

# 2019/2020 SENCOND ISSUE 第二期







居家学习 : 培养面向未来的学习者 Home Learning: Developing Future-Oriented Learners	03
以另一种方式陪伴孩子 Accompany Children in a Different Way	06
新颖的线上课堂 Novel Online Learning	08
小学部网络学习的好处 The Benefits of E-Learning in Primary	10
中西融合教育中的数学 Mathematics in Integrated Education ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	12

# 学习不停步 Never Stop Learning

# 居家学习:培养面向未来的学习者 Home Learning: Developing Future-Oriented Learners



因新冠肺炎疫情停课期间,北京耀华居家学习顺利开展。每天中外籍老师各自进行50分钟居家教学,并给学生安排总计2小时的独立学习时间,其中包括美术、小提琴、体育,以至音乐和图书馆活动。

北京耀华华籍校长孙姗姗女士说: "居家学习不是简 单照搬传统教学,老师要重新设计课程。学生居家完 成阅读学习,独立进行自主探究,用有限的居家学习 时间与同学讨论分享,老师再给予反馈和修正,这特 别能体现'翻转课堂'的理念。"

### 受教的时刻

六到八年级语文老师潘彩凤设计了一套主题阅读方案, 例如七年级的主题是"小人物大情怀"。潘老师不断 更新素材,将时事热点搬进教学,如日本捐助物资上 的诗句与硬核防疫标语相比较,引发讨论。八年级承接上学期的"新闻"单元,探讨如何辨识谣言,如何 在阅读中形成自己的理性思考。

潘老师说: "疫情下的教育可以成为一个可贵的 teachable moment (受教的时刻),学生感受到并表 达出来的东西,能够让他们在疫情中有所成长。"她 希望学生拥有独立判断力,在事件和事件之间,在文 本和文本之间,以及文本和自身、世界之间建立联结, 多角度地观察生活,让自己真切地体验和思考,在综 合学习中加强批判性思维和与人合作交流的能力。

## 埋下一粒种子

居家学习刚启动时,教育部规定"不得授新",给老师带来挑战,同时也是契机。

三年级语文老师徐晓群说:"在学校的日常教学中, 受限于教学任务的压力,我们首先需要完成课文的学 习,(所以)只能把重点放在字、词、句的基础掌握 上。"徐老师就利用居家学习的大块时间,带孩子静 下心来做纯粹阅读,培养整本书阅读的素养和创作能 力——这也是传统语文学习的首要目标。

为期四周的日本儿童文学作家新美南吉的作品阅读课, 围绕"狐狸的故事"展开,阅读量有二万字之多。徐 老师充分利用"翻转课堂",进行文本比较阅读和深 入分析。她把"文章的人物分析"单独录制成20分钟 的微课视频,"这样在课上无法细化的内容,孩子就 可以在专注的独立环境中,全身心地投入和理解。" 徐老师还打算继续这一尝试,与课堂相互结合。

徐老师形容,这段居家学习的整本书阅读时光,就像 (在孩子心中)"埋下一粒阅读的种子",而她也像"秋 收的农民伯伯一样,沉浸在丰收的喜悦里"。她说:"以 前很多同学不会分段,这次问题都迎刃而解。大家的 童话创作质量都非常高。故事结构起承转合,过渡自 然,'转'得巧妙,吸引读者。从很多孩子的故事中 我能读到新美南吉那种温暖和细腻的描写。这样的喜 悦是老师得到的最高成就了。"

# 学习激励,无时不在

艺术老师 Iestyn Shaw 发现,居家学习过程中互动, 使得学生可以互相提问和解释,彼此提供支持。这让 居家学习得以顺利开展,并让学生保持热情。"对于 艺术设计科目,目前的居家学习平台有一定局限,学 生在家里没法合作完成实践项目,或使用多样的学习 资源。但这些并没有阻止学生发展他们的艺术能力和 知识。"Shaw 老师为每个年级设计了一个独特的主题, 包括非洲艺术、动物、日常用品、幻象、饮食,高年 级则接触到立体主义和超现实主义,"我被收到的杰 出作品淹没了!"

老师注意到,居家学习进行一段时间后,学生在各自 的学习空间里,反而提高了专注力。平时在课堂上不 愿发言的孩子,居家学习中变得主动积极。孙校长对 此同样感到惊喜:"学习者有不同的学习风格,或许 他们在居家学习过程中找到了更得心应手的学习方式, 参与度反而更好。我们希望这样的学生赢得自信后, 回到传统课堂也能展现积极一面,相信'我可以做 到'。"

对于自律能力尚欠缺的低年级孩子,居家学习难度更 大,不过家长也表达了感谢和支持。K4班郭嘉荣的妈 妈说:"虽然学龄前幼儿注意力容易分散,不能完全 吸收居家学习的课程,但我们感受到老师真的有认真 思考,居家学习内容很丰富,英语、中文绘本、数学、 体育各方面都涉及到。"令郭妈妈惊喜的是,老师会 细心观察小朋友,并及时给予反馈和修正。看到小朋 友在屏幕上涂画,老师并没有批评。没多久,老师就 想了一个办法,让小朋友轮流在屏幕上写数字,或是 在 PPT 上圈出指定图案,有效利用屏幕进行互动。



YWIES Beijing home learning was implemented successfully in the school suspension period due to the COVID-19 pandemic. Every day, Chinese and Western teachers each conducted classes at home for 50 minutes, and arranged a total of two hours of self-study for students which included arts, violin, sports, music and library activities.

"Home learning doesn't simply copy traditional teaching, but

also requires teachers to redesign the curriculum. Students finish reading at home, explore study topics independently, discuss and share them in limited home learning time, and teachers give feedback and corrections. What we do reflects the concept of 'flipped classroom'," YWIES Beijing Chinese Co-Principal Jessica Sun said.

### A Teachable Moment

Ms Grace Pan, Grade 6-8 Chinese Teacher, designed a thematic reading programme. For example for the theme of Grade 7, "Big Love of Little People", Ms Pan constantly updated the material and brought current events into the classroom such as comparing poems on Japanese donated materials with slogans of "hard core epidemic prevention". Grade 8 continued the "news" unit of last semester, exploring how to identify rumours and form their own rational thinking in reading. "Education during the outbreak can be a valuable teachable moment. What students feel and express can let them grow in the outbreak," said Ms Pan. She hopes that students can have independent judgment, establish a connection between events, between texts, between texts and themselves and between texts and the world, observe life from multiple perspectives, express their real experience and thinking, and enhance their critical thinking, co-operation and communication in comprehensive learning.



#### Plant a Seed

When home learning first started, the Ministry of Education stipulated that no new teaching is allowed, presenting teachers with both challenges and opportunities.

"In the daily teaching of the school, due to the pressure of teaching tasks, we need to complete the study of the text first. So we focus on the basic grasp of words and sentences," said Ms Kristin Xu, Grade 3 Chinese Teacher. She therefore allowed the children a chunk of time at home for reading so that they could develop the habit of reading a whole book and creativity – the primary goal of traditional language learning.

A four-week reading project about "The Story of the Fox" by Japanese writer Nankichi Niimi covered 20,000 words of content. Ms Xu made full use of the "flipped classroom" to do text comparison reading and in-depth analysis. She recorded the "character analysis of the article" and made it into a 20-minute micro-class video. She explained, "In this way, the content



that cannot be detailed in the class can be fully absorbed and understood by the students in an independent environment." Ms Xu plans to continue this experiment and integrate it into classes.

Ms Xu described reading of the entire book during home learning as "like planting a seed of reading (in the hearts of the children)," and she was "like a farmer in the autumn harvest, immersed in the joy of harvest." "Everyone's creation of fairy tale is of very high quality. The stories are structured well with natural transition and clever 'turns' to attract readers. From many children's stories I can read the warm and delicate description by Nankichi Niimi. Such joy is the crowning achievement of a teacher," she said.

### **Learning Motivation Is Everywhere**

Mr lestyn Shaw, Arts Teacher, has found that home learning interactions allow students to ask questions, explain to each other,



and offer mutual support, keeping home learning smooth and students enthusiastic. "For art and design subjects, the current home learning platforms are limited, as students are unable to collaborate on practical projects or use a variety of learning resources. But that hasn't stopped students from developing their artistic skills and knowledge," said Mr Shaw. He designed a unique theme for each grade, including African arts, animals, everyday objects, illusions, food and drink, and at the same time the upper grades were exposed to cubism and surrealism.

Teachers noticed that after a period of home learning, students' concentration actually improved thanks to their own study space. Children who were usually reluctant to speak up in class became active in home learning. Chinese Co-Principal Ms Sun was also surprised, "Learners have different learning styles. Maybe they find a more convenient way to learn at home and they are more engaged. We want these students to gain confidence and then when going back to the traditional classroom show the positive side, believing 'I can do it'."

Home learning is harder for younger children who lack selfdiscipline; nevertheless parents have expressed gratitude and support. "Although preschoolers are easily distracted and can't fully absorb the contents of home learning, we feel that the teachers have thought the content through, and the content is very rich, including English, Chinese picture books, mathematics, and sports," said K4 class Guo Jiarong's mother. To her surprise, the teachers observed the children very carefully, gave timely feedback and corrected children's mistakes. Seeing the children drawing on the screen, the teacher did not criticise them. It wasn't long before the teacher came up with a way to effectively use the screen for interaction by having the children take turns writing numbers on the screen or circling specific patterns on the PPT.



以另一种方式陪伴孩子 Accompany Children in a Different Way



动。小班一位家长和孩子一起用废旧材料自制"斗兽 棋",拍摄了教学视频与大家分享,得到班级内所有 家庭的喜爱,一时成为全班孩子的共同爱好,孩子和 家长还会在微信群里讨论下棋的心得和"战术"。

许久未能见面,老师和孩子都非常想念对方。幼儿园 发起每周一次线上Circle Time,老师、孩子定期连 线,彼此问候,聊聊自己假期的有趣生活,并参与老 师设计的各种游戏和任务。根据孩子聊天的话题和兴 趣,老师还录制了游戏视频,比如手指小游戏、科学 实验、绘本故事、室内体能游戏等。中班为了感谢在 疫情中坚守岗位的医务人员、警察、社区工作者等, 老师制作了一部表达感谢的手语舞蹈的视频。为了做 好这视频,每个孩子都认真地练习,家长也鼎力帮助, 包括录制与剪辑。

疫情暂时隔离了幼儿园和家庭,但是无法隔离彼此间 的思念和关心。孩子童年的时光是宝贵的,我们一切 的工作都是为了让孩子能够充实而有意义地度过这段 特殊的时间。我们相信,无论外部世界正在发生什么, 生活和学习仍然要继续。

18 1- 95 - CE

一场疫情,打破了我们习以为常的日常生活。耀华国际教育幼儿园重庆融科园迟迟不能开学,孩子不能和 老师、同伴见面,往日幼儿园热闹、充满欢声笑语和 奇思妙想的校园生活,变成了孩子长达数月在家里和 爸爸妈妈一起的"宅居"。对家长而言,帮助孩子安 排在家的一日生活,开展一些适合孩子年龄特点的游 戏和运动,是一个全新的考验。为了帮助家长更好地 应对这考验,从2月初,楚珩教育研究所幼儿教育研 究团队开始了每日为家庭制作亲子教育资源。研究团 队负责人时萍教授说: "我们团队希望能够从幼儿教 育的专业视角,给家长如何在家里陪伴孩子提供一些 思路和建议。" 连续两个多月不间断,每日一例原创 亲子活动资源,经过教师先在微信群进行研讨、整理 后,再通过线上学习平台准时推送到家长手中。

看到家长陆续发来各种反馈,研究团队得知资源能够 引起孩子的共鸣,丰富家长和孩子的亲子时光,感到 很开心。同时,家长也会利用线上资源和孩子自创活



The daily life that we used to has been impacted by the virus outbreak. During the prolonged closure of YWIEK Chongqing Rongke, the children were unable to meet their teachers and classmates. Before the suspension, the kindergarten was a lively place full of laughter and wonderful ideas. But in the past months the children had to stay at home with their mums and dads for the whole day.



For parents, it was a challenge to make proper arrangements for the children's daily lives at home and to create age-appropriate games and activities for the children. To help parents meet the challenge, from the beginning of February, the research team of early childhood education at Chor Hang Educational Research Institute began to provide daily parent-child education resources that can be used in the home environment.

"Our team wants to provide parents with some ideas and advice on how to accompany their children at home from a professional perspective on early childhood education," said Professor Shi Ping, head of the team.

<complex-block>

For the last two months, the team has made every effort to prepare daily parent-child activity resources. These resources were sent daily through the online learning platform to the parents after the teachers discussing and organising them in their WeChat group. Receiving different kinds of parents' feedback, the team was very glad to know that these resources resonated with children, enriching the time parents spent with their children.

Furthermore, parents also used online resources for homemade activities. A parent and his child from K3 created a chess game out of old materials and filmed their own teaching video. It became the love of all the families and a common hobby of all the children in the class. Children and parents even shared their game insights and tactics on WeChat!

Teachers and children missed each other very much after not being together for so long. The kindergarten started a weekly online Circle Time so that teachers and children could regularly connect, say hello to each other, chat about the fun things they had been doing on holiday, and participate in the various games and tasks designed by the teachers.

4	看到这个围合图片,我突然想到之前在园厅,孩子们很喜欢把软垫立起来放在 地上,然后围成一个圆圈,小朋友们会站在圆圈里面,然后告诉老师那里就是 他们的家!
0	
à.	就是这个软垫
Â.	我想到个围合的游戏,就是拉个圆圈走走 🤣
0	对,关于围和图示在家庭中可以给孩子提供些什么材料支持呢?
T	我们班之前有小朋友将自己装进纸箱里
T	还有用很大的布图要自己

Based on the children's conversation topics and interests, teachers also made some activity videos, such as finger plays, science experiments, storybook readings, indoor physical activities. K4 teachers and children made a sign language dance video to show their gratitude to the people who performed duties faithfully during the outbreak like medical personnel, police officers, and community workers.

Although the outbreak temporarily separated our kindergarten with the families, it did not stop their concerns for each other. Childhood is precious, and we have worked hard to enable children to spend this time in a fruitful and meaningful way. We believe that no matter what happens in the world, life and learning must continue.

# 新颖的线上课堂 Novel Online Learning



面对突如其来的新冠病毒疫情,上海耀华临港校区在 "停课不停学"的方针指导下,开展了线上教学的探 讨及教师培训。学校在短短的几周之内,调整教学计 划及教学形式,准备教学辅导材料及学习资源,以保 障线上教学的顺利开展。各学科老师为了调动学生在 线学习的积极性,屡出奇招,设计出形式多样、内容 丰富的学习项目,以下就是其中一些例子。

## 课题一:疫情中的手

小学部中文老师金燕:我们正经历一次百年不遇的灾情,也是一个百年不遇开展生命教育的机会。从"手" 这个切入点了解哪些人奋斗在抗疫前线,保障大家的 安全和健康。希望我们的孩子能够多一点了解此次疫 情,增加对社会的关切度,对他人的关心,知道生命 存在磨难,需要面对磨砺,收获点滴成长。

### 课题二:探究与比较:百年间两大疫情

中学部历史老师张莉:在中国1910年也发生过一场很大的疫情——东北鼠疫。通过与新冠肺炎疫情的比较学习,让学生将历史事件与当下现实相结合,对人类滥捕滥吃野生动物、如何科学地防控疫情等各种问题 提出自己的见解,对未来如何避免灾难重演,提出他 们的想法或建议,明确每个人身上肩负的民族责任和 社会责任。回眸历史、感知历史,人们会获得别样的 启示。

## 课题三:都江堰

小学部语文老师刘志平:我希望同学学习这个项目, 看到"都江堰的精神",面对这次百年大灾疫情,同 样看到中华儿女传承下来的克服困难、扭转局势的精 神。

## 课题四:探究各省新冠肺炎疫情发展趋势

数学教老师陈丽平:通过本次课程,希望学生能够从 数据反映的客观现实了解此次疫情的发展趋势,并对 不同省份的疫情现状有更直观的对比。同时,能够充 分利用网络资源,收集并统计相关数据,合理选用相 关统计图呈现数据,运用不同的数学知识从不同的角 度分析疫情发展情况,学以致用。



每一个耀华人都在学习。无论是学校、老师、学生, 甚至家长,我们对教育有了新的发现和想法。真正的 学习,是因材施教,因地制宜,当下的疫情给了我们 一个这样的学习机会。



In the face of the sudden outbreak of the novel coronavirus, YWIES Shanghai Lingang carried out exploration of online teaching and teacher training to keep learning during the school suspension. Within a few weeks, we adjusted the teaching plan and teaching form, prepared teaching materials and learning resources, making sure that our online teaching would be smooth. In order to arouse the students' enthusiasm of online learning, teachers of various subjects came up with novel ideas for learning projects and rich content. Here are some examples.

### **Topic 1: Hand in the Epidemic**

Jin Yan, Primary Chinese Teacher: We are facing the once-in-acentury epidemic and it is also a once-in-a-century opportunity to develop life education. Using "hands" as a talking point, we taught children to know more about the people who work at the front line fighting against the CODIV-19 and safeguarding our health. We hope children understand more about this epidemic so they care more about society and other people. At the same time, we hope they will grow up after learning that there are difficult times in lives that we need to face.

# Topic 2: Inquiry and Comparison: Two Epidemic Situations in a Century

Zhang Li, Primary Chinese History Teacher: In 1910, an epidemic of pneumonic plague spread through the northeastern part of China. Comparing the COVID-19 pandemic with it, students learn to connect the reality to history and form their opinions on issues like humans catching and eating wild animals indiscriminately and the scientific ways of infection prevention and control. They also express their ideas and suggestions on how to prevent the same disasters from happening in the future. The study helps them understand their national and social responsibilities. People can gain inspiration from reviewing and recognising history.

### **Topic 3: Dujiangyan Irrigation System**

Liu Zhiping, Primary Chinse Teacher: Through this project, we hope students can invoke "Dujiangyan spirit". Facing this once-in-acentury pandemic, the Chinese people, as we also see, inherit this kind of spirit of overcoming difficulty and turning things around.



### Topic 4: To Study the Development Trend of the Coronavirus in Different Provinces

Chen Liping, Maths Teacher: In this topic, we hope students can learn the trend of the pandemic through the objective reality reflected by data and compare the trends between different provinces. At the same time, they can fully utilise online resources by collecting and compiling statistics, choose appropriate charts to show the statistics and apply different mathematics knowledge to analyse the trends from different angles.

Everyone at Yew Wah is actively learning. We — school, teachers, students, or even parents — all have new ideas about education. Real learning is meant to teach students according to their aptitude and local conditions, and the current pandemic has given us such a learning opportunity.



小学部网络学习的好处 The Benefits of E-Learning in Primary



在这非常时期,当我们被迫改变和适应的时候,就会 很容易感到不安。然而,在广州耀华的小学部里,很 高兴能够看到老师、学生和家长都关注在线学习的所 有好处。我们不断适应和坚毅地面对挑战,这些积极 的态度是让耀华学校能够成为一个学习和成就未来领 袖的地方的原因之一。

我们的老师展现出他们对在线学习的关心,他们抽出 时间来准备网络授课,并且用长时间来调整教学以满 足学生由于教师不在身边而出现的新需求。许多家长 亲眼目睹这一情景并且对所见到的良好教学给出正面 的反馈意见。同样,老师也很高兴看见一些家长在一 些课程中协助他们的孩子,并在孩子身边一起学习。 我们相信家长也感谢网络学习让他们多了陪伴孩子的 时间。

更重要的是,我们的学生受益匪浅。他们学习 "ClassIn"中的所有功能并在操作中加强他们的信息 科技能力。例如,小学部较高年级的学生在输入问题 的答案时,是在培养键盘输入技能。此外,学生还在 培养自己良好性格:事情起初不顺利时保持耐心,在 解决问题的过程中了解如何使用新工具,以及以可信 和负责任的方式恰当地使用在线工具。

我们的学生也很享受这种利用信息科技来上课的新学 习过程,以下是一些学生对在线学习的看法。

### 五年级的学生说:

"我喜欢在线学习,因为'ClassIn'有许多有趣的工 具让我保持学习的兴趣和动力。" "我们可以看到谁交了作业,谁没交。" "我喜欢在黑板上打字。"

### 三年级的学生说:

"我可以在课堂上获得奖励。"

"我可以在聊天室里提问和同时参与课堂上的黑板游戏。"

"我喜欢老师在课堂上为我们做的有趣游戏。"

### 一年级的学生说:

"在平常的课堂中,你通常不能看到许多其他同学的 脸,因为你是朝前看的,但是在'ClassIn'的课堂中 你可以看到其他同学的脸。"

"我们喜欢 ABC 选择器用于提问或测验。"

"我喜欢用应答器来回答问题。"

"我们可以记录和录影自己做作业,这很有趣。"

"当我们在一个小组时,我们会得到老师更多的关 注。"

"我们喜欢能像画线一样用屏幕把图片和文字连接在 一起。"





In times like this when we are forced to change and adapt, it is easy to feel bad about our situations. However, in YWIES Guangzhou's Primary school it has been wonderful to see our teachers, students and families focus on all the benefits of online learning. Seeing these positive attitudes when continuing to adapt to and persist throughout challenges is one of the many things that make Yew Wah a great place to learn and become leaders of the future.

Our teachers showed how much they cared as they took time to prepare for the e-learning and worked long hours to adapt their lessons to the new needs of students without being physically present with their students. Many families saw this first hand and gave positive feedback about the great lessons they had seen. At the same time, teachers were glad to see some parents assisting their child and learning alongside them in some of our lessons. We believe that our parents also appreciated the extra time they spent with their children at the e-learning.

Most importantly, there have been a lot of benefits for our students. They learnt all the functions in ClassIn and in doing so, developing their IT skills. For example, our Upper Primary students developed their keyboarding skills as they typed their answers to questions. Furthermore, we could see students developing their character by being patient when things didn't work the first time, problem solving to find out how to use a new tool, and being trustworthy and responsible for using the online tools appropriately.

Our students also enjoyed this new learning process of using information technology to access their lessons. Here is what some of our students think about e-learning.

### Year 5 students said:

"I like e-learning because there are so many fun tools in ClassIn that keep me interested and motivated."

"We can see who has turned in the homework and who hasn't."

"I like that I can type on the black board."

### Year 3 students said:

"I can earn awards in the class."

"I can ask questions in the chat room and participate in class games on the blackboard at the same time."

"I like how the teacher makes fun games for us to play in class."

### Year 1 students said:

"In normal class you usually can't see the faces of many other classmates as you are looking forwards but in ClassIn you can see other classmates' faces."

"We enjoy using the ABC selector tool for questions/quizzes."

"I like using the 'Responder' tool for answering questions."

"We can record and video ourselves for homework which is fun."

"We get more attention from the teacher when we are in smaller groups."

"We like being able to work with the screen like drawing lines to link pictures with words."



# ➢ 中西融合教育中的数学 Mathematics in Integrated Education



在教育中,谈到中西融合,我们一般认为只是在语言 和文化方面。在耀华,中西融合还涉及中西教学理念、 课程设置和教学方法。

在小学和初中阶段,桐乡耀华的课程设置是基于国家 课程,同时引入了海外优质教育资源和理念。其中, 数学的教学颇能代表耀华中西合璧的特色。

一提到数学,传统观点往往是:记忆公式最重要、刷题是王道、只能通过考试测试数学水平。

在耀华,我们是怎样上数学课的?

## 1. 在生活中学习和应用数学

### 教学案例 A: 二年级, 从居家生活中寻找数字

二年级的同学最近在线上的学习中接触了"万以内的 数"。为了使孩子能更好地学习数量,数学老师刘潘 引导学生利用生活中常见的事物去建立数量的概念。 比如,寻找生活中的千位数量;如何用日常用品体现 十进制?于是孩子奇思妙想的答案就呈现出来了。 老师还结合疫情布置了一个视频作业,来帮助孩子理 解"大的数量"。为了制作视频,孩子积极地做了很 多工作,比如上网搜索数据、撰稿、找背景墙、调试 镜头、准备妆发和服装、录制、剪辑和校对等。学生 的作品不禁让刘老师感叹:孩子具有专业播音员和编 导的潜质,工作很有效率。

教学案例 B: 三年级, 在数学教学中融入少儿财商教育 现时, 人们越来越多使用电子支付方式。这种支付方 式使孩子难以直观地感受到数量和货币在交易中的作 用。数学老师何福磊因此设计了一些数学教学活动, 来模拟传统的购物、拍卖和售卖等过程。学生在参与 活动的过程中, 可以体验商品的价格, 并了解元与角、 分之间的进率关系。

在中国传统的数学教育中,培养学生对数量的敏感和 直觉,以及财商的知识都是非常成功的。在耀华的数 学教学中,老师用项目式的作业、模拟现场、集体讨 论这些西方的教学手段来继续发扬传统数学教育的优 势。

### 2 针对不同年龄段的特点去教学

对不同年级,用不同教法,桐乡耀华数学组组长何锐 老师和大家分享道:"数学教学不仅要重视知识的传 授,更要重视培养学生分析和解决问题的能力。从学 习方式上说,各年龄段的孩子有不同的特点。对于小 学阶段的教学,老师会关注孩子如何获取信息,完成 作业和改正错误等;对于中学阶段,教学的重点在培 养孩子自主探究、归纳总结及自我反思的能力。"

重视"转型"阶段的数学教育,数学老师何福磊说道: "在思维方式上,三年级和六年级是学生思维转型的 重要阶段。学龄前儿童是动作思维和形象思维为主; 从一年级开始孩子建立初步的抽象思维;三年级时他 们抽象思维和想象力方面会有明显提高;六年级的学 生在逻辑推理、总结、归纳能力会有个飞跃。因此, 我们强调抓住发展的黄金阶段,在数学教学中有针对 性地去设计教案,启发性地去教学。最终能帮助孩子 发展综合的全面数学和思维能力。"

### 3 实践中感受和探究数学之美

在小学阶段,学生会学习到"八个方位"和"图形" 这些简单的几何知识。如果学生仅是坐在教室里听讲, 可能就会觉得几何比较抽象。一起来看一下,耀华的 数学老师是如何引导孩子学习几何。

### 教学案例 C: 操场寻宝大赛

这原本是一堂学习方位和角度的数学课,何福磊老师 却将其设计为有趣的"寻宝"任务。何老师告诉学生, 灵活运用所学的数学知识,就能找到"宝藏"。孩子 手执一份包含线索的"寻宝地图",开启了操场的探 索之旅。线索有可能是"一步代表 0.5 米的距离,两 步才是一米"或"面向北方,呈 45°角走 25 米"。





教学案例 D: 用学到的知识来丈量和计算校园的庭院 校园的建筑中隐藏着各种各样的几何图形。老师受到 这些图形的启发,结合校园环境设计了一些精彩的户 外教学活动。

在数学课堂上,老师任燕清教孩子"求解三角形的面积"。为了考验孩子的实际应用能力,老师要求他们量出教学楼间的庭院的面积。庭院的地面上有着不规则的多边形,原来可以通过把它们拆解成多个三角形来求出面积。孩子分成若干小组,商讨和确定解答方案,测量并采集数据。最终他们成功运用课堂上学到的知识算出地面上多边形的面积。

### 4 学术为桥梁,开拓更广阔的国际视野

学校还提供一些机会,让同学参与国际性的数学竞赛。 通过和海外同学的交流,学生能开阔眼界,建立自信, 向更广阔的知识天空翱翔。

上学期,孩子踊跃报名参加美国大联盟数学竞赛,并 获得非常棒的成绩。一共有50位同学获奖,其中30 位同学获得三等奖,14位同学获得二等奖,五位同学 获得一等奖以及一位同学获得 AMC8 (针对八年级及以 下的学生) 铜奖。

中西方的教学各有长处,我们希望能够借鉴各自的精 华,让我们的数学教学既活泼有趣又不失严谨,并能 培养学生的创造力和解决问题的能力。数学老师不断 地探索和实践,在教学上形成了独特的耀华风格,体 现了机构中西融合的教育理念。



When we talk about the integration of the East and West in education, we usually expect that it happens mainly in the fields of language and culture. For Yew Wah, the integration goes deeper and wider to include philosophy, curriculum and teaching methods.

YWIES uses the Chinese National Curriculum of Primary and Secondary Education and enriches it with high quality education resources and education philosophy from overseas. Our Mathematics teaching is quite representative of how we integrate the Eastern and Western techniques. People often think of Mathematics as memorising formulae and doing a lot of drills in order to gain high scores. But does mathematics learning has to be like this?

At Yew Wah, how do we deliver our Mathematics teaching?

### 1 Learning Maths and Applying What We Learn in Daily Life

### Example A: Grade Two, finding numbers in daily life

The students in Grade Two learnt numbers up to ten thousand through online learning recently. In order to help the students understand abstract numbers more, their Maths teacher Perry Liu encouraged them to learn the concept of numbers by counting common objects in daily life. For example, when teaching numbers up to ten thousand, he asked them to illustrate the decimal system using daily goods. To his delight, they came up with many great answers.

Mr Liu assigned a special video homework for the children to help them understand numbers above ten thousand better. In order to produce the video, all the students worked actively on various tasks, such as searching for data online, writing scripts, making a background for recording, editing, proofreading and even making sure their outfits and hairstyles were appropriate. Their polished products impressed Mr Liu. He feels the children have the talent to become professional broadcasters and producers, and they worked efficiently.

# Example B: Grade Three, developing the "Financial I.Q." of children through Maths teaching

Nowadays, more and more people prefer to use electronic payments. So it is difficult for children to appreciate and learn how numbers and currency work in transactions.

Maths Teacher Humphrey He therefore designed a lot of teaching activities to simulate the processes of shopping, auctions and sales in which students could understand the price of goods and the relationship between dollars and cents.

Traditional Maths teaching in China is successful in developing students' understanding of numbers as well as their "Financial I.Q.". At Yew Wah, Maths teachers implement Western teaching methods such as group projects, simulations and debates to complement the advantages of traditional Maths teaching.

### 2 Adapting Teaching to Develop Students' Thinking Skills

Regarding the approach of "for different grades, use different teaching methods", Mr Harry He, Mathematics Subject Leader, shared with us: "When we teach Mathematics, we not only impart knowledge, but also cultivate students' ability to analyse and solve problems. Children of all ages have different characteristics in their thinking and we need to pay attention to this in teaching.

"In the Primary school, we should pay more attention to how to get information, and the completion and revision of homework. In the Secondary school, we shift the focus to independent exploration, explanation and self-reflection."



About identifying the "turning points" in Maths education, Mr Humphrey He, Mathematics Teacher, shared with us:

"The turning points in the development of students' thinking can be found in Grade Three and Grade Six. These are the key stages in their cognitive development.

"Preschool children mainly use physical movement and visual stimuli in their thinking; from Grade One, children start establishing their abstract thinking; from Grade Three, children's abstract



thinking and creativity may improve dramatically; from Grade Six, students may achieve rapid progress in skills such as reasoning, summarising and induction. We therefore seek to seize these opportunities to accelerate children's development during key stages. We design Maths classes based on students' development and seek to inspire our children to enjoy Mathematics. We hope that they will eventually develop all-round abilities in Maths and reasoning."

### **3 Finding the Beauty in Maths**

At Primary level, students learn basic ideas in geometry such as cardinal points and geometric shapes. If students just sit in the classroom and listen to what the teachers say, they may feel that the concepts are abstract and difficult to understand. Let's see how our Maths teachers guide their learning.

### Example C: Treasure hunt in the playground

In a class on cardinal points and angles, Maths Teacher Humphrey He created a treasure hunt activity. He told the students that the mysterious treasure could only be found by applying the knowledge they would gain in that day's lesson.

The students rushed to the playground with a treasure map and a list of clues from the teacher. The clues may be "One step equals 0.5 metre, and two steps equal one metre", or "Facing north, turn 45 degrees and walk about 20 metres."

# Example D: Measuring and calculating the area of the quadrangle of our campus.

Our school's architecture is full of geometric shapes, giving the teachers the inspiration to design interesting outdoor teaching activities.

In teaching students to calculate the area of a triangle, Maths Teacher Vicky Ren found an innovative way to test the abilities of the children to apply what they learnt. She asked the children to measure the campus's quadrangle. On its ground geometric patterns were drawn. The pattern can be divided into several triangles so that the total area of the quadrangle can be measured. The children were divided into groups to discuss the problem, devise a solution, measure and collect the data. Finally, they calculated the area of the polygon by applying what they had learnt in the classroom.

### 4 Connecting Students with the Rest of the World

The school encourages students with talent in Maths to take part in international Maths competitions. Through these competitions, our students can engage in exchanges with overseas students, broaden their views and build confidence to carry out further study in the academic field.

Last semester, our students took part in the American Maths League and achieved good results. Among the 50 participating students, 30 won the third prize, 14 won the second prize, and five won the first prize. One student won the bronze medal in AMC8.

Both Eastern and Western teaching methods have their strengths. We hope our teaching can integrate the good features of both approaches, thereby becoming appealing, informative and well structured. We aim to develop students' creativity and problem solving skills. With constant innovation and revision, our Maths teachers are able to develop a distinctive Yew Wah style, based on our education philosophy that combines the essence of the East and West.





school year.

#### 香港耀華國際教育機構 Hong Kong Yew Wah International Education Foundation

《今日耀华》为香港耀华国际教育机构出版之双 语刊物,每学年出版2次。 *Yew Wah Update* is a bilingual magazine of Hong Kong Yew Wah International Education Foundation to be published two times a

#### 出版人 Publisher;

陈保琼博士 Dr Betty Chan

Terry Cheng

总编辑 Editor-in-Chief: 郑伟鸣

执行编辑 Executive Editor: 麦素碧

Catherine Mak 平面设计

Graphic Designer: 方子聪 Paul Fong

制作统筹

Production Co-ordinator: 陈敏 Sherman Chan

### 查询

Editorial & General Enquiry: update@yewwah.com 耀华国际教育学校 Yew Wah International Education School (YWIES) www.ywies.com

▼ 烟台经济技术开发区耀华专修学校(幼儿教育及高中) Yantai ETDZ Yew Wah School for Specialized Education (ECE & Upper Secondary) 烟台经济技术开发区耀华实验学校(小学及初中) Yantai ETDZ Yew Wah School for Experimental Education (Primary & Lower Secondary) 山东省烟台市经济技术开发区天山路9号 264006 9 Tianshan Road, Yantai Economic and Technological Development Zone, Shangdong 264006 电话 Tel: +86 535 638 6667/638 3451 传真 Fax: +86 535 638 6669 电邮 Email: admission.yt@ywies.com 网址 Website: www.ywies-yt.com

耀华国际教育学校上海古北校区(艺术设计) Yew Wah International Education School Shanghai Gubei Campus (Art & Design) 上海市古北路 600 号 200336 600 Gubei Road, Shanghai 200336 电话 Tel: 800 820 2130 /+86 21 6275 4365 传真 Fax:+86 21 6261 2812 电邮 Email: oupp.sh@ywies.com 网址 Website: www.ywies-sh.com

▼上海浦东新区民办沪港学校(上海耀华临港校区) Yew Wah International Education School of Shanghai Lingang 上海市浦东新区银莲路 2 号 201306 2 Yinlian Road, Pudong District, Shanghai 201306 电话 Tel: +86 21 6118 0800 传真 Fax: +86 21 6118 0801 电邮 Email: enquiry.shpd@ywies.com 网址 Website: www.ywies-shpd.com

▼ 編华国际教育学校广州校区 Yew Wah International Education School Guangzhou Campus 广东省广州市花都区花东镇学而街9号 510897 9 Xue'er Street, Huadong Town, Huadu District, Guangzhou, Guangdong 510897 电话 Tel: +86 20 6290 3388 传真 Fax: +86 20 8683 2669 电邮 Email: enquiry.gz@ywies.com

### ▶ 耀华国际教育学校桐乡校区

网北 Website: www.vwies-az.com

Yew Wah International Education School Tongxiang Campus 浙江省桐乡市高桥镇合悦大道 88 号 314515 88 He Yue Avenue, Gao Qiao Town, Tongxiang, Zhejiang, 314515 电话 Tel: +86 573 8896 6605 传真 Fax: +86 573 8896 6992 电邮 Email: enquiry.tx@ywies.com 阿址 Website: http://www.ywies-tx.com

▶ 耀华国际教育学校北京校区

Yew Wah International Education School Beijing Campus 北京市大兴区经济技术开发区凉水河二街保华国际教育园 邮编 100176 B&P IEP, Liangshuihe Erjie, BDA, Daxing District, Beijing 100176 电话 Tel:+86 10 8783 6006/8783 6000 电邮 Email:enquiry.bj@ywies.com 网址 Website:www.ywies-bj.com

#### 耀华国际学校

Yew Wah International School (YWIS)

✓ 日照 Rizhao

山东省日照市东港区五莲路 368 号 276826 368 Wulian Road, Donggang District, Rizhao, Shandong 276826 电话 Tel: +86 633 819 2800 传真 Fax: +86 633 819 2801 电邮 Email: rz-enquiry@ywisschool.com 网址 Website: www.ywis-rz.com

耀华培训中心 Yew Wah Training Centre (YWTC

▼ 深圳 Shenzhen 深圳市南山区南山大道新绿岛大厦 9 楼 B 区 518052 Block B 9/F, Xin Lv Dao Building, Nanshan District, Shenzhen 518052 电话 Tel: +86 755 82469772 传真 Fax: +86 755 26672002 电邮 Email: ywtc@yewwah.com 网址 Website: www.ywtc-sz.com 耀华国际教育幼儿园

Yew Wah International Education Kindergarten (YWIEK) www.ywiek.com

▼上海园 Shanghai

上海市浦东新区长岛路 823-825 弄 87 号碧云新天地小区 200129 87 Green New World, Lane 823-825, Changdao Road, Pudong, Shanghai 200129 电话 Tel: +86 21 5025 2077 电邮 Email: admission.sh@ywiek.com 网址 Website: www.ywiek-sh.com

▼ 重庆复地园 Chongqing Forte 重庆市两江新区金渝大道 81 号复地别院 401122 Forte Beauty Villa, 81 Jin Yu Avenue, New Northern Zone, Chongqing 401122 电话 Tel: +86 23 8816 7058 电邮 Email: admission.cqfd@ywiek.com 网址 Website: www.ywiek.cq.com/fd

▼ 重庆融科园 Chongqing Rongke 重庆市两江新区鸳鸯路 77 号融科橡树澜湾 D 组团 401122 77 Yuan Yang Road, Rongke Oak Lake County D Section, New Northern Zone, Chongqing 401122 电话 Tel: +86 23 8872 6118 电邮 Email: admission.cqrk@ywiek.com 网址 Website: www.ywiek.cq.com/rk

▼ 日照园 Rizhao 山东省日照市东港区五莲路 368 号 276826 368 Wulian Road, Donggang District, Rizhao, Shandong 276826 电话 Tel: +86 633 819 2666 电邮 Email: admission.rz@ywiek.com 网址 Website: www.ywiek-rz.com

▼ 青岛园 Qingdao 山东省青岛市经济技术开发区太行山路 72 号 266555 72 Tai Hang Shan Lu, Economic & Technology Development Zone, Huangdao, Shandong 266555 电话 Tel: +86 532 8699 9363 电邮 Email: admission.qd@ywiek.com 网址 Website: www.ywiek-qd.com

耀华婴幼儿教育中心 Yew Wah Infant and Toddler Education Centre (YWITEC)

▼ 深圳园 Shenzhen 深圳市南山区深南大道 9017 号东方花园 G14 株 518053 G14, Oriental Garden, No.9017 Shennan Avenue, Nanshan District,Shenzhen 518053 电话 Tel: +86 755 8665 8870 电邮 Email: admission.sz@ywiek.com

耀华要幼儿探索中心 Yew Wah Infant and Toddler Discovery Centre (YWITDC)

▼ 上海市长宁区延安西路 2111 号扬子中心 2 楼, 200336 2/F, Yangtze Centre, 2111 Yan An Xi Road, Shanghai, 200336 电话 Tel: (86) 150 2118 9771 电邮 Email: enquiry@ywiek.com 网址 Website: www.ywitdc-sh.com

耀华语艺教育中心

Yew Wah Arts and Language Centre (YALC)

 上海耀华语艺教育中心 YALC Shanghai 上海市古北路 600 号 200336
600 Gubei Road, Shanghai 200336
电话 Tel: +86 21 6234 0011 / 6219 1706
传真 Fax: +86 21 6261 2812
电邮 Email: info@sh.yalc-global.com
网址 Website: www.yalc-sh.com

▼ 烟台耀华语艺教育中心 YALC Yantai 山东省烟台市经济技术开发区天山路 9 号 264006 9 Tianshan Road, Yantai Economic & Technological Development Zone, Shandong 264006 电话 Tel: +86 535 638 3841 / 638 3483 传真 Fax: +86 535 638 3483 电邮 Email: info@yt.yalc-global.com 网址 Website: www.yalc.yt.com

本刊版权为耀华国际教育机构所有,在征得本机构书面同意之前,不得作全部或局部翻印、复印、转载或其他用途。 Nothing should be reprinted in whole or in part without written permission from the publisher.