at all over a 3-month period.

Finally, to further support that our method is sound, the average paid users per class that we captured also matches what the company reported during its Q4'19 earnings transcript.

GSX CFO Shannon Shen:

"Average enrollments per class further increased from 1,400 in the third quarter in 2019 to around 1,700 in the fourth quarter."

Average enrollments that we have captured is 1,929, which is significantly higher than the average of 1,700 per class disclosed by the company. This means that the classes we've selected are indeed the more popular ones and our estimate is likely inflated by planted users.

Overlapping of customers from Winter

We also wanted to address the issue of overlapping classes from Winter or Q4 2019 (begun in October to December) and extended into Spring. Similarly, many of the Spring classes also overlapped into Summer (i.e., Q2 2020). We assumed that all monies and classes started in Q4 2019 are recorded as revenues in Q4 2019 and that all spring classes that began from January to March are recorded in Q1 2020. Revenue treatment should cancel out the overlap effects. Another simple factor: since the company is constantly developing more classes, Spring programs should exceed the number of Winter programs.

Prices

The net fees that we've paid for the classes are significantly lower than list prices. We are using these prices in calculating the net revenues of GSX during Q1 2020

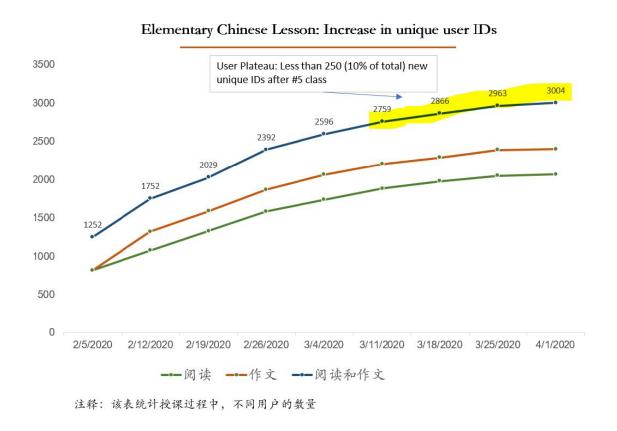


instead of the list prices, as most parents are able to obtain these prices as a first-time user or through a bundled price. We didn't even try to bargain very hard.

User plateau and tracking

We believe that the numbers we have today cover nearly all the students for three key reasons:

- New additional unique IDs typically plateau after the 4th or 5th class
- Students typically do not purchase a class that has already started 3 or 4 classes ago
- GSX doesn't allow new signups for programs that have started for a while (after 4th or 5th class) and instead will direct students to the same class running in the next quarter (i.e., from Spring to Summer / Q1 to Q2)



The graph above shows the cumulative increase in unique IDs for three different elementary Chinese programs that we've been tracking, and the plateau of new users is evidenced from the less than 250 new IDs (less than 10% of total users) increase from lesson #6 to #9.

User Geography



As mentioned earlier, a unique user ID's geographic location can only be captured when he or she changes the name that was initially auto-generated when one first logs in as a free user. Of all the 27,558 unique IDs that we have captured in the paid classes, only 15,257 of them, or 60%, have changed their names. Hence, our geographic data is only limited to this sample size.

The table below shows a breakdown of paid students across China and a few from overseas.



Provinces/Other Countries	Student # %	6 of total	Less Hubei Prov
Hubei Province	6,533	42.82%	-
Guangdong Province	980	6.42%	11.23%
Jiangsu Province	870	5.70%	9.97%
Zhejiang Province	744	4.88%	8.53%
Shandong Province	528	3.46%	6.05%
Beijing	463	3.03%	5.31%
Hebei Province	423	2.77%	4.85%
Liaoning Province	420	2.75%	4.81%
Sichuan Province	406	2.66%	4.65%
Henan Province	400	2.62%	4.59%
Hunan Province	384	2.52%	4.40%
Fujian Province	338	2.22%	3.87%
Anhui Province	305	2.00%	3.50%
Shaanxi Province	298	1.95%	3.42%
Jiangxi Province	280	1.84%	3.21%
Shanghai	269	1.76%	3.08%
Shanxi Province	193	1.26%	2.21%
Heilongjiang Province	167	1.09%	1.91%
Yunnan Province	164	1.07%	1.88%
Jilin Province	150	0.98%	1.72%
Chongqing	148	0.97%	1.70%
Tianjin	147	0.96%	1.69%
Inner Mongolia Autonomous Region	140	0.92%	1.60%
Gansu province	111	0.73%	1.27%
Guangxi Zhuang Autonomous Region	103	0.68%	1.18%
Guizhou Province	88	0.58%	1.01%
Xinjiang Uygur Autonomous Region	47	0.31%	0.54%
Qinghai Province	38	0.25%	0.44%
Hainan	35	0.23%	0.40%
Ningxia Hui Autonomous Region	25	0.16%	0.29%
Xinjiang Province	23	0.15%	0.26%
Guangxi Province	12	0.08%	0.14%
Inner Mongolia	10	0.07%	0.11%
Ningxia	4	0.03%	0.05%
Japan	4	0.03%	0.05%
Hong Kong Special Administrative Region	3	0.02%	0.03%
United States	2	0.01%	0.02%
Tibet Autonomous Region	1	0.01%	0.01%
Australia	1	0.01%	0.01%
Total	15,257		

GSX announced earlier this year that they would be giving out RMB 20 million worth of free classes to the students who are on lockdown in Hubei province, especially in Wuhan City. As mentioned above, we found that nearly half the paid users were from Hubei province and largely from Wuhan city for Q1 2020. This is troubling because it could only mean that GSX didn't have a strong diversified



student base to begin with, and that the previous sales revenues are largely exaggerated.

Breakdown of cities in Hubei Province	#
Wuhan	6,322
Yichang City	27
Jingzhou	25
Xiangyang	21
Xiaogan	18
Huanggang	16
Ezhou	16
Jingmen	13
Shiyan	9
Qianjiang	6
Enshi Tujia and Miao Autonomous Prefecture	6
Xianning	5
Suizhou	4
Tianmen	2
Yellowstone	2
Xiantao	1
Unknown	40
total	6,533

Breakdown of Tier cities	#	%
Tier 1 and 2	10,326	68%
Tier 3 and 4	4,931	32%
Total	15,257	

Another interesting discovery was that most of the GSX students appear to come from Tier 1 and 2 cities (Wuhan alone contributes 6K people and is a Tier 2 city). Why would the company lie about this and say that the majority of paid users are from lower tier cities? Two possible explanations:

- Our sample size is too small and not representative of the entire paid user population
- GSX is lying that the majority of users are from lower tier cities in an attempt to explain how the company has grown so fast despite many Chinese parents in Tier 1 and 2 cities being unaware of GSX



Which explanation to believe? Previous short reports have already correctly pointed out that GSX's prices are significantly higher than its more well-known online education peers. Also, we all know that lower-tiered cities are typically more sensitive to price. If the product is somewhat similar, it usually comes down to price—and in this instance, it should be no different.

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