#### 跨学科学习项目《话说长江》实践报告

### Report oncross-disciplinary curriculumA Yangtze Story

项目名称:话说长江

Project name: A Yangtze Story

实施人及对象:中国江苏省张家港市长江文化研究共同体,

Participants: The Yangtze River Cultural Research Communityof the city of Zhangjiagang,

Jiangsu Province, China,

共同体成员有张家港市大新中心小学六年级全体师生,

including all the faculty and students in the sixth grade at the Daxin Central Elementary School 校外专业机构有张家港市海事局、张家港市博物馆和张家港市水资源科普馆。

and other agencies including the Zhangjiagang Maritime Safety Administration, the

Zhangjiangang Museum as well as the city's Water Resources Science Museum.

长江文化研究共同体:

The Yangtze River Cultural Research Community:

大新中心小学是一所坐落在长江之滨的百年老校。

With over a century of rich history, the Daxin Central Elementary School in Zhangjiagang is situated by the Yangtze River waterfront.

学校成立了跨学科学习项目团队,成员来自各学科的优秀教师,共同探讨课程案例,联 合校外专业机构共同实施。

The school has set up an interdisciplinary study project team, including faculty members from all disciplines, who join forces with outer school agencies to discuss and implement the curriculum.

张家港市海事局负责行使长江水上安全监督和防止船舶污染、口岸开放监管和行政执法 等职能,

The Zhangjiagang Maritime Safety Administration is responsible for security of waterway traffic, preventing pollution generated by ships, operating and supervising port activities, as well as law enforcement.

为学生户外考察提供专业服务。

The administration can provide professional services for students' outdoor activities.

张家港市博物馆设有"长江文化博物馆",是弘扬长江流域文化的重要基地,帮助学生 了解长江历史知识。 The Yangtze River Culture Museum, a division of the Zhangjiagang Museum, is an important base of promoting the Yangtze regional culture. It facilitates students' understanding of the Yangtze River's history.

张家港市水资源科普馆以"人水和谐"为主题,让学生充分地了解水资源,增强节水的 责任感和自觉性。

The Zhangjiagang Water Resources Science Museum increases students' understandings of water resources and raises their awareness and responsibility of saving water with its "Human and Water in Harmony" showcase.

**项目周期:** 2019 年 9 月至 12 月,从确定项目选题、设计内容、活动开展到阶段成果展示,

Duration of project: From September to December of 2019, the project spun from ideation, design, implementation to showcase.

历时3个月,6个班级,280名学生,19位教师,3个专业机构,共同参与。

During the three months, 280 students from six classes participated in all the activities under the guidance of 19 teachers and three specialized agencies.

项目背景:

Background:

自 2004 年以来,张家港市携手沿江 12 个省市区,连续 16 年成功举办中国(张家港)长 江文化艺术节,

Eversince 2004, Zhangjiagang has, together with 12 provinces, cities and districts, hosted for 16 consecutive years the China (Zhangjiagang) Yangtze Cultural and Art Festival,

打造了一个长江文化交融汇聚、沿江各地互动合作的文化经贸盛会。

a grand gathering for promoting cultural exchange and economic cooperation between all the places along the Yangtze River.

研究长江文明,宣传长江文化,是每一个张家港人的应有职责。

It's every Zhangjianger's responsibility to delve into the Yangtze civilization and advance the Yangtze culture.

作为张家港未来的建设者,如何让更多的同龄人来了解长江文化,了解我们的母亲河?

As a constructor for Zhangjiagang's future, how can we engage more peers to learn more about the Yangtze River culture and our mother river? 基于这样的思考,由大新中心小学牵头,联合张家港市海事局、张家港市博物馆和张家 港市水资源科普馆,成立长江文化研究共同体,

Based on this central question, the Daxin Central Elementary and Middle School led the effort in establishing the Yangtze River Cultural Research Community with the Zhangjiagang Maritime Safety Administration, the Zhangjiangang Museum as well as the city's Water Resources Science Museum.

探索在中小学校开展长江文化教育的有效途径,让我们的教育与时代接轨,共同融入到 社会发展中,培养面向未来的新时代公民。

The community is a mission to explore effective ways of advancing Yangtze River Cultural education in elementary and middle schools, keeping our education up with the development of the time, integrating curriculum design into social development, and cultivating forward-thinking citizens for the new era.

#### 《话说长江》课程实施

#### A Yangtze Story Curriculum Implementation

一、主题由来

#### I. Origin of the theme

在中小学中实施长江文化教育,不能采用说教的方式进行,单一的学习方式,会让孩子 们感到厌倦。

To educate elementary and middle schoolers about the Yangtze River, the traditional way of lecturing wouldn't cut it. A monotonous studying mode is unlikely to hold their attention.

因此长江文化研究共同体的导师们经过讨论,决定以建造一个长江文化儿童博物馆为项目的驱动问题,

As a result, the community leaders reached a decision: to design the curriculum around an experimentary task, building a Yangtze Culture Museum for Children.

让孩子们在参与博物馆的前期设计中完成对长江文化的专题学习,每一个参与学习的孩 子都是博物馆的设计者,

Every child taking a part in the project is a designer of the museum, and they will further their study of the Yangtze River culture over the course of designing the museum.

博物馆的设计模型就是这次跨学科学习项目的作品。

The museum model, for instance, is a product of this interdisciplinary curriculum.

二、内容设计

# II. Design of curriculum content

跨学科学习的目标就是要实现学科知识与儿童生活的链接,

The goal of interdisciplinary studies is to fill in the gap between knowledge from school and real life experience for elementary schoolers.

在实践活动中把学科知识内化为生活经验,掌握21世纪技能。

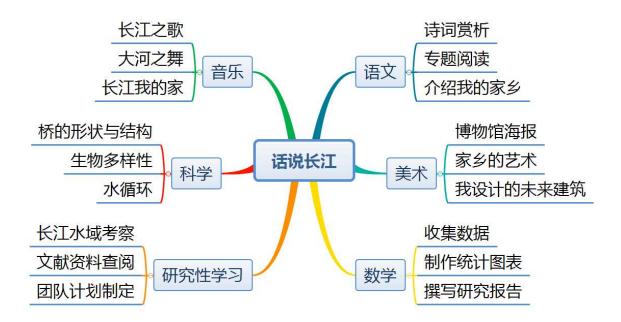
It helps them convert what they learn in class to what they can use in real life, and equip them with the essential skills of the 21<sup>st</sup> century.

项目活动内容的确定要符合学生当下的认知特点和知识储备,否则学生的实践会是流于 形式。

The activities of the project need to be based on the characteristics of students' cognitive ability and knowledge reserve, otherwise the experiment will be limited to superficiality.

因此,我们把六年级不同学科的老师组建跨学科导师团队,围绕长江文化,根据国家各 学科课程标准,设计《话说长江》学科知识网络图。

Consequently, we have rounded up teachers of different subjects to form the mentoring team, and design the roadmap for subject-specific knowledge that *A Yangtze Story* imparts, in accordance with the national curriculum standards for multiple subjects.



《话说长江》学科知识图



#### Knowledge Roadmap for A Yangtze Story

基于项目的跨学科学习,必须要倾听学生的想法,把学生的学习建议和兴趣点,整合到 项目内容设计中,从而激发学生的参与热情。

Activity-based interdisciplinary studies must listen to students, and integrate their advice and interests into the design, so as to stimulate their willingness to participate.

项目教师团队对学生进行了"你对长江知多少"的问卷调查,对学生的近二百个问题进 行分类筛选,

The team of teachers surveyed students about "how much do you know about the Yangtze

River", and then sorted the answers to nearly 200 questions that came back into categories.

确定将《话说长江》项目课程分为长江之美、长江之长、长江之水三个子项目,

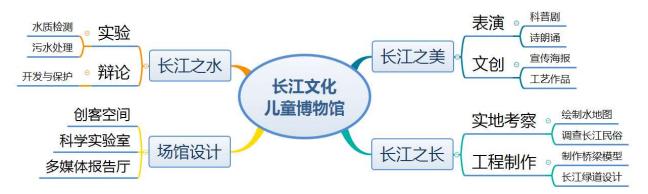
Three sub-projects were then developed: *The beauty of the Yangtze, The meandering Yangtze, The water of the Yangtze.* 

每个子项目的学习任务都与学生的真实生活相连接,体现跨学科知识的综合应用。

Eachcourse goal of the sub-project is closely interconnected with students' life, and shows the integral application of interdisciplinary knowledge.

未来的长江文化儿童博物馆将分为三大展馆,每个子项目的学习成果都作为场馆的布展 内容。

The future Yangtze Culture Museum for Children will have three venues corresponding to the three sub-projects. All the products spun out from the sub-project will be part of the showcase at



each venue.

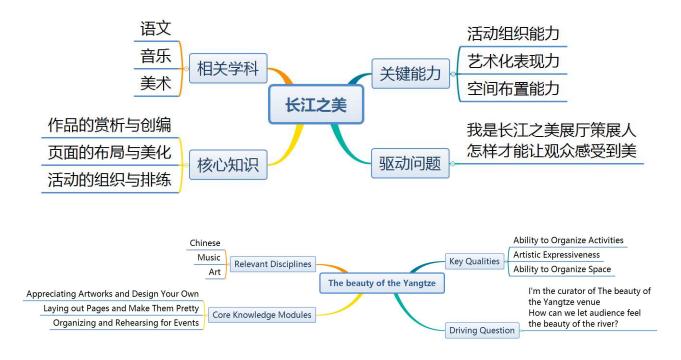
## 长江文化儿童博物馆设计图



#### Blueprint of the Yangtze Culture Museum for Children

(一) 长江之美

#### A. The beauty of the Yangtze



在长江之美子项目学习中,引导学生以长江之美展厅策展人的身份思考,以什么形式布 展才能让观众感受到长江之美?

The sub-project The beauty of the Yangtze put students into the roles of curators and think about how to make viewers feel the beauty of the Yangtze?

经过对语文、音乐和美术学科知识的项目化整合,引导学生通过阅读、欣赏各类文化作品,

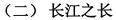
The project-based integration of Chinese, music and art subjects led students to read and appreciate all formats of creative cultural products,

以音诗画为载体、以舞台剧与作品展的形式呈现长江之美来展示学习成果。

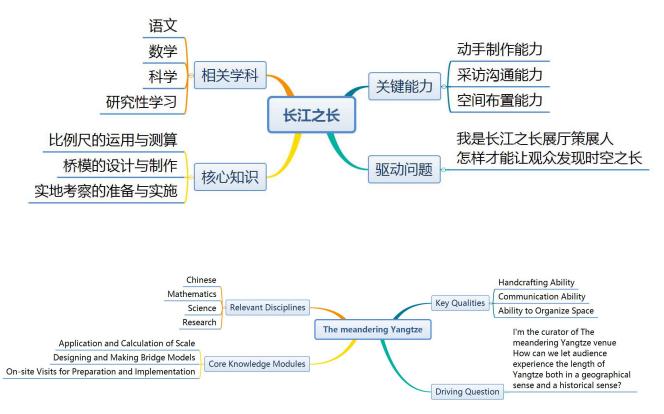
and demonstrate what they had learned with music, poems and drawings, or in the form of theater plays and art showcase.

学生作品融合了语文、音乐和美术学科的相关知识,在活动中提升学生的人文和艺术素 养。

The student work absorbed knowledge from Chinese, music and arts. Byinvolving in the activities, students acquired better liberal arts intake.



## **B.** The meandering Yangtze



在长江之长子项目学习中,引导学生以长江之长展厅策展人的身份思考, The sub-project *The meandering Yangtze* posts this question to students: as curators, 从文化历史和地理流域两个维度上,怎样才能让观众发现长江的长穿越古今,流淌不息? how will they help the audience discover the length of the Yangtze River in a historical and no less in a geographical sense, which spans across time and flows relentlessly?

从唐古拉山奔向东海,从远古走向未来。

The Yangtze River rises in the Tangula Mountains and runs towards the East China Sea, and connects the past to the future.

长江之长团队将带领大家通过实地访查、人物采访、查找资料、数据计算,绘图建模 等活动去探秘长江的"长"。

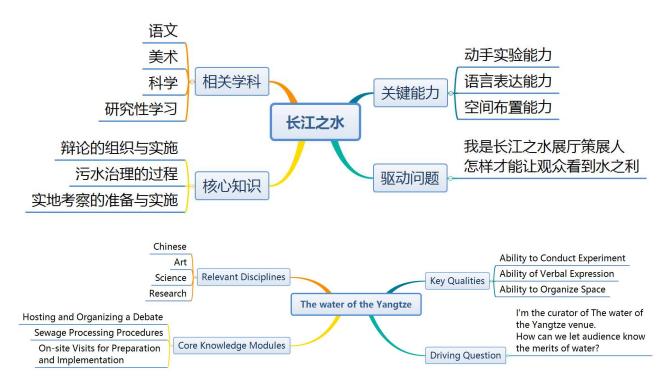
*The meandering Yangtze* team takes us on the expedition to discover the length of the Yangtze River by visiting sites, interviewing people, researching, calculating, sketching and modeling.

从地理以及时间维度上用直观形象的方式来展现长江之长,让更多的人了解长江。

It contextualizes the length of the meandering Yangtze geographically and historically in a straightforward way, and show more people about it.

## (三) 长江之水

#### C. The Water of the Yangtze



在长江之长子项目学习中,引导学生以长江之长展厅策展人的身份思考,

The sub-project The water of the Yangtze is a guide for students' independent thinking as curators:

水污染到了何种程度?我们怎么才能知道?如何进行水质检测?我们可以做什么?

What's the degree of water pollution in the Yangtze? How can we know? How to conduct water testing? What can we do about it?

在"长江之水"团队中,通过辩论赛、实验、调查等形式了解人类活动对流域生态的 影响,

The water of the Yangtze project team examined the effect of human activities on the

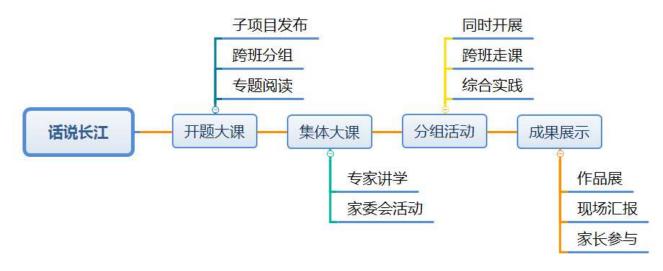
Yangtze River basin through debates, experiments, surveys etc.

从而激发学生热爱长江、保护母亲河的深切情感。

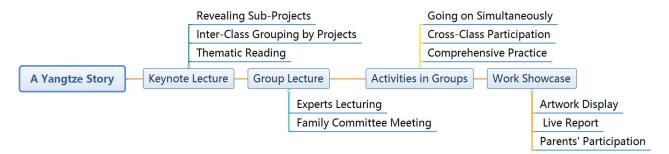
These activities strengthened students' love for the Yangtze and heightened their affection for the mother river and willingness to protect it.

三、教学实施

#### **III. Implementation**



### 《话说长江》教学实施流程图



A Yangtze Story Curriculum implementation flowchart

(一) 集体大课, 学生分组

A. Lectures and group work

项目实施团队举行六年级学生集体参与的开题大课,

The project kicked off with a keynote lecture with all the six-graders involved.

"长江之长""长江之美""长江之水"三个子项目的领衔教师分别讲解该项目的学习 内容和项目任务,学生自主填写参加项目类别的调查问卷,

The team leaders of the three sub-projects, *The beauty of the Yangtze, The meandering Yangtze and The water of the Yangtze* each elaborated on the subject content and tasks, and students chose to participate in taking each sub-project's questionnaire.

经项目组教师统计和协调,最后公布各个子项目的参与学生名单。

After teachers tallied up and coordinated each sub-project's participants, the rosters were finalized and released.



(开题大课 Keynote Lecture)

(二)确定任务,分组活动

B. Clarifying tasks and dividing into groups

教务处统一安排每周五下午两节课作为项目组活动时间。

The school's Office of Academic Affairs designated the two classes on Friday afternoons as the curriculum activity period.

学生实行跨班走课,到子项目活动地点报到,

Students mingled as a whole and report on locations of the sub-projects that they belong to.

每个子项目组教师指导团队至少有四名不同学科的教师组成,结合项目小组任务,进行 分工教学。

Each sub-project's team had teachers from a least four different subjects, and taught their specializations according to the tasks of each team.

1. 长江之美

1. The beauty of the Yangtze

一是策划一场关于长江之美的艺术作品展。

Firstly, students designed an artwork showcase around the theme of the beauty of the Yangtze. 学生先对文学艺术作品进行分类鉴赏,然后根据喜好,选择一种作品类别进行研究。

For starters, they studied the various forms of literature and art, and then chose a certain form to dive into according to their preference.

师生协同学习,小组共同创作,最后全部由学生进行收集、整理、设计、排版、装饰等 布置完成作品展,有效提高学生组织、策划、合作等实践能力。

Students and teachers learned and created together, but students collected, organized, designed, laid out and decorated the artworks by themselves. This practice improved students' organization, management and cooperation abilities.



(师生协同创作

Teachers and students creating work together



(学生布展 Students curating the showcase

)

<image>

(作品展 Artwork showcase)

二是组织一场长江之美专题的舞台剧。

Secondly, students performed a theatrical play revolving around The beauty of the Yangtze. 在语文和音乐老师的组织下,学生自主选择诵读内容、匹配背景音乐、进行队形变换、 安排服装道具等,

Instructed by Chinese and music teachers, the students chose the content to recite, and complemented it with background music, choreographed and arranged for costumes and props. 阶段成果展示会精彩呈现节目。

The show was presented at the end of the showcase.



(学生自主排练 Students rehearsing the play)

## 2. 长江之长

## 2. The meandering Yangtze

一是制作"长江大桥"模型。

Firstly, they built a "Yangtze Bridge" model.

在科学和数学老师共同指导下,同学们认识桥梁的形状与结构,

With the instructions from math and science teachers, students learned about the shape and structure of the bridge,

学习使用简单机械,利用比例尺测算相关数据,绘制设计图,制作搭建桥梁模型。

and learned to use simple machines, to do calculations and made blueprint with scale, and build model bridges.

# 瞧! 这是学生在专心致志地做模型!



## Look! Students are absorbed in making their model bridges!

(模型制作 Model Bridge Making)

孩子们还尝试用不同的材料做桥模。

Students also tried their hands on different materials for the model.



(学生在做纸桥模型 Students making paper model bridges)



(桥模展 Shocase of model bridges)

二是实地访查。长江之长团队组织了多次访查实践活动,了解长江生态环境,交通设施, 对长江未来的发展提出自己的建议。

Secondly, *The meandering Yangtze* team organized multiple trips to learn more about the ecological environment, transportation facilities and proposed their suggestions for the future development of the Yangtze.



(参观沪通长江大桥 Visting the Hutong Yangtze River Bridge)



(对海事局驻大桥办事处工作人员进行访谈 Interviews with staff members stationed at the bridge office from the Administration of the Maritime Safety Administration)



(参观张家港市海关科普馆 Visiting the Zhangjiagang Customs Museum)



(学生参观长江文化博物馆 Students visiting the Yangtze River Culture Museum) 外出访查后,孩子们在老师的指导下,撰写访查感想,提出自己想进一步了解的问题, 进行分享与交流。

After visits, students wrote about their thoughts and propose questions that they wished to know more about under the guidance of teachers, compared notes and shared experience.



(分享感受 Sharing Experience)

三是根据收集的资料,通过整理、筛选,孩子们创编了"话说长江"文俗绘本。

Thirdly, after carefully organizing and sifting through the materials they collected, students compiled the *A Yangtze Story* illustration book.

从故事的构想、配图的绘制都汇集了孩子们的汗水和心血。

The story conception and illustration is the culmination of students' input and hard work.



(学生创作的部分绘本 Some illustration books created by students)

# 3.长江之水

# 3. The water of the Yangtze

一是查找水资源开发与保护的相关情况,组织开展一场辩论赛(开发与保护利弊之我见)。

Firstly, students looked into the status quo of water resources development and conservation, and engaged in a debate on the pros and cons of development.



(辩论赛现场 The debate on the conservation and development of Yangtze)

二是组织参观当地水资源科普馆以及自来水厂,了解当地水域环境状况。

Secondly, students visited the local Water Resources Science Museum and waterworks to understand the local water and environmental conditions.



(参观水资源科普馆 Visiting the Water Resources Science Museum)



(参观水源保护区及本地第四水厂 Students visiting the water conservation area and the local Fourth Water Facility)

三是对流域生态环境作调查,分区域取水样,进行水质对比检测,

Thirdly, students investigated the regional ecological environment by stratified sampling water and compared water quality results.

了解水污染来源与当前治理情况。

In such a way, students grew their understanding of sources of water pollution and the water conservation conditions.



(学生在做水质对比检测实验 Students conducting a water quality comparison exam)

孩子们通过对水资源情况以及本区域水域环境的访查后,纷纷立志要做环保小卫士,积 极参加社区与学校联合举办的"垃圾分类"活动。

After researching the conditions of local water resources and the testing the local water environment, students were determined to be environmental guardians, and play an active role in trash sorting organized by communities and schools.



(学生参加社区垃圾分类活动 Students participating in trash-sorting activities) 四是未来的长江会是什么样的呢?孩子们大胆想象,依托区域未来建设规划设计自己心 目中的未来长江样态、长江之上的超级工程。

Finally, what will the future Yangtze be like? Students unleashed their imagination and designed the super project on the Yangtze envisioning future river in their eyes in the future based on the blueprint for regional development.



(学生在设计"水底隧道" Students designing the underwater tunnels)



(学生创作的"未来长江"样态图 Students envisioning the future of the Yangtze) (三)长江文化儿童博物馆布展现场

C. Setting up the Yangtze Culture Museum for Children

本次跨学科学习项目《话说长江》历经三个多月即将结束,

After three months of studying and interdisciplinary collaboration, *A Yangtze Story* was coming to an end.

最后激动人心的时刻到来了,三大子项目的策展人组成团队,根据场馆空间,对作品进 行布展。

The most exciting time comes with curators of the three sub-projects formed teams and laid out the works for the showcase at the venue.







学生自己创作的手抄报、未来畅想画、原创绘本、访查报告,自己组织的辩论赛、自编 自演的舞台剧、自己制作并布展的大桥模型、老器物展等等,看着这些形式多样,

Handmade posters, drawings envisioning the Yangtze's future, illustration books and visit reports, debates, plays, bridge models and old antiques exhibition abound.

各具特色的作品,它们无一不展现着孩子们在本项目中的收获和成长,在合作与交流、 沟通与创作中,学习在真正的发生。

Each of these various forms of unique creations show the accomplishment and growth of children in this project. Learning takes place everywhere in the process of collaboration, communication,

团队协作、实践探究、整理归纳、分享表达,孩子们有了面向未来、挑战无限的更多可 能。

and creation Team cooperation, experiment, organization and expression openeda new window for students to embrace the future and take on challenges with immense potential.

(四) 活动评价与反思

D. Evaluation and Review

基于问题或任务的跨学科学习,知识学习不是目的,而是综合应用知识解决问题的过程, 学习结果以作品的形式呈现,

The question-driven and task-based interdisciplinary study does not set the singular goal of obtaining knowledge, but rather, how to use knowledge in problem-solving.

实践表明,采用表现性评价比较适合。

Experiments show that it's more appropriate to adopt the method of descriptive evaluation of their performance.

表现性评价是为学生提供一定的问题情境,通过观察学生在实际任务中的表现来评价学 生发展成就的一种评价方式。

Performative evaluation suggests providing a prompt of contextfor students, and observe how they fare and achieve in actual tasks.

表现性评价的方式多种多样,常见的形式有演讲、辩论、表演、实验、调查、观察、创 作艺术品、作品展示等。

There are many ways to conduct performative evaluations, including speeches, debates,

performances, experiments, research, observations and creations of art work showcases, and so on.

### 《话说长江》学习评价表

| 评价内容<br>Quality                    | 评价标准      |        |       |
|------------------------------------|-----------|--------|-------|
|                                    | 优秀(★★★)   | 良好(★★) | 合格(★) |
|                                    | Excellent | Good   | Fair  |
| 具有好奇心和求知欲,会提出                      |           |        |       |
| 感兴趣的问题。                            |           |        |       |
| Strong curiosity and eagerness     |           |        |       |
| to learn. Ability to ask questions |           |        |       |
| they are interested in.            |           |        |       |
| 能认真倾听他人的想法,用较                      |           |        |       |
| 清晰的语言,围绕主题,有条                      |           |        |       |
| 理、有重点地进行口头表达。                      |           |        |       |
| Active listening to others and     |           |        |       |
| ability to communicate with        |           |        |       |
| emphasis, organization and         |           |        |       |

## A Yangtze Story study evaluation form

| clarity.                       |  |  |
|--------------------------------|--|--|
| 形成有计划地解决问题的习                   |  |  |
| 惯,能构思一个完整的计划。                  |  |  |
| Ability to conceive a          |  |  |
| comprehensive plan to solve    |  |  |
| problems                       |  |  |
| 能运用多种方式呈现信息的整                  |  |  |
| 理结果;能在信息中获得支持                  |  |  |
| 自己研究的依据。                       |  |  |
| Ability to present processed   |  |  |
| information in various formats |  |  |
| and find evidence to back up   |  |  |
| their research                 |  |  |
| 能根据需要,设计、制作或改                  |  |  |
| 装手工或艺术作品。                      |  |  |
| Ability to design, craft or    |  |  |
| modify handmade products or    |  |  |
| artwork according to needs     |  |  |
| 能自主建立研究小组, 合理分                 |  |  |
| 工,明确各自职责。                      |  |  |
| Ability to form study groups   |  |  |
| with clear division of labor   |  |  |
| 教师和家长评语                        |  |  |
| Comments from teachers and     |  |  |
| parents                        |  |  |
|                                |  |  |