

# The Mandarin Excellence Programme Evaluation Report 2021-2022

---

Prepared for the IOE, UCL's Faculty of Education  
and Society and the Department for Education

by



## Table of Contents

|  |    |
|--|----|
| 1. Introduction .....  | 3  |
| 2. The Mandarin Excellence Programme .....   | 5  |
| 3. Executive Summary .....   | 7  |
| 4. Summary performance of MEP against Key Performance Indicators (KPIs) .....  | 13 |
| 5. Methodology .....   | 14 |
| 6. Relevance: Is the programme doing the right things? .....   | 16 |
| 7. Coherence: How well does the programme fit together? .....  | 21 |
| 8. Efficiency: How are programme resources being used?.....  | 25 |
| 9. Effectiveness: Is the programme achieving its delivery targets?.....  | 27 |
| 10. Impact: What difference is the programme making (how well is it delivering its target learning outcomes for pupils)? ..... | 29 |
| 11. Sustainability: will the benefits and impact of the programme last? .....  | 41 |
| 12. Lessons Learned .....  | 43 |

**The Institute of Education (IOE), UCL's Faculty of Education and Society** is the lead delivery partner for the DfE funded Mandarin Excellence Programme. The IOE supports schools in starting and developing the teaching and learning of Mandarin Chinese. The IOE is supported by its partner university in China, Peking University as well as by a team of specialists in London. IOE's vision is that every child in England who wishes to, is able to learn Chinese and that every school has access to high quality Chinese teaching. Key to the realisation of this vision is the development of the effective teaching of Chinese language in schools in England and beyond.

Founded in 1902, IOE is a world leading centre for research and teaching in education and social science and is a major provider of teacher education. It currently has more than 8,000 pupils and 800 staff. In December 2014 IOE became a single-faculty school of UCL.

**The British Council** is a delivery partner for the Mandarin Excellence Programme. The British Council is the UK's international organisation for cultural relations and educational opportunities. It was founded in 1934 and incorporated by Royal Charter in 1940. The British Council aims to create friendly knowledge and understanding between the people of the UK and other countries. It does this by making a positive contribution to the UK and the countries it works with – changing lives by creating opportunities, building connections and engendering trust. The British Council works in more than 100 countries across the world in the fields of arts and culture, English language, education and civil society. In 2018 its work engaged with nearly 80 million people directly and reached 791 million people overall, including online, social media and through broadcast and publications.<sup>1</sup>

**Impact Stories** is an insight and evaluation consultancy specialising in education, culture and social change. It aims to collate, illuminate and interpret information to provide actionable insights and learning for organisations and programmes in the UK and internationally.

Impact Stories is the new brand identity bringing together the programme planning and evaluation expertise of In2Impact with the research and analysis capabilities of Research Stories.

Insight and evaluation for this 2021-2022 report has been significantly improved by close cooperation between the evaluators, Impact Stories, and the **Research and Analysis Team at the DfE**. In particular, pupils within and outside the MEP have been identified systematically within the National Pupil Database (NPD), allowing the undertaking of far more detailed analysis of participation and outcomes than had been possible during previous evaluations.

**James Chudy, Analyst within the Schools and Funding team** at the DfE undertook most of the data matching, cleaning and analysis of MEP profile and GCSE outcomes data presented in this report. His expertise and input has greatly supported the evaluation.

---

<sup>1</sup><https://www.britishcouncil.org/sites/default/files/annual-report-2018-19-web.pdf>

## 1. Introduction

### Overview

- This report sets out the results of an evaluation of the Mandarin Excellence Programme (MEP) over the academic year 2021-2022.
- 2021-2022 was the 6<sup>th</sup> year of The Mandarin Excellence Programme (MEP) and marked the first year of the second phase of funding of the programme by the Department for Education.
- This report builds on a summative evaluation of the first five years of the programme (2016-2021) completed in 2022 (<https://ci.ioe.ac.uk/wp-content/uploads/2022/05/MEP-Independent-Evaluation-Report-2016-2021.pdf>).
- 2021-2022 was the first year in which pupils within MEP sat GCSE examinations in Mandarin. It was also the first year in which some pupils within the programme sat GCSE at schools which had no experience of teaching Mandarin prior to MEP.
- In the previous academic year (2020-2021), pupils within the programme at the end of year 11 had received teacher assessed grades for GCSE in line with the wider changes to GCSE assessment put in place in response to the Covid-19 pandemic. This previous cohort of GCSE candidates had all been taught at one of the fourteen schools within the first MEP cohort from 2016-2017 which had been recruited into the programme to act as leaders and hubs of good practice because they already had experience of teaching Mandarin Chinese on the curriculum.
- GCSE attainment at the end of 2021-2022 marks the best opportunity so far to assess the programme's impact on pupils' formal learning outcomes. Analysis of attainment for the 2021-2022 GCSE cohort is therefore a focus of this evaluation report.

### Aims and objectives of MEP

- Mandarin Chinese is the most widely spoken first language in the world. The growing importance of China globally as an economic, cultural and political power makes Mandarin Chinese one of the most important languages for the UK's future.
- Prior to MEP, Mandarin Chinese had been taught in only a small number of English state schools. Proportionately, more pupils were learning the language in independent schools. Approximately 7% of all school children in England are educated in independent schools according to the Independent Schools Council (<https://www.isc.co.uk/research>) but data published by the DfE show that in 2019, 33% of entries for GCSE Mandarin Chinese were from pupils in independent schools.
- MEP was established to boost the quantity and quality of Mandarin teaching and learning in state schools in England. It seeks to give motivated pupils within the state sector the opportunity to acquire Mandarin language skills at an early stage, potentially giving them an advantage in their future careers. The headline goal of the first phase of the Programme on commission was to have at least 5,000 pupils on track for fluency in Mandarin by 2020. As detailed in the 2021 report, this target was met and then exceeded.
- Throughout the second phase of funding, which runs to 2024 (or to 2025 should the programme be extended by the one-year option period), MEP is expected to maintain a target number of schools within the portfolio. This target was 75 schools during the 2021-2022 academic year. However, at the time of this report's publication this target had increased to 79.

It was publicly announced on 3 March 2023 that this target will increase further to 90 by academic year 2023/24 and to 100 by 2024/25.

- A Theory of Change (ToC) for MEP was developed by DfE and IOE which identifies a number of short and long-term target outcomes and Key Performance Indicators (KPIs). The summary of this Theory of Change is shown in Appendix 1.
- Among the key outcome targets for MEP are:
  - Increased pupil uptake in Mandarin at KS4 and high attainment,
  - Increased teacher understanding of how effective teaching can engender a positive attitude towards Mandarin, combating the '*Mandarin is too difficult*' culture,
  - A sufficient supply of Mandarin teachers (recruitment and retention),
  - Evidence generated to inform roll out of MEP model for other languages.
- The indirect, long-term impacts of MEP are expected to be:
  - A permanent increase in the number of state schools teaching Mandarin and the number of pupils learning Mandarin at KS4,
  - Increased pupil uptake in Mandarin at KS5 and high attainment,
  - Higher numbers of pupils go on to study Mandarin at HE level.

### Evaluation Framework for MEP

- The evaluation of MEP within this report is organised around the six dimensions of the OECD DAC evaluation framework (<https://www.oecd.org/dac/evaluation/dacriteriaforevaluatingdevelopmentassistance.htm>):
  - **Relevance:** is the programme doing the right things?
  - **Coherence:** how well does the programme fit together?
  - **Efficiency:** how are programme resources being used?
  - **Effectiveness:** is the programme achieving its delivery targets?
  - **Impact:** what difference is the programme making (how well is it delivering its target learning outcomes for pupils)?
  - **Sustainability:** will the benefits and impact of the programme last?
- Reporting under the three results dimensions, Effectiveness, Impact and Sustainability, references the Outcomes and Key Performance Indicators (KPIs) set out within the programme's Theory of Change (ToC) reproduced in Appendix 1.

## 2. The Mandarin Excellence Programme

### Background

- On 20 May 2016 the Secretary of State for Education awarded a contract for the delivery of the Mandarin Excellence Programme (MEP) in Schools to the IOE working with the British Council as a delivery partner. The Programme had an initial investment of £10m to run over a four-year period from 2016 to 2020. The initial contract and investment was extended for a further 18 months and ran through to August 2021 when a new contract for the second phase of the programme was issued.
- On commission, the headline aim of the programme was to have at least 5,000 pupils within state schools in England on a path to fluency in Mandarin Chinese by 2020 and in doing so create a model for delivery and development of the language providing:
  - diverse geographical location of schools to ensure the development of teaching and learning of Mandarin Chinese in schools across the country;
  - school-led development of the Programme, translating centralised guidance and support into local practice;
  - a framework for the sustainability of Mandarin Chinese in England beyond the life of the Programme;
  - an opportunity for schools with strong existing Mandarin Chinese delivery to act as Hubs to implement successfully the step-up of teaching required within the first year of the Programme, and to be able to lead confidently additional new schools in following years;
  - intensive activities for schools, including residential intensive language study in China at the end of year 8;
  - a high quality online environment to provide resources;
  - development of teaching capacity and expansion of the provision of training places;
  - a communications plan and strategy;
  - stakeholder engagement to build demand.
- The programme achieved its initial target of 5,000 pupils enrolled by 2020 and in 2019/20, funding for MEP was extended for one additional year to the end of the 2020/2021 academic year.
- Under a second phase, three years of additional funding was agreed to cover the period 2021-2024 and this funding is subject to extension potentially for a fourth academic year until 31st August 2025.
- The specific aims of the second phase of MEP are to:
  - Support, retain and where needed, recruit secondary schools or the secondary phase of all-through schools rated good or outstanding by Ofsted to maintain 75 schools in the programme;
  - Involve the rigorous study of Mandarin by highly able and motivated pupils for eight hours a week, made up of a combination of class-time teaching, after school teaching and self-study, including forms of blended/online learning;

- Ensure continued recruitment and training of UK-based Mandarin teachers to contribute to meeting the needs of schools in England;
  - Embed effective, sustainable teaching practices that will continue to increase the number of pupils studying Mandarin beyond the funding of this project;
  - Provide pupils with an immersive experience of China through an intensive study visit to China for most pupils who reach Year 9 on the programme and/or through the use of digital media where travel is not permitted or possible; and
  - Achieve at least 9,000 pupils currently on the programme and 11,000 pupils since the beginning of the programme on track to a high level of fluency by Academic Year 2023/24.
- In order to participate in MEP, schools need to have an Ofsted rating of Good or Outstanding and be able to select a minimum annual cohort of 20 children into the Programme in Yr 7.
  - Participating schools receive £20K core funding plus extra per-pupil payments reflecting pupil retention year-on-year and levels of participation in the Intensive Study in China.
  - By increasing the number of schools teaching Mandarin Chinese, the Programme also aims to support parallel efforts to grow the number of teachers of the language in England.
  - UCL IOE is the largest of a number of centres training teachers of Mandarin Chinese through the IOE Mandarin PGCE which has the most significant Mandarin specific input for student teachers. MEP has an important role to play by boosting the number of schools in which trainee and early career teachers can gain experience and fulfill their teaching practice requirements.

### 3. Executive Summary

#### Relevance

- At the end of the first phase of funding of MEP at the end of academic year 2020-2021 there were 71 schools in the programme. Since then, three schools have left the programme and six schools have joined, making a total portfolio in 2021-2022 of 74.
- Within these schools, approximately 7,300 pupils were studying within MEP in 2021-2022 of whom more than 2,200 had newly enrolled in Year 7.
- 768 pupils in 34 of these schools sat GCSE Mandarin in 2021-2022.
- For perspective, 3,763 pupils in total sat GCSE Mandarin Chinese in England in 2022. Of these, 1,199 pupils (32%) were in independent schools, leaving 2,564 candidates in state schools. MEP therefore accounted for 30% of all GCSE Mandarin candidates in state schools in England.

*“Parents see it [MEP] as academically stretching, culturally expansive and opening doors for effective communication in later life and careers.”* Head Teacher, MEP School (2022)

- Strikingly, fewer than 4% of the pupils within MEP who sat GCSE were recorded as having Chinese ethnicity and/or first language Chinese. In contrast, 35% of the pupils outside MEP who sat GCSE Mandarin Chinese in state schools were recorded as such. MEP has therefore widened the study of Mandarin Chinese by increasing the overall number of pupils studying the language almost exclusively among pupils without a background in the language or a family link to China.
- MEP now accounts for almost 2 in 5 (39%) of all GCSE candidates in state schools in England who do not have a family link to China or prior exposure to the language.
- MEP remains highly regarded by school leaders and teachers in schools delivering it. Among respondents to the survey of staff in MEP schools, 70% describe themselves as ‘Positive Advocates’ and the remaining 30% as ‘Supporters’ of the Programme. 92% rate MEP as being either ‘Very Successful’ or ‘Successful’ in their school.

*“An excellent programme that provides opportunity. It would be very welcome if other languages had a similar programme.”* Head Teacher, MEP School (2022)

#### Coherence

- The perception among teachers and school leaders remains that MEP is a well-conceived and rounded programme which has the benefit of funding and is well supported by IOE and the British Council.
- The two key drivers of success for MEP are seen to be the financial support and the extended hours of classroom teaching, with school leaders relatively more likely to focus on the financial support and teachers in the classroom relatively more likely to focus on the extended hours. The legacy of the pandemic and the general cost pressures which are affecting schools as much as other areas of UK society have increased the perceived value of the financial support to participating schools in 2022.



- Teachers continue to see the extended hours devoted to Mandarin learning inside and outside the classroom as being fundamental to the delivery of learning outcomes but they also recognise that the opportunities afforded to children for wider cultural learning, including through the intensive study elements and extra-curricular activities, provide a cohesive and mutually reinforcing structure for the programme.

*"[Factors which contribute to the overall success of MEP in the school are] the additional time given and the opportunity to enhance the students' learning beyond the curriculum"* Head Teacher, MEP School (2022)

- 81% of teacher respondents to the staff survey say they are 'Very satisfied' or 'Satisfied' with the overall programme structure of MEP and 86% with the learning pathway provided from Year 7 to Year 11.
- The project-based intensive study in the UK is well regarded and valued as an opportunity for children within the programme to engage with their peers in an enjoyable learning experience.
- The 10-day intensive study in China organised by the British Council in conjunction with China's CLEC (The Centre for Language Education and Cooperation) was delivered virtually for the second time in 2021-2022 because of ongoing travel restrictions in China resulting from the Covid-19 pandemic.
- Participation in the virtual intensive study increased significantly from 2021. At least 52 schools (out of a possible 64) took part in the 2022 virtual intensive study. Prior confirmations suggested that up to 1,554 pupils would attend but no complete registration data is available. 716 students and 52 teachers gave immediate post-study feedback via online surveys administered by the British Council.
- The majority of MEP teacher respondents to the survey agreed that the intensive study was well designed, organised and communicated and that lessons with Chinese teachers were engaging and delivered in a positive learning environment. Two thirds of respondent pupils said they would be likely to recommend the virtual intensive study in China to a peer learner.
- However, a majority of both teachers and pupils believe that post-pandemic, a return to in-person intensive study in China would be more valuable for learning and cultural understanding.
- Although participating schools have typically de-emphasised the opportunity for in-person study in China in their discussions with prospective students and parents, most continue to see it as a powerful motivational tool and USP of MEP.

## Efficiency

- Multiple schools within a Multi Academy Trust (MAT) continue to play an important role in the national portfolio of MEP schools. School groupings within a MAT have been incorporated into the programme's Hub and Partner model designed to facilitate knowledge and resource sharing between schools which are more vs less experienced in teaching Mandarin.
- Several MATs continue to share teaching resources across constituent schools and there are also examples of teachers working within MEP who also work in other local schools, including primary/feeder schools.
- Those schools able to source a CLEC teaching assistant (formerly known as Hanban teaching assistants) almost universally regard them as a huge asset to the programme's delivery.

- Schools (and teachers) value greatly both the support to practice provided through the programme by IOE and the teaching resources. 82% of teachers responding through the survey expressed themselves 'Very satisfied' or 'Satisfied' with support to teachers and teaching practice, while 71% expressed themselves 'Very satisfied' or 'Satisfied' with the teaching and learning resources available.
- As more pupils move into KS4 – and increasingly into KS5 – there is demand from teachers for higher level resources. Some less experienced teachers are also looking for further support as they begin to teach Mandarin in KS5, although Mandarin in KS5 is currently outside the formal remit of MEP.
- Within KS3, Jin Bu (1 and 2) has now become an almost standard textbook, while in KS4 there is an even split between use of the Edexcel and AQA GCSE Chinese course books, with only a small number of teachers using Cambridge IGCSE Mandarin. AQA is the dominant examination board for GCSE among MEP schools.
- Apps continue to be widely used, with Quizlet, Kahoot and Go Chinese the most common.
- As has been the case since its inception, accommodating the four taught hours per week within the curriculum and managing the implications for the wider school timetable remain the major ongoing challenge to the programme identified by schools.
- After six years, most schools within MEP now have multiple year groups with extended learning hours and several have noted the cumulative effects both on timetable management and teacher workload.
- The direct effects of the pandemic started to recede during 2021-2022, but many MEP schools and teachers continued to notice some disruption, especially during the first half of the academic year. A third of respondents to the staff survey reported that the pandemic had made it more difficult to deliver the 4 out-of-classroom hours during the year and about half reported that it had had made it more difficult to maintain pupils' learning progress and motivation.
- Nearly 3 in 5 report that the enforced cancellation of the in-person intensive study in China has negatively impacted pupils' wider cultural understanding and the motivation of pupils in Years 7 and 8.

### Effectiveness

- The programme is continuing to achieve its delivery targets.
- There were 74 schools in the programme portfolio at the end of 2021-2022 against a formal target of 75.
- More than 40 schools within the portfolio are offering Mandarin on the curriculum for the first time.

*"The programme has been a real selling point with parents and students feel a great deal of pride learning this subject."* Head of MFL, MEP School (2022)
- MEP is meeting its primary goal of increasing the number of children on the path to fluency with more than 7,300 pupils in the programme in academic year 2021-2022 and a new, Year 7 cohort of over 2,200 enrolled.

- Throughout its life, drop-out of pupils from MEP has been relatively low, other than when schools have withdrawn completely from the programme. The second, Year 7 cohort which started MEP in 2017/2018 comprised 1,012 pupils. At the end of 2021/2022, 768 pupils within this cohort sat GCSE Mandarin Chinese. The continuity of data is not exact but these figures suggest something of the order of a 76% completion rate over five years of the programme, consistent with the approximately 5%-7% annual drop-out rate reported in previous evaluation reports.
- Data from DfE show that in 2021-2022 the Year 7 intake for MEP included 15.3% of children with Free School Meal (FSM) status. This compares to a national FSM share across all non-MEP pupils in Year 7 of 25.6%.
- MEP is a demanding programme for children and teachers. Schools commonly report that as the number of year groups increases, the pressures on the timetable and the demands on staff also increase. It is widely observed that the effective delivery of MEP is very dependent on the strong support of school leaders, the quality and dedication of teachers and the ongoing support to teachers provided by IOE.
- The programme in schools supports and is supported by the IOE PGCE course in Mandarin. Last year, the programme trained 16 PGCE students of whom 14 are known to be currently teaching in schools in England. Half of these (7) are known to be teaching in MEP schools.

### Impact on learning outcomes

- In Spring 2022, 768 pupils within the MEP sat GCSE Mandarin Chinese. These pupils attended one of 34 schools submitting candidates, an average of just under 21 candidates per MEP school.
- 342 of these pupils attended one of 14 schools which had joined MEP in its first cohort in 2016/2017 ('1<sup>st</sup> Cohort Schools') and 426 attended one of 20 schools which had joined in 2017/2018 ('2<sup>nd</sup> Cohort Schools').
- The headline results for these pupils show that:
  - 91% of MEP pupils attained grades 5+,
  - 51% attained 8+,
  - and 28% grade 9.
- The results show a clear difference in attainment between pupils in first cohort schools and those in second cohort schools. 66% of pupils in first cohort schools attained Grades 8 or 9, whereas in second cohort schools this share was 38%.
- This difference reflects the fact that all first cohort schools had previous experience of teaching Mandarin (and, indeed, were recruited as Hub schools for this reason), whereas many second cohort schools introduced the subject onto the curriculum for the first time through MEP. As a consequence, teachers within first cohort schools are, on average, significantly more experienced than those in second cohort schools, many of whom have been trained alongside MEP.

- In order to understand the relative performance of MEP vs non-MEP pupils at GCSE, the comparison has to exclude the 657 state school candidates known to have first language Chinese and/or Chinese ethnicity. 78% of these pupils attained GCSE grade 9 in 2022 and a cumulative 89% grades 8 or 9. Given that almost all of these pupils studied outside MEP, their inclusion in the dataset would significantly bias the results.
- Excluding these candidates, the data show that MEP pupils have significantly higher GCSE attainment than their non-MEP peers at every point of the grade distribution:
  - 26.2% attained grade 9 vs 13.4% non-MEP,
  - 49.2% attained grade 8+ vs 30.2% non-MEP,
  - and 90.1% attained grade 5+ vs 77.4% non-MEP.
- The attainment uplift for MEP vs non-MEP is significant for pupils in both first and second cohort schools but is markedly larger for pupils in first cohort schools. First cohort MEP schools appear to be especially strong in raising attainment at the top end of the grade distribution (grades 8 and 9).
- In order to allow for the influence of other factors which influence attainment (e.g. attendance at a grammar school, pupil selection for ability, gender, receipt of free school meals), multivariate analysis was undertaken to isolate the individual contribution of participation in MEP to GCSE attainment.
- This multivariate analysis found that participation in MEP itself – allowing for all other factors – has a positive and statistically significant impact on attainment.
- On average, a pupil in MEP within a first cohort school will attain 1.23 higher grade points (on a scale of 0-9) than if they had not been in the programme. A pupil in MEP within a second cohort school will attain 0.49 higher grade points than if they had not been in the programme.
- To put this data in perspective, studying within MEP in a first cohort school has an impact on attainment similar to that of having Chinese ethnicity (1.39). Studying within MEP in a second cohort school has an impact on attainment greater than that of studying Mandarin in a grammar (selective) vs non-grammar school (0.39).
- Further analysis suggests that the impact on attainment of MEP is similar at the 5+ and 8+ grade boundaries.
- As a pointer to GCSE performance of future MEP cohorts, results from the bespoke hurdle tests administered at the end of Years 7,8,9 are relatively stable vs 2020/2021.
- However, the performance of Year 10 pupils who take the externally administered HSK 3 examination as that year's hurdle test was more varied. Some of this variation may reflect the disruptive impact of the pandemic. There is also a level of concern among teachers that HSK 3, which is seen to add significantly to their workload and has a content and vocabulary which diverges significantly from GCSE, may simply not be the most appropriate milestone test to use at this stage.

## Sustainability

- The core of schools within the programme is now fairly stable and the evidence supports the conclusion of previous evaluation reports that the majority of schools which have joined have done so with a view to embedding and supporting Mandarin on the curriculum over the longer term.
- 89% of staff respondents to the survey said that they were either 'Very confident' or 'Confident' in their school's ability to offer high quality Mandarin teaching and learning on the curriculum over the long term.

*"Mandarin has been firmly embedded in the curriculum at our school. We also have very strong and hard-working Mandarin teacher at school."* Head Teacher, MEP School (2022)

- School leaders point to the importance of continuing to support and invest in their teachers (often with the express goal of retaining existing teachers) as the key to ensuring sustainability. Those schools with only one Mandarin teacher remain the most vulnerable to the impact of staff changes.

*"As long as I can keep my current teacher, I am confident that we can deliver well in the future."* Head Teacher, MEP School (2022)

- School leaders advocate for continuity of funding as crucial support for the sustainability of any intensive programme longer term. Several point to the general challenge of rising costs impacting across the whole curriculum.
- Responses to the staff survey identify at least 14 MEP schools already offering Mandarin in KS5.
- For those schools with their first MEP pupil cohorts now in KS4, the extension into KS5 is often a particular area of concern and request for support and guidance. The choice of course remains a significant challenge, with many teachers continuing to regret the imminent withdrawal of the Cambridge Pre-U and to express strong reservations about the appropriateness of the current A-level. Some schools are switching to teaching for HSK 4/5, even though it lies outside the UK system.

## 4. Summary performance of MEP against Key Performance Indicators (KPIs)

| Outcome   | KPI  | Data Source                                       | Result 2021-2022   |
|---|--|---|--|
| A stable portfolio of schools on the programme  | Maintenance of a portfolio of 75 schools on the Programme  | Programme Data from IOE                           | 74 schools in the programme<br>- 3 left in 2021-2022<br>- 6 joined in 2021-2022  |
| Increased numbers of pupils on track to a high level of fluency in Mandarin                 | At least 9,000 pupils within the programme by academic year 2023/2024  | Programme Data from IOE                           | 7,322 pupils within the programme at the end of academic year 2021/2022  |
| Improved pupil attainment in Mandarin   | GCSE results compared to national averages   | Analysis of GCSE attainment data available to DfE | MEP pupils in first cohort schools: On average 1.23 higher grade points (on a scale of 0-9) vs non-MEP<br>MEP Pupils in second cohort schools: On average 0.49 higher grade points vs non-MEP  |
| Pupils are engaged and highly motivated to study Mandarin                                   | % of pupils retained in the programme (90%+ pa)  | Online survey of MEP staff and school leaders     | 95%+ pa for 2016/2017 MEP Year 7 cohort over 5 years<br>(768 GCSE entries in 2021/2022)  |
| Expansion of supply of qualified Mandarin teachers  | Number of PGCE places offered by UCL IOE annually for the Mandarin Languages PGCE  | Programme Data from IOE                           | 25   |
| Improved quality of Mandarin teaching practices   | Teacher satisfaction with:<br>- Learning pathways<br>- Programme structure<br>- Hurdle tests<br>- Support<br>- Resources | Online survey of MEP staff and school leaders     | Satisfied+Very satisfied with (N27)<br>Learning pathway from Y7 to Y11 - 86%<br>Overall programme structure - 81%<br>Hurdle Tests as a tool for assessing pupils' progress - 75%<br>Support to teachers and teaching practice - 82%<br>Teaching and learning resources available - 71%   |
| Improved teacher confidence in teaching Mandarin  | Self-reported teacher confidence   | Online survey of MEP staff and school leaders     | Agree+Strongly agree (N27)<br>Through MEP my confidence as a teacher has improved - 82%<br>Through MEP I have become more confident in delivering a rigorous model for teaching Mandarin - 82%   |
| Increased pupil confidence, resilience and self-esteem                                      | Teacher reported:<br>- Confidence<br>- Resilience<br>- Self-esteem   | Online survey of MEP staff and school leaders     | Agree+Strongly agree (N27)<br>Participation in MEP improves pupils' self-esteem - 74%<br>Participation in MEP improves pupils' resilience - 89%<br>Participation in MEP improves pupils' self-confidence - 82%<br>Participation in MEP supports the confidence and resilience of children from disadvantaged backgrounds - 75% |
| A higher proportion of disadvantaged pupils within MEP schools are engaged in the programme | Share of pupils within the programme from disadvantaged backgrounds vs 2021/2022 baseline                                | Analysis of NPD data available to DfE             | Baseline for 2021/2022:<br>FSM share within MEP = 15.3%  |

## 5. Methodology

### Original Research

- This evaluation report is based on the fourth wave of data collection undertaken since the start of the Mandarin Excellence Programme.
- There were 7 main elements of data collection and analysis within this wave of research:
- **Analysis of programme data collected by IOE.**
  - This data covers the schools in the programme, the number and aggregate attainment of pupils taking end of year hurdle tests and the teaching hours delivered.
- **Analysis of student profile and GCSE attainment data within the NPD**
  - The identification and data matching of pupils within MEP was undertaken by analysts at DfE. Pupil records were flagged within the National Pupil Database (NPD) available to the DfE which allowed comparison of the characteristics and GCSE attainment of pupils studying within the programme against those studying outside the programme.
  - Further details of the identification and data matching process are provided in Appendix 2.
- **An online survey distributed to staff (heads and teachers) in MEP schools.** The survey carried over some core questions from previous waves of research and was updated to reflect the aims of the second phase of funding and the updated outputs and outcomes within the programme Theory of Change.
  - The survey received 77 responses in total, of which 65 were complete and 12 partial,
  - At least one response was received from 46 schools out of a total of 74 in the programme (62%),
  - 33 respondents (43%) were school heads and the remainder other teachers and staff.
- **10 in-depth interviews with teachers and heads from 9 MEP schools.**
  - Schools for interview were chosen to give a broad representation across the portfolio of different time periods within MEP and different regions of England. Interviewees included both school heads and teachers to provide both leader level and classroom perspectives on MEP.
  - The interviews were held via Zoom/TEAMS and explored issues raised through the online survey in greater depth. They lasted 30-45 minutes.
- **Observation of several sessions within the two-week Online Intensive Study in China.**
  - Members of the evaluation team observed a range of different lessons and cultural events within the 1- day study programme.

- **Data from a teacher and pupil survey distributed at the end of the virtual intensive study in China developed and administered by the British Council.**
  - These surveys focused on immediate assessment of the value of the intensive study programme and its contribution to the overall target outcomes of MEP,
  - The surveys received 716 responses from participating pupils and 45 responses from teachers supporting the intensive study programme,
  - A separate evaluation report on the intensive study specifically has been prepared for the British Council.
  
- **A short feedback survey from schools which have left the programme since 2021.**

### Theory of Change

- The programme's target outcomes for the second wave of funding have been formalised within a Theory of Change developed by the DfE (Appendix 1).
- The Theory of Change sets the target outputs and outcomes of the programme within context and discusses key dependencies and contingencies.
- Performance against KPIs aligned to the target deliverables and outcomes within this Theory of Change is summarised in Section 4 above.

### Limitations to the research and analysis

- Data collection from participating schools during this wave continued to be impacted to some extent by the pressures on schools resulting from the Covid-19 pandemic. No observational visits to schools were possible during this wave of research.
- The staff survey for this wave of research received a strong response from school leaders but a relatively lower response than in previous waves from teachers. This is most likely because of the timing of the survey in the second half of the summer term when exam pressure is most acute within schools.
- It is intended that several further data collection tools, including surveys for direct data collection from participating pupils, will be developed and used during subsequent waves of evaluation. The development of these tools will allow for the collection of data against some further KPIs within the Theory of Change.
- A focus of this wave of evaluation was comparative analysis of GCSE outcomes for pupils within MEP. The process of identifying and matching MEP pupil data within the National Pupil Database (NPD) proved very time consuming and highlighted several issues around definition and data collection which will inform future waves of research and evaluation.
- In consequence, there are some discrepancies when reporting numbers of pupils within MEP which are reflected in some of the data presented in this report. Those discrepancies are typically minor and do not affect the conclusions drawn from analysis of the data.



## 6. Relevance: Is the programme doing the right things?

### School Participation in MEP

- At the end of the first funding phase of MEP (2020/2021) there were 71 schools in the programme. Since then, three schools have left the programme and six schools have joined, making a total portfolio in 2021/2022 of 74 (Chart 1).
- This 74 includes fourteen of fifteen schools recruited in the first cohort (2016/2017) to be hub schools and beacons of good practice based on their previous experience teaching Mandarin.
- The portfolio has therefore remained largely stable with most schools remaining committed to the programme. Many schools see that participation in the programme reflects positively on the school's profile and attractiveness to prospective parents and pupils.

*"It's [MEP] great for the school's image and the students' personal development"*  
Teacher, MEP School (2022)

- Throughout the programme's life, schools that have dropped out have done so for one of two main reasons:
  - A challenge at school level, outside MEP. For example, a change in Ofsted rating or a change in school leadership,
  - Difficulty in managing and resourcing the extended hours and the timetable consequences of MEP within the wider school curriculum. This challenge was accentuated by the Covid-19 pandemic and contributed to eight schools leaving at the end of academic year 2019-2020.

**Chart 1: Number of schools delivering MEP by year of joining the Programme**

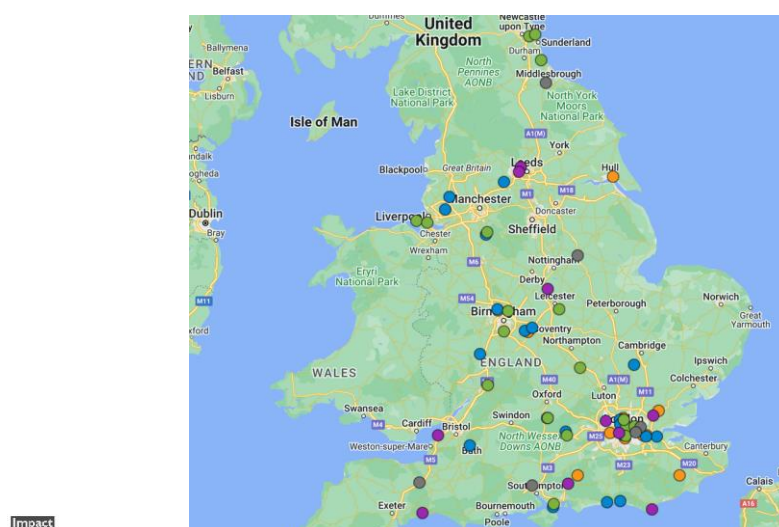
| Academic Year | Schools joining MEP | Schools leaving MEP | Cumulative No. Schools delivering MEP |
|---------------|---------------------|---------------------|---------------------------------------|
| 2016/2017     | 14                  |                     | 14                                    |
| 2017/2018     | 24                  |                     | 38                                    |
| 2018/2019     | 26                  | 1                   | 64                                    |
| 2019/2020     | 13                  | 8                   | 76                                    |
| 2020/2021     | 5                   | 2                   | 71                                    |
| 2021/2022     | 6                   | 3                   | 74                                    |
| <b>Total</b>  | <b>88</b>           | <b>14</b>           | <b>74</b>                             |

### The profile of schools within MEP

- As noted in previous evaluation reports, the programme's focus on excellence has attracted several academically high performing schools and a relatively high share of grammar and faith schools.
- It has also attracted schools which were already focused on preparing children for life in the globalised world of the 21st century. Many have existing international links and/or participate in other international programmes such as the International School Award (ISA) run by the British Council.
- The MEP portfolio is concentrated in the major conurbations (Chart 2) with the largest group in London and other significant urban clusters in the West Midlands, Leeds-Manchester and Newcastle-Sunderland. Many of the schools serve ethnically diverse communities.

A significant minority of schools within the portfolio have catchment areas marked by relative deprivation. Heads in these schools are often particularly attracted by the programme's potential to broaden the horizons of children and to provide a platform for interaction and engagement with children from more advantaged backgrounds elsewhere in England.

Chart 2: Location of MEP Schools 2021-2022



Source: IOE Programme data

### Pupil Participation in MEP

- Within the 74 schools in the portfolio, approximately 7,300 pupils were studying within MEP in 2021-2022 of whom more than 2,200 had newly enrolled in Year 7 (Chart 3).
- The first cohort of pupils recruited in 2016-2017 were assessed for GCSE in 2020-2021 and have now left the programme.

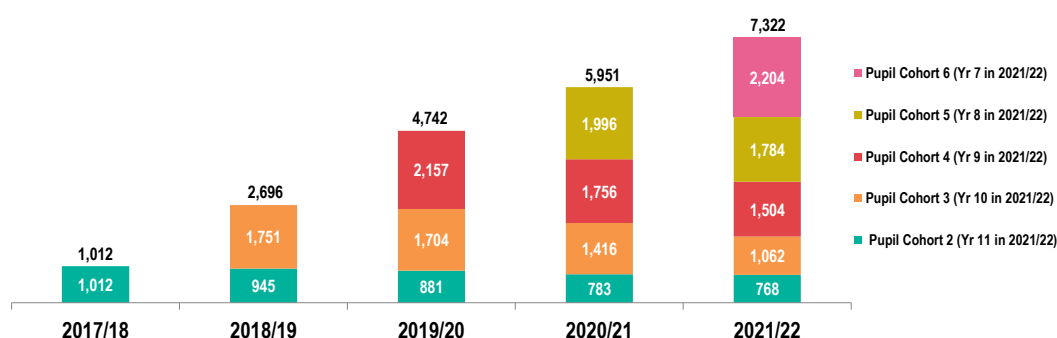
- On average, each school within the portfolio enrolled 30 new Year 7 pupils into MEP in 2021-2022.

*“The programme has been a real selling point with parents and students feel a great deal of pride learning this subject.”* Head of Modern Foreign Languages, MEP School (2022)

*They [parents] identify the aspiration element of following this programme and the potential impact on future careers:* Head Teacher, MEP School (2022)

**Chart 3: Growth in Pupil Numbers within MEP**

Number of Pupils within MEP (number taking end of year tests)  
By academic year and pupil cohort



Source: Programme data from IOE based on numbers of pupils taking year-end Hurdle Tests (Yr7-Yr9), HSK3 (Yr 10), GCSE (Yr 11).

NB: Chart does not show pupil Cohort 1 recruited in 2016/2017; 323 pupils from this cohort received assessed GCSE Grades in 2020/2021 and therefore completed the MEP programme. In individual years, small numbers of schools and pupils may not take year-end Hurdle Tests, so the number of pupils actually studying within MEP during an academic year may be slightly higher than the numbers shown.



Source: IOE Programme data

- In Spring 2022, 768 pupils within MEP sat GCSE Mandarin Chinese. These pupils were drawn from 34 schools. The GCSE cohort size ranged from 10 to 37 with an average of just under 21 candidates per MEP school.
  - 342 of these pupils were enrolled in one of the 14 Hub schools recruited in 2016/2017, all of which already had experience teaching Mandarin (24 per school).
  - 426 pupils were enrolled in one of 20 schools recruited in 2017/2018. (21 per school). Many of these schools adopted Mandarin teaching and learning on the curriculum for the first time through MEP.
- Spring 2022 marked the second time that MEP pupils in Year 11\* had been entered for GCSE but the first time that their attainment was based on exams rather than the teacher-assessed grades which were used in 2021 as a consequence of the pandemic.
- To put these numbers in perspective, 3,763 pupils in total sat GCSE Mandarin Chinese in England in 2022. Of these, 1,199 pupils (32%) were in independent schools, leaving 2,564 candidates in state schools. MEP therefore accounted for 30% of all GCSE Mandarin candidates in state schools in England in 2022.

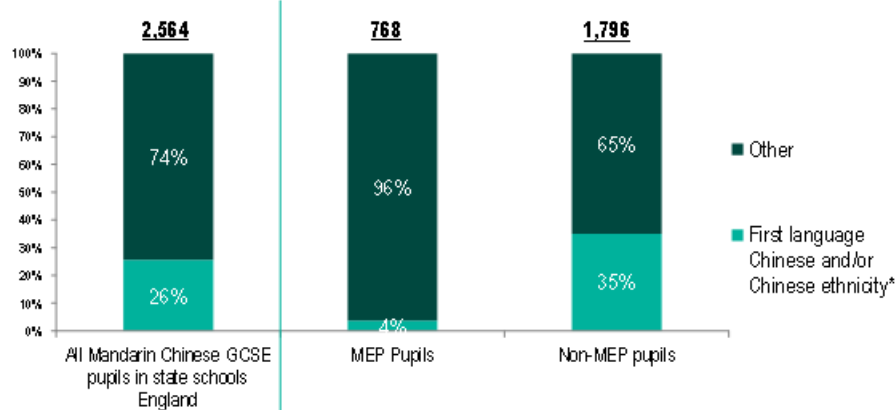
One school within MEP, Bohunt Liphook, submitted 27 candidates for GCSE at the end of Year 9

### MEP pupil profile

- Prior to the introduction of MEP, Mandarin Chinese was a subject known to attract a high share of children with Mandarin as a home language.
- The data is not available for pupils within the independent sector but it is believed that a high share of candidates from this sector do have Mandarin Chinese as a home language and/or Chinese ethnicity.
- The data is available for most pupils within the state sector in England. Of the 2,564 pupils who sat the Mandarin GCSE in state schools in 2022, 657 (26%) are known to have Mandarin Chinese as a first language and/or to have Chinese ethnicity [There may be a small number of pupils for whom this data is not recorded].
- Of these 657 pupils, 28 had studied within MEP (4% of all MEP pupils taking GCSE), and the remaining 629 had studied in state schools outside MEP. Therefore, 35% of all state school pupils taking GCSE Mandarin Chinese outside MEP are known to have Mandarin Chinese as a first language and/or to have Chinese ethnicity (Chart 4).

**Chart 4: First language Chinese/Chinese ethnicity of GCSE candidates in England (2022)**

% Share of MEP and non-MEP Pupils taking Mandarin Chinese GCSE in state schools in England who are known to have first language Chinese and/or Chinese ethnicity



Source: DfE (2022). Analysis by Impact Stories  
\* Pupils for whom data is recorded

- These data show that MEP has widened the study of Mandarin Chinese by increasing the overall number of pupils studying the language almost exclusively among pupils without a background in the language or a family link to China.
- MEP now accounts for almost 2 in 5 (39%) of all Mandarin GCSE candidates in state schools in England who do not have a background in the language or a family link to China.

### Advocacy from participating schools

- MEP remains highly regarded by school leaders and teachers in the schools which are delivering it.
- Among respondents to the staff survey in MEP schools, 70% describe themselves as 'Positive Advocates' and the remaining 30% as 'Supporters' of the Programme. 92% rate MEP as being either 'Very Successful' or 'Successful' in their school.

*"An excellent programme that provides opportunity. It would be very welcome if other languages had a similar programme."* Head Teacher, MEP School (2022)

*"The challenge, value and enrichment that it offers is unparalleled compared to most other aspects of our curriculum."* Head Teacher, MEP School (2022)

## 7. Coherence: How well does the programme fit together?

### Programme design

- The MEP programme starts at the beginning of KS3 in Year 7. The key characteristic of the Programme within participating schools is its intensive nature. It allows selected pupils to study eight hours of Mandarin Chinese every week including a compulsory minimum of four hours of classroom-taught lessons supplemented by up to four hours of guided self-study outside the curriculum.
- The selection method into MEP within schools varies widely but normally involves consultation with parents about the long-term time commitment that will be required and therefore places considerable emphasis on parent and child motivation. Some schools offer a trial period for all Year 7 pupils and a few offer teaching outreach to Year 6 pupils in feeder primary schools within their catchment area in part as an opportunity to pre-select into MEP.
- Another important component of the Programme is activities organised for cross-school cohorts of pupils. The most significant is a two-week intensive study in China originally designed for pupils at the end of Year 8 and organised by the British Council and IOE.
- The focus of the intensive study in China is the development of pupils' language ability and confidence by allowing them to experience China through various cultural activities, to undertake intensive study and to practise their acquired language skills in a native speaker environment.
- The intensive study within MEP is organised and managed by the British Council China in partnership with CLEC (The Centre for Language Education and Cooperation, previously known as Hanban), within the China Ministry of Education. The intensive study in China was delivered virtually for the second time in 2022 because of ongoing travel restrictions in China resulting from the Covid-19 pandemic. It was also delivered to pupils at the end of Year 9 rather than Year 8 as originally envisaged.
- The 2022 virtual intensive study in China involved 16 host institutions in China – 15 universities and 1 school. Participating schools in England were matched to one of the host institutions which acted as the teaching lead throughout the two-week programme.
- Each host institution provided specialist teachers of Mandarin as a foreign language for the intensive study programme and four teacher trainers from IOE ran two individual 2-day training workshops for the teachers from China in advance of the programme
- A student reference group from four participating MEP schools researched topics and interests in advance and fed into the programme design. Alongside language, cultural and interactive sessions with peers in China, the programme included:
  - An opening and closing ceremony attended by education and government stakeholders in UK and China,
  - A panel discussion with British students and business people with experience of life in China,
  - An interactive competition about 'My School',
  - 'Hands-on' sessions on aspects of Chinese culture such as Tai Chi, making panda masks.

- The MEP design also includes a three-day campus-based intensive study in the UK for pupils at the end of Year 10. In 2022 the focus of the intensive study was a China-themed tourism project. This time also gives pupils the opportunity to meet fellow learners, to reinforce their learning to date and look at future study paths and opportunities with Mandarin.
- Two tests are used to track the learning progress of pupils in advance of their targeted sitting of GCSE Mandarin Chinese at the end of Year 11.
  - In the summer term of academic Years 7, 8 and 9, pupils sit Hurdle tests specially created by the IOE to track their progress in the four key skills of reading, writing, speaking and listening,
  - In the summer term of Year 10, the hurdle test which pupils take is HSK3.
- The HSK testing system sits outside the UK's formal examination structure but is well understood by British universities. It is the standard test of Chinese language proficiency for non-native speakers. HSK assesses non-native Chinese speakers' ability in using the Chinese language in their daily, academic and professional lives and currently consists of six levels.
- The standard of the UK's GCSE Mandarin Chinese lies in between HSK3 and HSK4. The vocabulary doubles at every level making the gap between levels high. HSK4 is considered to be well beyond GCSE and just a little below A-level whereas HSK5 is beyond A-level.
- Throughout the Programme, UCL IOE provides significant practical and pedagogical support to participating schools, including support with curriculum development, teaching resources and teaching practice. The Institute also hosts termly meetings for both teachers and school Heads involved in the Programme.
- Peer support within the Programme is built on a Hub and Partner School model. The fourteen schools recruited into the Programme in the first cohort (2016/2017) were already experienced in teaching Mandarin and were designated as Hub Schools. These schools were chosen to act as local centres of excellence for a small number of Partner schools. Schools recruited in subsequent cohorts have been assigned to a Hub School (based primarily on geography) in order to receive support and guidance in establishing the Programme. As the Programme has expanded, a further 9 schools in which MEP has been running successfully have been designated as Hub schools to support further expansion in school numbers across the Programme.
- Participating schools receive a minimum £20,000 funding per academic year. Extra payments are made for student retention and for yearly intensive learning.

#### Perceived drivers of success for MEP

- The perception among teachers and school leaders remains that MEP is a well-conceived and rounded programme which has the benefit of funding and is well supported by IOE and the British Council.

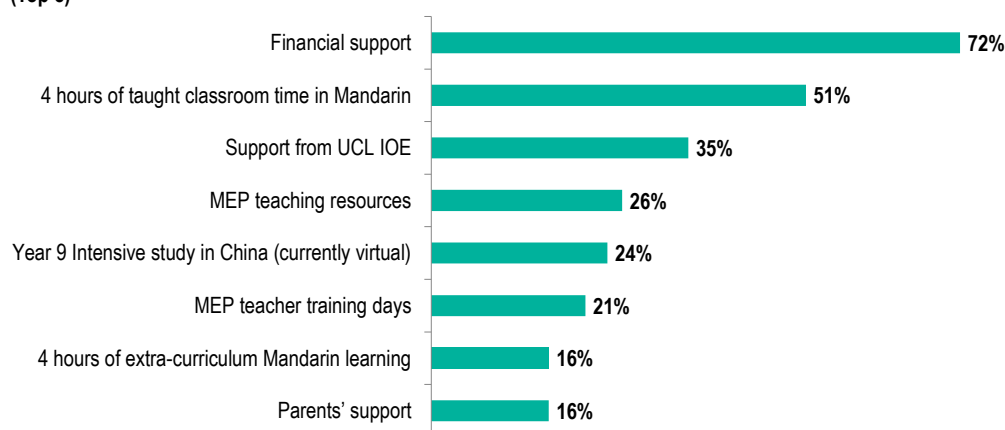
*"It is a great programme that facilitates the learning of Mandarin very well. It provides a lot of support for both teachers and pupils. It provides funding for activities and equipment to improve the learning of Mandarin."* Teacher, MEP School (2022)

*"The additional funding, extra hours lessons and the range of opportunities for MEP students is amazing, particularly the (virtual) China trip, Y10 intensive learning including visit to a university, additional language and culture opportunities in school, support from CLEC teachers....."* Head of Mandarin, MEP School (2022)

- The two key drivers of success for MEP are seen to be the financial support and the extended hours of classroom teaching (Chart 5), with school leaders relatively more likely to focus on the financial support and teachers in the classroom relatively more likely to focus on the extended hours. The legacy of the pandemic and the general cost pressures which are affecting schools as much as other areas of UK society have increased the perceived value of the financial support to participating schools in 2022.

**Chart 5: Perceived success drivers for MEP**

Which are the three most important aspects contributing to the success of MEP?  
(Top 8)



Source: MEP Staff Survey 2021/22. Fieldwork and analysis by Impact Stories  
Base: Staff involved in MEP (66)

- Staff involved in MEP continue to see the extended hours devoted to Mandarin learning inside and outside the classroom as being fundamental to the delivery of learning outcomes but they also recognise that the opportunities afforded to children for wider cultural learning, including through the intensive study elements and extra-curricular activities, provide a cohesive and mutually reinforcing structure for the programme.

*"[Factors which contribute to the overall success of MEP in the school are] the additional time given and the opportunity to enhance the students' learning beyond the curriculum."* Head Teacher, MEP School (2022)

- 81% of teacher respondents to the staff survey (n=27) say they are 'Very satisfied' or 'Satisfied' with, "the overall programme structure of MEP" and 86% with, "the learning pathway provided from Year 7 to Year 11."
- The project-based intensive study in the UK is well regarded and valued as an opportunity for children within the programme to engage with their peers in an enjoyable learning experience.

*"The students highly value the opportunity to learn Mandarin. The opportunities the students have are far more than learning the language though; they are given the chance to learn about the culture and to take part in a number of competitions and workshops."* Head Teacher, MEP School (2022)

- The 10-day intensive study in China organised by the British Council in conjunction with China's CLEC was delivered virtually for the second time in 2021-2022 because of ongoing travel restrictions in China resulting from the Covid-19 pandemic.



- Participation in the virtual intensive study increased significantly from 2021. At least 52 schools (out of a possible 64) took part in the 2022 virtual intensive study. Prior confirmations suggested that up to 1,554 pupils would attend but no complete registration data is available. 716 pupils and 52 teachers gave immediate post-study feedback via online surveys administered by the British Council.
- The majority of MEP teacher respondents to the survey agreed that the intensive study was well designed, organised and communicated and that lessons with Chinese teachers were engaging and delivered within a positive learning environment. Two thirds of respondent pupils said they would be likely to recommend the virtual intensive study in China to a peer learner.

*“The [virtual intensive study] programme was clearly well thought out and a lot of effort had gone in to the structure of activities to ensure they were relevant and varied. Students enjoyed themselves more than they expected to, I think. They enjoyed the interaction with Chinese peers. Lots of skills were practised and cultural activities made it fun and engaging for students.”* MEP Teacher supporting virtual intensive study in China (2022)

*“I would say that the best thing was the fact that it was well balanced and that the students now have a better picture of what China is like overall, even though they have not had a chance to travel there.”* MEP Teacher supporting virtual intensive study in China (2022)

- However, a majority of both teachers and pupils believe that post-pandemic, a return to in-person intensive study in China would be more valuable for learning and cultural understanding. Although participating schools have typically de-emphasised the opportunity for in-person study in China in their discussions with prospective students and parents, most continue to see it as a powerful motivational tool and USP of MEP.
- Heads and teachers widely appreciate the various areas of support and resources provided by IOE. There is a relatively high share of recently qualified teachers delivering the programme, many of whom have been trained by IOE. These teachers – and their Heads - tend to be especially appreciative of both the support provided to teaching practice and the classroom resources.
- As more MEP pupils move into KS4 – and increasingly into KS5 – there is demand from teachers for higher level resources. Some less experienced teachers are also looking for further support as they begin to teach Mandarin in KS5, although Mandarin in KS5 is currently outside the formal remit of MEP.

## 8. Efficiency: How are programme resources being used?

### Cross-school resourcing

- Multiple schools within a Multi Academy Trust (MAT) continue to play an important role in the national portfolio of MEP schools.
- Schools within a MAT have a shared mission and ethos which supports the implementation of MEP in multiple schools. Several MATs continue to share teaching resources across constituent schools and there are also examples of teachers working within MEP who also work in other local schools, including primary/feeder schools.
- School groupings within a MAT have been incorporated into the programme's Hub and Partner model designed to facilitate knowledge and resource sharing between schools which are more vs less experienced in teaching Mandarin.
- Previous evaluations have noted that the success of the wider Hub and Partner model has been patchy, with some strong examples of collaboration and support and some weaker ones. The pandemic obviously made all forms of cross-school collaboration more difficult and 2022 was to some extent a recovery year.
- Feedback through the staff survey and interviews this year suggest that this broad conclusion remains valid. Some teachers laud their partners and appear to value the collaboration and support very highly; others see the relationship as being weak and in the extreme almost non-existent. Time and distance remain the key barriers to greater cooperation between hub and partner schools.

### In-school delivery

- Schools (and teachers) value greatly both the support to practice provided through the programme by IOE and the teaching resources. 82% of teachers (n=27) responding through the staff survey expressed themselves 'Very satisfied' or 'Satisfied' with, 'Support to teachers and teaching practice', while 71% expressed themselves 'Very satisfied' or 'Satisfied' with, 'The teaching and learning resources available'.

*"A fantastic programme with great support from UCL in terms of planning, resourcing, staffing and professional learning."* Head Teacher, MEP School (2022)

- Those schools able to source a CLEC teaching assistant (formerly known as Hanban teaching assistants) almost universally regard them as a huge asset to the programme's delivery. Their role is especially significant in the considerable number of MEP schools with only one qualified teacher.
- As has been the case since its inception, accommodating the four taught hours per week within the curriculum and managing the implications for the wider timetable remain the major ongoing challenge to the programme identified by schools through the staff survey and in-depth interviews.

*"I think it [MEP] offers a great experience for those involved. However, trying to implement it in a way which doesn't narrow the curriculum for those involved has a negative impact on the wider school timetable and groupings."* Head Teacher, MEP School (2022)

- The core of schools which have remained with the programme over a number of years have found workable solutions. With few exceptions, MEP schools deliver the mandated 4 hours of classroom teaching and support a further four hours of out-of-classroom learning. The four hours of classroom teaching are typically divided into 2 or 3 hours delivered during the standard school day with the remaining 1 or 2 hours delivered at lunchtime or early evening.
- The balance of hours delivered during the standard school day is generally higher in KS4 than in KS3, after pupils have chosen their focal GCSE subjects. However, the timetabling challenge is typically greater in KS3 because of the need to accommodate a wider range of subjects and the typical allocation of only 2 hours per week to a MFL outside MEP.
- After six years, most schools within MEP now have multiple year groups operating with extended learning hours and several have noted the cumulative effects both on timetable management and teacher workload. School leaders note the challenge of managing cumulative teacher workload and recruiting extra resources at the right time, so that learning hours can be delivered but resources are not being used inefficiently.

*“I worry about the capacity as time moves forward- we have one mandarin teacher employed on a 0.8 contract and in 2023-24 we’ll have 4 year groups doing Mandarin, I’m not sure how this can be managed on her timetable and the required hours needed.”* Head of MFL, MEP School (2022)

- The direct effects of the pandemic started to recede during 2021-2022, but many MEP schools and teachers continued to notice some disruption, especially during the first half of the academic year. A third of respondents to the staff survey reported that the pandemic had made it more difficult to deliver the 4 out-of-classroom hours during the year and about half reported that it had had made it more difficult to maintain pupils’ learning progress and motivation.
- A small minority of schools feel that the pandemic has significantly undermined the potential benefits of the programme, especially the benefits of wider cultural learning about China. A larger number see the in-person intensive study in China as an integral part of the programme for both learning and motivational reasons and are keen for it to resume as soon as it is safe and practical to do so.

*“While we have benefitted to the extent that we are able to offer our students an alternative language option, with funding to support extracurricular activities, we are yet to reap the full benefits of participation in the programme. Due to COVID-19, we have been unable to take our students to China, and the ‘virtual visit’ is not a comparable substitute, nor have our GCSE examination results in Mandarin been at the level we had hoped.”* Deputy Head, MEP School (2022)

- Nearly 3 in 5 respondents to the staff survey report that the enforced cancellation of the in-person intensive study in China has negatively impacted pupils’ wider cultural understanding and the motivation of pupils in Years 7 and 8.
- Within the classroom, in KS3 Jin Bu (1 and 2) has now become an almost standard textbook, while in KS4 there is an even split between use of the Edexcel and AQA GCSE Chinese course books, with only a small number of teachers using Cambridge IGCSE Mandarin. AQA is the dominant examination board for GCSE among MEP schools.
- Apps continue to be widely used, with Quizlet, Kahoot and Go Chinese the most common.

## 9. Effectiveness: Is the programme achieving its delivery targets?

### School and pupil numbers

- There were 74 schools in the programme portfolio at the end of 2021-2022 against a formal target of 75.
- More than 40 schools within the portfolio are offering Mandarin on the curriculum for the first time and introducing Mandarin remains a key motivation for participating schools.

*“The programme has been a real selling point with parents and students feel a great deal of pride learning this subject.”* Head of MFL, MEP School (2022)

- The second phase of MEP has a primary goal of 9,000 pupils on the programme and 11,000 pupils since the beginning of the programme on track to a high level of fluency by Academic Year 2023/24.
- Data suggest that it is on-track to meeting this goal with more than 7,300 pupils in the programme during 2021-2022 and a new, Year 7 cohort of over 2,200 enrolled.

### Pupil motivation and retention

- Throughout its life, drop-out of pupils from MEP has been relatively low, other than when schools have withdrawn completely from the programme. The second Year 7 cohort which started MEP in 2017/2018 comprised 1,012 pupils. At the end of 2021/2022, 768 pupils within this cohort sat GCSE Mandarin Chinese. The continuity of data is not exact but these figures suggest something of the order of a 76% completion rate over five years of the programme, consistent with the approximately 5% - 7% annual drop-out rate reported in previous evaluation reports.
- The third and fourth cohorts recruited into MEP were most impacted by the constraints of the Covid-19 pandemic and the data suggest that the final 5yr completion rate for these two cohorts may turn out to be lower than 76%.

### Participation of disadvantaged pupils

- An additional target of the second wave of MEP is to increase the share of children from disadvantaged backgrounds within the programme, relative to a baseline for 2021/2022
- The most obvious measure of disadvantage is receipt of Free School Meals (FSM). Data from DfE show that in 2021/2022 the Year 7 intake for MEP included 15.3% of children with FSM status. This compares to a national FSM share across all non-MEP pupils in Year 7 of 25.6%.
- The difference is explained by the fact that the national FSM share of pupils taking Mandarin is lower than the national average for all pupils and that in addition, MEP has a significant share of schools in relatively affluent catchment areas (i.e. on average, MEP schools have a lower share of FSM pupils than do non-MEP schools).
- Nationally, the share of pupils in receipt of Free School Meals has increased significantly since 2018/2019 (Table 1) but the data show that the FSM share within MEP has been increasingly relatively more quickly, albeit from a lower baseline.

*“The Program supports both academic students and disadvantaged students by providing them with a once in a lifetime skill.”* Deputy Head, MEP School (2022)

Table 1: FSM status of Year 7 pupils within and outside MEP

| Pupils                    | Non-MEP    |            |           |            | MEP         |             |             |            |
|---------------------------|------------|------------|-----------|------------|-------------|-------------|-------------|------------|
|                           | Non-FSM    | FSM        | Total     | FSM%       | Non-FSM     | FSM         | Total       | FSM%       |
| 2016/17                   | 503,189    | 114,935    | 618,124   | 18.6%      | 366         | 39          | 405         | 9.6%       |
| 2017/18                   | 513,622    | 113,486    | 627,108   | 18.1%      | 961         | 96          | 1,057       | 9.1%       |
| 2018/19                   | 527,449    | 115,154    | 642,603   | 17.9%      | 1,667       | 151         | 1,818       | 8.3%       |
| 2019/20                   | 522,395    | 124,966    | 647,361   | 19.3%      | 1,902       | 209         | 2,111       | 9.9%       |
| 2020/21                   | 502,285    | 154,689    | 656,974   | 23.5%      | 1,811       | 267         | 2,078       | 12.8%      |
| 2021/22                   | 496,313    | 170,700    | 667,013   | 25.6%      | 1,957       | 354         | 2,311       | 15.3%      |
| <b>% Change 2022/2017</b> | <b>-1%</b> | <b>49%</b> | <b>8%</b> | <b>38%</b> | <b>435%</b> | <b>808%</b> | <b>471%</b> | <b>59%</b> |

Source: DfE (2023); Analysis by Impact Stories

### Teacher Supply and Teacher Confidence

- MEP is a demanding programme for children and teachers. Schools commonly report that as the number of year groups increases, the pressures on the timetable and the demands on staff also increase. It is widely observed that the effective delivery of MEP is very dependent on the strong support of school leaders, the quality and dedication of teachers and the ongoing support to teachers provided by IOE.

*“As long as I can keep my current teacher, I am confident that we can deliver well in the future. However, as we progress to more year groups, it is going to become more difficult as the fourth hour is delivered after school.”* Head Teacher, MEP School (2022)

*“My school has provided lots of support for me to deliver Mandarin. They assist all my training opportunities and permit me to acquire any materials that I need for teaching.”* Mandarin Teacher, MEP School (2022)

- The programme in schools supports and is supported by the IOE PGCE course in Mandarin. Last year, the IOE trained 16 PGCE students of whom 14 are known to be currently teaching in schools in England. Half of these (7) are teaching in MEP schools.
- The various elements of support to MEP provided by IOE are appreciated by heads and teachers and are seen to be especially important in supporting the early career teachers delivering the programme.
- Although based on a relatively small sample of 27 teachers, feedback through the staff survey shows that this support is having a positive effect. 82% Agree strongly or agree with both statements: *“Through MEP my confidence as a teacher has improved”* and *“Through MEP I have become more confident in delivering a rigorous model for teaching Mandarin.”*

## 10. Impact: What difference is the programme making (how well is it delivering its target learning outcomes for pupils)?

### GCSE attainment by MEP pupils

- The headline 2022 GCSE results for pupils within MEP are shown in Table 2.

Table 2: GCSE Mandarin Chinese – Grade achieved by all MEP pupils 2022 – % cumulative

| GCSE Mandarin Chinese: grade achieved 2022 (% cumulative) | 9     | 8     | 7     | 6     | 5     | 4     | 3     | 2     | 1     | U    | Total Pupils |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------------|
| ALL MEP pupils  | 27.7% | 50.8% | 70.7% | 79.2% | 90.5% | 94.4% | 96.5% | 98.4% | 99.2% | 100% | 768          |
| All MEP pupils in 1st cohort schools (14 schools)         | 40.4% | 66.4% | 83.3% | 89.5% | 95.9% | 98.2% | 99.1% | 99.7% | 99.7% | 100% | 342          |
| All MEP pupils in 2nd cohort schools (20 schools)         | 17.6% | 38.3% | 60.6% | 70.9% | 86.2% | 91.3% | 94.4% | 97.4% | 98.8% | 100% | 426          |

Source: DfE (2023); Analysis by Impact Stories

- These results show that 91% of all MEP pupils attained grades 5+; 51% attained 8+ and 28% grade 9.

*“The results of our first cohort were excellent. Students get to make rapid, excellent progress in Mandarin because of the time they have on the timetable and the out of classroom independent learning. Students enjoy doing so well and get a real sense of fulfilment and achievement. Support and resources from UCL IOE CI is excellent. Students also are exposed to enrichment opportunities.”* Head of Mandarin, MEP School (2022)

- There is a clear difference in attainment between pupils in first cohort schools and those in second cohort schools with first cohort pupils having significantly higher attainment, especially at the top end of the grade distribution. 66% of pupils in first cohort schools attained Grades 8 or 9, whereas in second cohort schools this share was 38%.
- This difference reflects the fact that all first cohort schools had previous experience of teaching Mandarin (and, indeed, were recruited as Hub schools for this reason), whereas many second cohort schools introduced the subject onto the curriculum for the first time through MEP. As a consequence, teachers within first cohort schools are, on average, significantly more experienced than those in second cohort schools, many of whom have been trained alongside MEP.

### The relative performance of MEP pupils at GCSE vs non-MEP pupils

- To make a meaningful comparison of the performance of pupils within and outside MEP, the contribution of pupils with Chinese ethnicity and/or first language needs to be taken into account.
- The data show that these candidates have a markedly higher attainment profile than other pupils. 78% of the 657 state school pupils known to have Chinese as a home language and/or Chinese ethnicity were awarded GCSE grade 9 in 2022 and a cumulative 89% grades 8 or 9. This subset of pupils is performing at a different level to children who have started learning Mandarin Chinese as a foreign language at the age of 11 without any prior exposure.

- As discussed previously, 96% of all these pupils studied Mandarin outside MEP, accounting for 35% of all non-MEP candidates. Therefore, the comparison data in tables 3 and 4 and Chart 6 excludes the 657 GCSE candidates known to have first language Chinese and/or Chinese ethnicity.
- The headline comparison between the performance of MEP pupils and other pupils in state schools outside the programme is shown in Table 3.
- The data show that MEP pupils have significantly higher attainment than their non-MEP peers at every point of the grade distribution:
  - 26.2% attained grade 9 vs 13.4% non-MEP,
  - 49.2% attained grade 8+ vs 30.2% non-MEP,
  - 90.1% attained grade 5+ vs 77.4% non-MEP.

**Table 3: GCSE Mandarin Chinese – Grade achieved by all state school pupils 2022 – % cumulative**

Data excludes pupils known to have Chinese first language and/or Chinese ethnicity

| GCSE Mandarin Chinese: grade achieved 2022<br>(% cumulative)<br><small>[Data excludes pupils known to have Chinese as a first language and/or Chinese ethnicity]</small> | 9     | 8     | 7     | 6     | 5     | 4     | 3     | 2     | 1     | U    | Total Pupils |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------------|
| All State School pupils  | 18.4% | 37.6% | 57.2% | 66.6% | 82.3% | 88.3% | 93.8% | 97.1% | 98.6% | 100% | 1907         |
| All non-MEP State School pupils England  | 13.4% | 30.2% | 49.4% | 59.2% | 77.4% | 84.6% | 92.2% | 96.3% | 98.3% | 100% | 1167         |
| All MEP pupils   | 26.2% | 49.2% | 69.6% | 78.4% | 90.1% | 94.2% | 96.4% | 98.4% | 99.2% | 100% | 740          |
| MEP pupils in First Cohort MEP Schools   | 39.0% | 65.0% | 82.5% | 89.0% | 95.7% | 98.2% | 99.1% | 99.7% | 99.7% | 100% | 326          |
| MEP pupils in Second Cohort MEP Schools  | 16.2% | 36.7% | 59.4% | 70.0% | 85.7% | 91.1% | 94.2% | 97.3% | 98.8% | 100% | 414          |

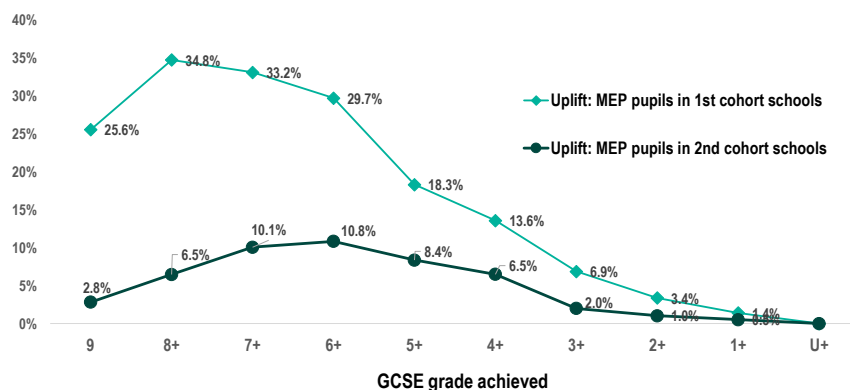
Source: DfE (2023); Analysis by Impact Stories

- The attainment uplift vs non-MEP pupils is significant for pupils in both first and second cohort schools but is markedly larger for pupils in first cohort schools. The comparison for the two cohorts is illustrated in chart 6. This shows that relative to non-MEP pupils, the % point uplift for pupils in first cohort MEP schools peaks at 34.8% for pupils attaining grades 8+, while for pupils in second cohort MEP schools the uplift peaks at 10.8% for pupils attaining grades 6+. First cohort MEP schools appear to be especially strong in raising attainment at the top end of the grade distribution.

*“This programme has enriched the languages curriculum, inspired staff to stretch and challenge students beyond previously imagined capabilities and changed the lives and future opportunities for students who have participated in this innovative and transformative programme.”* Head Teacher, MEP School (2022)

Chart 6: MEP GCSE Attainment Uplift: MEP pupils by school cohort vs Non-MEP pupils

**% point uplift in attainment: MEP pupils vs non-MEP pupils in state schools in England**  
 (Data show difference in attainment vs non-MEP pupils at points on the cumulative grade distribution for GCSE Mandarin Chinese for pupils in 1st cohort and 2nd cohort MEP schools)



Source: DfE (2023); Analysis by Impact Stories  
 First cohort (301 pupils in 14 schools); 2nd cohort (415 pupils in 22 schools)  
 Data excludes pupils with first language Mandarin Chinese and/or Chinese ethnicity



The relative attainment of MEP pupils at GCSE within their school

- First cohort schools were recruited into MEP because of their track record with Mandarin on the curriculum, while second cohort schools are typically highly motivated to make a success of Mandarin. So, it is possible that the apparently superior results obtained by MEP pupils are a function of excellence within the schools rather than within MEP itself.
- Some insight into whether this is really what is driving MEP results can be gained by comparing attainment by MEP pupils with that of pupils taught outside MEP within the same schools. Although in a minority, several schools within MEP continue to offer a parallel Mandarin stream outside MEP.
- Table 4 shows this comparison, drawing on data for 107 non-MEP pupils taking GCSE Mandarin Chinese in first cohort schools and 95 non-MEP pupils in second cohort schools.
- The data has to be interpreted with some caution because the results for pupils being taught outside MEP are drawn from a small number of schools which skews the distribution. However, on average they do show a significant uplift in attainment for pupils taught within MEP vs their peers within the same schools taught outside the programme. The effect is especially noticeable at grades 8 and 9 within first cohort schools.

Table 4: GCSE Mandarin Chinese – Grade achieved by pupils in the programme/out of the programme in schools within MEP 2022 – % cumulative

Data excludes pupils known to have Chinese first language and/or Chinese ethnicity

| GCSE Mandarin: grade achieved 2022 (% cumulative)<br><small>(Data excludes pupils known to have Chinese as a first language and/or Chinese ethnicity)</small> | 9     | 8     | 7     | 6     | 5     | 4     | 3     | 2     | 1     | U      | Total Pupils |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------------|
| MEP pupils in 1st cohort schools (14 schools)   | 39.0% | 65.0% | 82.5% | 89.0% | 95.7% | 98.2% | 99.1% | 99.7% | 99.7% | 100.0% | 326          |
| Non-MEP pupils in 1st cohort schools (14 schools)   | 20.6% | 49.5% | 75.7% | 83.2% | 92.5% | 95.3% | 97.2% | 97.2% | 97.2% | 100.0% | 107          |
| MEP pupils in 2nd cohort schools (20 schools)   | 16.2% | 36.7% | 59.4% | 70.0% | 85.7% | 91.1% | 94.2% | 97.3% | 98.8% | 100.0% | 414          |
| Non-MEP pupils in 2nd cohort schools (20 schools)   | 16.8% | 25.3% | 34.7% | 50.5% | 66.3% | 73.7% | 82.1% | 90.5% | 98.9% | 100.0% | 95           |

Source: DfE (2023); Analysis by Impact Stories



### The attainment over time of pupils at schools within MEP

- The impact of MEP can also be seen in the change over time in the GCSE attainment of pupils at schools within the programme. The average GCSE attainment of pupils at the fourteen schools in the first cohort can be tracked between 2017 and 2022 and compared with the attainment of pupils at schools in England which are not in the programme but which have offered GCSE Mandarin over the same time period. This latter control group includes both state and independent schools.
- Grade inflation, especially in 2021 linked to the use of teacher assessment rather than exams, means that the average attainment of pupils in both groups has increased between 2017 and 2022. But the increase for pupils at MEP schools (both within and outside the programme) is 13.8% points higher than for pupils at schools outside the programme.

### Multivariate analysis of MEP pupil attainment

- Taken together, the data presented above provides strong support for the conclusion that MEP is having a significant impact on pupil attainment at GCSE. However, it is at least theoretically possible that the apparent uplift in attainment is a result of other factors indirectly related to the programme; for example, the mix of schools (selective vs non-selective) or the indirect selection of pupils with higher potential into the programme.
- To test the hypotheses that it is MEP itself, rather than these other factors related to the programme, that is supporting higher attainment, a number of multivariate analyses were undertaken. The general purpose of multivariate analysis is to identify and quantify the unique contribution of individual factors (independent variables) to an outcome (dependent) variable, while taking into account the simultaneous contribution of all the other factors.
- A pupil in MEP might be a girl, qualify for free school meals (pupil premium), and attend a non-selective school. Given that all of these factors are likely to impact on attainment at GCSE, the multivariate analysis aims to identify whether studying within MEP (vs outside MEP) in itself make a statistically significant contribution to attainment, taking all the other factors into account.
- Of course, any multivariate analysis can only capture the impact of variables within the dataset. In this case, it cannot capture directly the impact of, for example, any enhanced motivation of parents and pupils choosing to study within MEP compared to those studying outside MEP. [Although, if higher attainment is driven in part by the attraction to MEP of more motivated pupils and parents, that is itself an indirect positive impact of MEP].
- Table 5 summarises the complete list of variables introduced into the multivariate models. Where variables are categorical, e.g. gender, the statistical model seeks to identify the contribution of being in one category (male) vs not being in that category (female).
- Within the variable list, pupils at first and second cohort MEP schools are identified separately.

Table 5: Summary list of independent (explanatory) variables input to multivariate models of GCSE attainment in Mandarin (2022)

| Variable name                  | Summary description of pupil characteristic                                   |
|--------------------------------|---|
| eng_mat_sci_avg                | Average GCSE attainment in English, Maths and Science                         |
| ethnic_dummyChinese (any)      | Recorded as Chinese ethnicity   |
| ethnic_dummyOther ethnicity    | Recorded as Other, non-White British ethnicity                                |
| fsm1                           | Recorded as receiving Free School Meals                                       |
| genderM                        | Male  |
| ks2emss                        | Attainment at end of Key Stage 2  |
| lang_dummyChinese (any)        | Recorded as having first language Chinese                                     |
| lang_dummyOther language       | Recorded as having another (non-English) first language                       |
| mep_flagmep_pupil_frstchrt     | Within MEP at first cohort school   |
| mep_flagmep_pupil_scndchrt     | Within MEP at second cohort school  |
| mep_flagmep_schl_frstchrt      | Studying Mandarin outside MEP at first cohort school                          |
| mep_flagmep_schl_scndchrt      | Studying Mandarin outside MEP at second cohort school                         |
| private1                       | 'Private candidate' - Took GCSE at a school with 3 or fewer candidate entries |
| regionEast Midlands            | At school in East Midlands  |
| regionEast of England          | At school in East of England  |
| regionLondon                   | At school in London   |
| regionNorth East               | At school in North East   |
| regionNorth West               | At school in North West   |
| regionSouth West               | At school in South West   |
| regionWest Midlands            | At school in West Midlands  |
| regionYorkshire and The Humber | At school in Yorkshire and Humberside   |
| selectiveschool1               | At a selective (Grammar) school   |
| senfE                          | Has Special Educational Needs (EHC Plan)                                      |
| senfK                          | Has Special Educational Needs (SEN Support)                                   |

- The dataset used for the multivariate analysis included all GCSE candidates in state schools in England in May 2022 (2,564 records) but excluded the records (27) from one first cohort MEP school, Bohunt Liphook. Bohunt has a relatively unique, immersive approach to the teaching and learning of Mandarin and enters candidates for GCSE at the end of year 9 (rather than year 11). The school is to an extent in a sub-category of its own and from a practical perspective it would have been difficult to align the data of its year 9 pupils to those for year 11 pupils from all other schools teaching Mandarin in the country. Therefore, the total dataset used for modeling included 2,537 records.
- The first model was run using standard linear regression. The dependent variable was GCSE attainment in 2022 introduced as a numerical scale between 0 (Grade U) and 9 (Grade 9).
- The variables identified within the model as being statistically significant at the 99% confidence level ( $P < 0.01$ ) are shown in Table 6. The  $R^2$  value for the model is 0.59 which means that 59% of the variance in attainment is explained by the independent variables.

Table 6: Significant independent variables – Linear Regression: GCSE attainment in Mandarin Chinese in state schools in England 2022

| Variable name                              | Coefficient | std.error | Significance<br>(Confidence level;<br>P<0.01) |
|--|-------------|-----------|---|
| ethnic_dummyChinese (any)                  | 1.39        | 0.15      | 99.9%   |
| mep_flagmep_pupil_frstchrt (First cohort)  | 1.23        | 0.10      | 99.9%   |
| eng_mat_sci_avg                            | 0.82        | 0.03      | 99.9%   |
| lang_dummyChinese (any)                    | 0.77        | 0.16      | 99.9%   |
| private1                                   | 0.55        | 0.14      | 99.9%   |
| mep_flagmep_pupil_scndchrt (Second cohort) | 0.49        | 0.09      | 99.9%   |
| selectiveschool1                           | 0.37        | 0.09      | 99.9%   |
| ethnic_dummyOther ethnicity                | 0.26        | 0.08      | 99%   |
| fsm1                                       | -0.37       | 0.10      | 99.9%   |
| regionSouth West                           | -0.49       | 0.17      | 99%   |
| genderM                                    | -0.59       | 0.06      | 99.9%   |
| regionYorkshire and The Humber             | -0.67       | 0.18      | 99.9%   |
| (Intercept)                                | 0.88        | 0.72      |   |

- For the purpose of this evaluation the most important result is that the coefficients for pupils within MEP in both first and second cohort schools are positive and statistically significant. In simple terms, they show to a high degree of confidence that a pupil's participation in MEP, allowing for all the other characteristics of schools and pupils which affect attainment and can be modelled, does in itself have a positive impact on GCSE attainment.
- The coefficient size can be interpreted as the average change in GCSE attainment attributable to studying within MEP. On average, a pupil in MEP within a first cohort school (allowing for all other factors), will attain 1.23 higher grade points (on a scale of 0-9) than if they had not been in the programme. A pupil in MEP within a second cohort school (allowing for all other factors), will attain 0.49 higher grade points than if they had not been in the programme.
- To put this data in perspective, studying within MEP in a first cohort school has an impact on attainment similar to that of having Chinese ethnicity (1.39). Studying within MEP in a second cohort school has an impact on attainment greater than that of studying Mandarin in a grammar (selective) vs non-grammar school (0.39).
- Reviewing the other findings briefly:
  - Chinese ethnicity has the largest individual impact on attainment (1.39), while Chinese first language (0.77) also has a large effect. The data around ethnicity and first language is not always complete but in many cases a pupil will be identified as both ethnic Chinese and having first language Chinese. The model suggests that such a pupil will on average gain a 2.16 (1.39+0.77) uplift in grade attainment, an effect reviewed in the discussion of headline attainment set out earlier. [There are almost certainly some interaction effects but these have been omitted for simplicity].

- Average attainment at GCSE across English/Maths/Science also has a large effect of 0.82 per 1 point increase in the E/M/S average score on a scale of 0-9. This variable is most obviously a proxy for the general academic ability of children taking GCSE Mandarin and is introduced into the model to control for the possibility that the apparent impact of MEP is actually a result of pupils within the programme being on average more academically able than are children outside it. Interestingly, pupil attainment at the end of KS2, which is the most obvious proxy for academic selection into MEP in Year 7, is not a significant explanatory variable when average attainment at GCSE across E/M/S is in the model. Most MEP schools argue that they do not select into the programme purely on academic ability but do select on motivation. The coefficient for attainment in English/Maths/Science might also be acting in part as a proxy for this motivation (of children and parents).
  - Pupils sitting their Mandarin GCSE at a school with fewer than 3 candidates also have higher attainment on average (0.55). This variable is a proxy for 'private candidates'. Few, if any, schools will teach a GCSE course for fewer than 3 children and in most cases these schools will be acting only as examination centres for candidates who have studied externally to the school.
  - Attending a selective (grammar) school (0.37) and having a non-white British ethnicity other than Chinese (0.26) also has a positive impact.
  - Several characteristics have a negative impact on attainment, most notably being in receipt of free school meals (-0.37) and being male (-0.59) rather than female. Two regions also have a negative coefficient, although these are largely a reflection of the fact that there is always a distribution of average school attainment and the model has identified some statistically significant grouping of these.
- For evidencing that MEP does have a positive impact on attainment, the results of this linear regression are very powerful. However, there are some technical challenges to the approach.
  - The first is that the attainment of individual pupils within the GCSE population is not completely independent. Rather, an individual pupil's attainment is to some extent a reflection of the average attainment of the school which that pupil attends; the grade distribution of all pupils is therefore at least partly clustered. To test for this, the linear regression model was rerun to allow for clustering effects but the significance and order of magnitude of the coefficients did not change to the extent that it affected the conclusions.
  - The second is that the dependent variable used, GCSE attainment as a 0-9 scale, is not strictly a linear variable. The grade distribution is actually fitted to some extent (by the exam board) so that the 'distance' between each grade point (5-6 or 8-9) is not always the same as measured by a pupil's raw test scores.
  - It is also possible that the effects of participating in MEP are more pronounced at different points of the grade distribution. The coefficient from the linear regression effectively averages out any differential effects over the distribution to assume that the impact on attainment between grades 5 and 6 is exactly the same as it is between grades 8 and 9.

## Impact of MEP at different boundaries within the grade distribution

- To test whether study within MEP has a greater or lesser impact at different points of the GCSE grade distribution, two logistic regression models were also run on exactly the same dataset and using exactly the same independent (explanatory) variables. Logistic regression is a technique used to understand the contribution of independent variables to a binary dependent (outcome) variable (e.g. Yes/No; 1/0).
  - One model divided the grade distribution as the dependent (outcome) variable into two groups – Grade 5 or above vs Grade 4 or below,
  - The second model divided the grade distribution as the dependent (outcome) variable into two different groups – Grade 8 or above vs Grade 7 or below
- The rationale behind these choices was to understand whether the impact of MEP is more or less apparent at the high end of the attainment distribution (grades 8 and 9) relative to the mid-point of the distribution (grades 5+).
- Interpretation of the output from logistic regression is less intuitive than that from linear regression. The logistic model quantifies a coefficient for the independent variables which can be interpreted as an increase or decrease in the odds of an individual pupil being in one outcome group vs the other. So, in the first logistic model the coefficient can be interpreted in terms of the increase or decrease in the odds of a pupil attaining grades 5+ vs grade 4 or below; in the second logistic model the coefficient can be interpreted in terms of the increase or decrease in the odds of a pupil attaining grade 8+ vs grade 7 or below. [The odds can be understood as the ratio of the probability of being in one outcome group vs the other\*].
- Encouragingly, the significant variables identified within both logistic models are similar to those identified through simple linear regression and, on the whole, the relative size of their effects is also similar to that seen through the linear regression.
- Table 7 below summarises the model coefficients for the two independent variables representing participation in MEP in a first cohort school and in a second cohort school.

**Table 7: Coefficients for MEP participation – Logistic Regression: GCSE attainment in Mandarin Chinese in state schools in England 2022**

| Logistic Model | Variable name                              | Coefficient (Increase in Log odds) | std.error | Significance (Confidence level; P<0.01) | Calculated increase in odds (Exp) |
|----------------|--|------------------------------------|-----------|---|-----------------------------------|
| 5+/4 or less   | mep_flagmep_pupil_frstchrt (First cohort)  | 1.93                               | 0.38      | 99.9%                                   | <b>6.91</b>                       |
| 8+/7 or less   | mep_flagmep_pupil_frstchrt (First cohort)  | 1.84                               | 0.20      | 99.9%                                   | <b>6.31</b>                       |
| 5+/4 or less   | mep_flagmep_pupil_scndchrt (Second cohort) | 0.64                               | 0.23      | 99%                                     | <b>1.90</b>                       |
| 8+/7 or less   | mep_flagmep_pupil_scndchrt (Second cohort) | 0.70                               | 0.18      | 99.9%                                   | <b>2.01</b>                       |

\*The probability of getting a 4 when throwing a 6-sided die is 1/6 or ~16.7%. In comparison, the odds of getting a 4 are 1:5, or 20%. This is equal to  $p/(1-p) = (1/6)/(5/6) = 20\%$ . So, in a situation in which only two outcomes are identified – Yes/No; 1/0; roll a 4/not roll a 4; Grade 8+/Grade 7 or below - the odds represent the ratio of the two probabilities; the probability of one outcome divided by the probability of the other outcome.

- Both variables identifying participation in MEP (at first cohort and second cohort schools) are identified as being statistically significant at the 99% confidence level within each of the 5+ and 8+ models.
- The results show that:
  - Participation in MEP in both first and second cohort schools has a large, positive impact on the likelihood of higher GCSE attainment at both the 5+ and 8+ grade boundaries,
  - The magnitude of the impact of participation in first cohort schools is much larger than in second cohort schools,
  - The size of the positive impact on attainment of participation in both first and second cohort schools is actually very similar at the 5+ and 8+ grade boundaries.
- To elaborate on these findings, the column highlighted in green in table 7 shows the increase in odds of attainment attributable to participation in MEP. Participation in MEP in first cohort schools increases the odds of attaining 5+ by 6.91 and the odds of attaining 8+ by 6.31. Participation in MEP in second cohort schools increases the odds of attaining 5+ by 1.90 and the odds of attaining 8+ by 2.01.
- At both points of the grade distribution the increase in odds is very similar, which gives confidence in the robustness of the results from the more easily interpreted linear regression.

### HSK3 Results

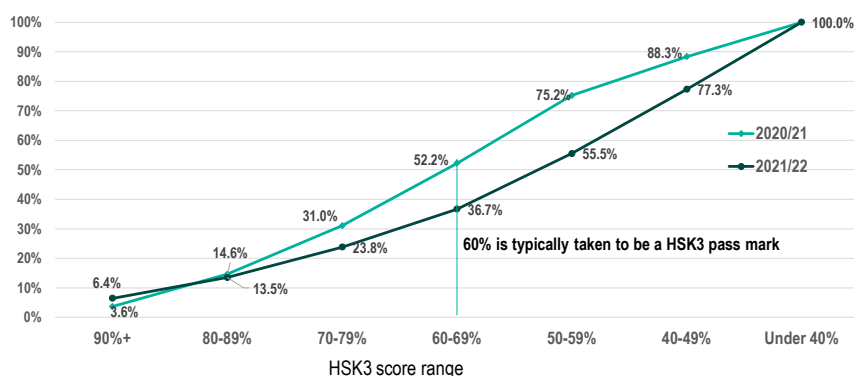
- HSK 3 is the Hurdle Tests for Yr10 pupils within MEP.
- The HSK papers and the question types are generally different to those that pupils are working towards for their GCSE. HSK is a proficiency test developed in China for non-native speakers of Chinese and for context, a similar comparison would be between GCSE English and the IELTS test. The vocabulary list for HSK 3 is different but not hugely different to GCSE and some students say they enjoy the 'real' Chinese employed.
- Although HSK does not generate UCAS points for pupils, it is widely recognised and understood by UK universities and is a reference qualification for Chinese universities and for scholarships in China etc. Some schools are now offering HSK 4 in the sixth form and therefore the HSK 3 test taken in Yr10 also serves as a useful foundation for further study.
- The standard of GCSE Mandarin Chinese is generally taken to lie somewhere between HSK3 and HSK4. Results for HSK 3 can therefore provide an indicator of progress towards GCSE.
- In 2022 HSK results were provided to IOE by 45 MEP schools covering 844 Yr10 pupils. Just under 6.4% scored 90%+ and a further 7.1% scored between 80% and 90%. A cumulative 36.7% scored more than 60%, a score commonly taken to be a pass mark for HSK 3 (Chart 7).
- The comparison with 2021 is imperfect because 2021 data was from only 12 schools (274 pupils) but it appears that HSK 3 attainment has fallen considerably in 2022.
- Some of this drop in attainment may reflect the disruptive impact of the pandemic. There is also a level of concern among some teachers that preparation for HSK 3 adds significantly to their workload and that since the content and vocabulary diverges from GCSE, it is not necessarily a clear milestone for pupils on the pathway to GCSE.

- To address the concerns of teachers, in 2023 schools have been given the option to sit HSK 2 (rather than HSK 3) in Yr 10, although only 13 MEP schools have so far chosen to do so. IOE has also engaged a provider of HSK mock tests online to help schools and pupils prepare better for the marked HSK 3 test.

**Chart 7: Cumulative HSK3 results by score range**

**% of students by overall HSK3 score range**

(Data show cumulative % in excess of score range)



Source: School data collated by IOE; analysis by Impact Stories  
Base: 274 students in 12 MEP schools in 2021; 844 students in 45 MEP schools in 2022

### Year 7 – Year 9 Hurdle Test Results

- Special Hurdle Tests set by IOE are the main means of assessment of pupil progress within MEP in Years 7, 8 and 9.
- Each test consists of four elements – Speaking, Reading, Writing, Listening (with the exception of Speaking in Yr 9 which was taken out of the test to reduce teacher workload). Charts 8 and 9 show the distribution of pupils and schools by average Hurdle Test scores and by average school score over the five waves of testing conducted since 2016/2017.
- The Hurdle Test data in both charts show a consistent picture, with results from tests in Yr 7 and Yr 9 very consistent with those from the previous year 2020/2021. In Yr 9, 48% of pupils had an average score above 70%.
- Yr 8 results were slightly stronger than in 2020/2021 with 57% receiving an average score above 70%.
- Of teacher respondents through the survey, 75% express themselves ‘Very satisfied’ or ‘Satisfied’ with Hurdle Tests as a tool for assessing pupils’ progress. This result refers to both the bespoke Hurdle Test for Years 7- 9 and the HSK Test in Year 10.

Chart 8: Distribution of students by overall Hurdle Test score

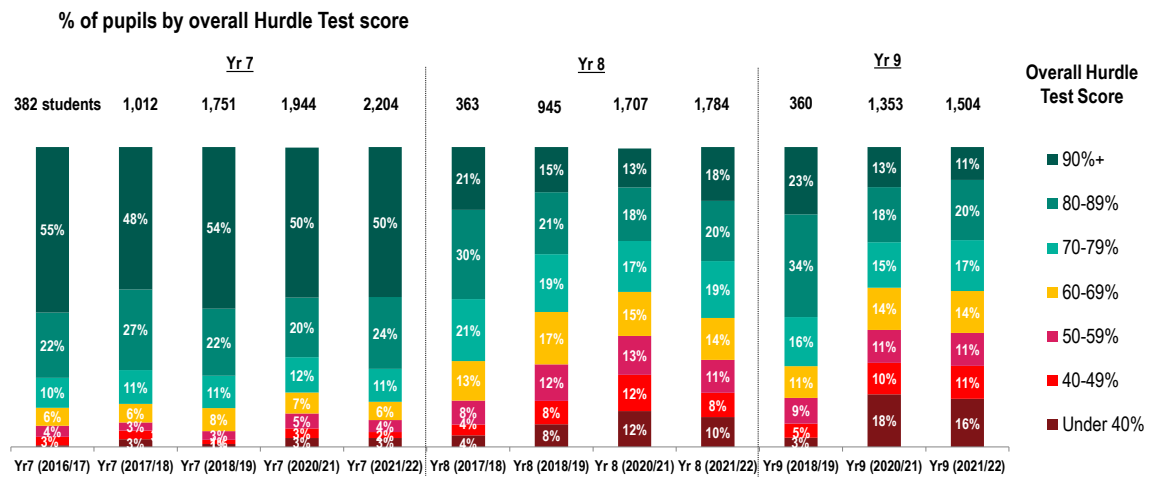
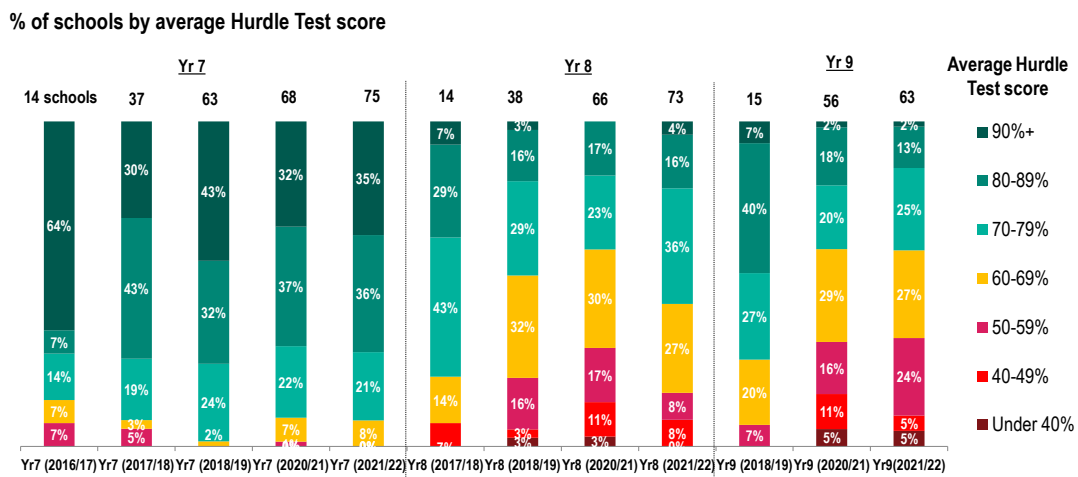


Chart 9: Distribution of schools by average overall Hurdle Test score





### Wider Impact of MEP

- Many staff involved in MEP continue to argue that the programme's impact on pupils' cultural understanding and personal development is not fully captured by exam and test results.

*"The programme not only develop students' language skills, but also enriches their life"*  
Teacher, MEP School (2022)

*"Students thrive through the Mandarin excellent programme. We are seeing students want to study Mandarin at post-16."* Head Teacher, MEP School (2022)

- Many MEP schools also try to share some of the benefits of the programme beyond the MEP cohort by running cultural events and celebrations for the whole school. At least one school now claims to be trying to model its whole school approach to languages on the intensive MEP model.

*"[Other pupils benefit] through cultural experiences (like our annual Chinese New Year Day). They also benefit from guests who come to the school and from the prestige that the school enjoys locally. All other students now follow a pattern for learning a language that mirrors that of MEP. We aim for 8 hours per week in all languages that the students learn."* Head Teacher, MEP School (2022)

## 11. Sustainability: will the benefits and impact of the programme last?

- The core of schools within the programme is now fairly stable and the evidence supports the conclusion of previous evaluation reports that the majority of schools which have joined have done so with a view to embedding and supporting Mandarin on the curriculum over the longer term.

*“Mandarin is well established in our school and we have created resources for all year groups. We are also offering A level Mandarin now.”* Head of MFL, MEP School (2022)

- 89% of staff respondents to the survey said that they were either ‘Very confident’ or ‘Confident’ in their school’s ability to offer high quality Mandarin teaching and learning on the curriculum over the long term.

*“Mandarin has been firmly embedded in the curriculum at our school. We also have very strong and hard-working Mandarin teacher at school.”* Head Teacher, MEP School (2022)

- School leaders frequently point to the importance of continuing to support and invest in their teachers (often with the express goal of retaining existing teachers) as the key to ensuring sustainability. Those schools with only one Mandarin teacher remain the most vulnerable to the impact of staff changes.

*“As long as I can keep my current teacher, I am confident that we can deliver well in the future.”* Head Teacher, MEP School (2022)

*“I am confident.....if we can keep our current staff in post.”* Head Teacher, MEP School (2022)

*“We have an excellent teacher and will do our very best to retain him. The motivation, enjoyment and uptake hinges around him.”* Head Teacher, MEP School (2022)

- School leaders advocate for continuity of funding as crucial support for the sustainability of any intensive programme longer term. Several point to the general challenge of rising costs impacting across the whole curriculum.
- As has been observed in previous evaluation reports, while most schools would aim to continue with Mandarin on the curriculum even if extra funding were to stop, few are confident that they could sustain an intensive programme of the current format of MEP. They fear losing the intensive hours and many of the extra-curriculum activities which they believe so enrich the programme.
- An increasing number of schools are now addressing continuity into KS5. Responses to the staff survey identify at least 14 MEP schools already offering Mandarin in KS5. They collectively report 48 pupils who have progressed through MEP and are now studying A-Level and a slightly higher number studying other courses, most commonly the Cambridge pre-U and HSK4.
- For those schools whose first MEP pupil cohorts are now in KS4, the extension into KS5 is often a particular area of concern and one in which they are looking for support and guidance. The choice of course remains a significant challenge, with many teachers continuing to regret the imminent withdrawal of the Cambridge Pre-U and to express strong reservations about the appropriateness of the current A-level.

- Some schools are switching to teaching for HSK 4/5, even though it lies outside the UK system. HSK is encouraged and recognised in China - enabling students potentially to continue their studies at a university in China.

*“We haven't offered A Level as we have followed the discussion and debate around the challenge of this course. However we are very keen to develop our KS5 offer as we have students coming through MEP who want to continue and there are no other local offers. We have planned for the coming year to offer HSK4 as part of our enrichment offer and hope to learn through this how we develop the Mandarin KS5 offer.”*

Head Teacher, MEP School (2022)

- The recent decision by the DfE to review the current A-level subject content in Chinese will certainly be welcomed by many teachers working within MEP.

## 12. Lessons Learned

- The Mandarin Excellence Programme continues to deliver strongly against its target deliverables and outcomes.
- Analysis of GCSE data shows that MEP is making a unique and significant contribution to higher attainment by pupils.
- That contribution is significantly higher in first cohort schools which have previous experience of teaching Mandarin and, typically, more experienced teachers.
- This finding suggests that further consideration should be given to how best to share learning, experience and resources between first and subsequent cohort schools. This consideration should include a further review of the Hub and Partner model which continues to work well in some instances but less well in others.
- The use of HSK as a Hurdle Test in Year 10 has both advocates and detractors among teachers delivering MEP. Its detractors point to the extra workload and divergence from the GCSE curriculum. The decline in HSK results in 2022 may point to disengagement with the test by some teachers. The results of the significant extra support for HSK being provided to schools by IOE will need to be assessed in 2023 in order to decide how best to continue with a Year 10 milestone assessment.
- A large majority of participating schools are now committed to retaining Mandarin on the curriculum in the long-term. Cost pressures on schools generally have increased significantly over the last year and against this background it appears likely that if additional funding were to cease, most schools would revert to the less intensive model followed by other Modern Foreign Languages.
- The perceived quality and value among pupils and teachers of the virtual intensive study in China was significantly greater in 2022 than in 2021. However, a majority of teachers regard the in-person intensive study as offering benefits in terms of language learning, cultural immersion, personal development and motivation which cannot be replicated online. There is a clear preference for in-person intensive study to resume when it is safe and practical to do so.
- An increasing number of schools, teachers and pupils are now looking to the role of Mandarin in KS5. There is demand from MEP pupils and a desire by many schools to have a Mandarin pathway beyond Year 11.
- Concerns about the discontinuation of the Cambridge Pre-U and about the perceived unsuitability of the current A-Level remain and many schools are looking for guidance and to learn lessons from peers about how best to proceed. The recent announcement of a review of the A-level subject content will no doubt be welcomed but many schools are having to make decisions about provision now.
- In addition, many teachers will be teaching in KS5 for the first time and they are looking for support and resources to do so, albeit they recognise that KS5 provision currently lies outside the formal remit of MEP.
- Collation of pupil data and flagging of MEP participation within the NPD revealed several challenges around data definition and reporting which should be addressed collectively by DfE and IOE to allow more accurate and consistent reporting of programme delivery and outcome attainment in the future.

- The Programme Theory of Change is valuable in focusing research and evaluation on agreed KPIs. However, some elements of the ToC could be clarified and simplified in order to improve the evaluation of future years of the programme.

## 13. Appendices

### Appendix 1: Summary MEP Theory of Change

| Background  | Inputs – what resources will be used to support providers?   | Outputs – what tangible products or services are produced?  | Outcomes – what will occur as a direct or indirect result of outputs?<br><i>(Please see the table below for direct/indirect outcomes)</i>  | Impact – what results should follow outcomes?   |
|---|--|---|--|---|
| <p><b>KS4 Chinese entries are declining</b></p> <p><b>KS5 entries are declining and the current A level is deemed unfit by teachers</b></p> <p><b>Limited supply of Mandarin teachers in areas outside of London and other large cities</b></p> <p><b>MEP operating for 5 years</b></p> <p><b><u>Evidence suggests that:</u></b></p> <p>Languages are strategically vital for the future of the UK in a range of key areas, both global and local.</p> <p>Learning Mandarin as well as gaining a cultural understanding through visiting China and cultural lessons during the MEP is likely to develop cultural awareness and develop social ties among pupils.</p> <p>The British Council ranks Mandarin as the second most important language for the future</p> | <p>DfE funding (payments directly to schools)</p> <p>Programme expert group</p> <p>Support from DfE policy and analytical teams</p> <p>UCL IOE provide curriculum and pedagogy support, including teacher training sessions</p> <p>UCL IOE design and supply 'hurdle' tests and independent student study projects</p> | <p>Intensive study opportunities for pupils both organised centrally in Year 9 &amp;10 and by schools in Years 7 &amp; 8</p> <p>Continued recruitment and training of UK-based Mandarin teachers, both practicing and via PGCE Mandarin pathway at UCL IOE</p> <p>Access to quality assured resources and enabling resource-sharing for teachers</p> <p>Collaboration between MEP schools</p> <p>Cultural engagement with China and immersion opportunities for MEP pupils</p> <p>Increase awareness of MEP programme</p> <p>Increase awareness of Mandarin learning in schools</p> <p>Mandarin study opportunities expanded to students with disadvantage, as well as students in diverse locations around the country</p> <p>Quality assured teaching and learning resources developed and/or made available (open source)</p> <p>Increased % of disadvantage pupils enrolled in MEP</p> <p>School management &amp; recruitment</p> <p>Hurdle test development and administration</p> | <p><b><u>Short-term outcomes:</u></b></p> <p>20 PGCE places offered annually for the Mandarin Languages PGCE</p> <p>Retention - A higher proportion of teachers are still teaching the following year compared to the national average</p> <p>Improved teacher confidence in teaching Mandarin</p> <p>Improved quality of mandarin teaching practices</p> <p>Pupils not in the programme improve mandarin learning (due to open-source resources)</p> <p>Students are engaged and highly motivated to study Mandarin</p> | <p>High quality, effective teaching of Mandarin embedded into state-funded schools</p> <p>Increase stock of Mandarin speakers in England, required by the UK for trade and development and diplomacy, increasingly amongst those from disadvantaged backgrounds</p> <p>Increased number of Mandarin teachers trained and retained</p> |

|   |   |  |   |  |
|---|---|--|---|--|
| <p>Learning a language may have direct benefits to pupils in terms of health and attainment in other subjects</p> <p>learning Mandarin can strengthen diplomatic relations with China, support the needs of the UK economy, and benefit pupils directly</p> <p>MEP schools report that intensive contact and continuous exposure throughout the school week is improving the pace, depth and quality of educational outcomes.</p> <p><b>Programme Aims:</b></p>   | <p>UCL IOE provide headteacher support</p> <p>Teacher time</p> <p>Chinese Centre for Language Education and Cooperation (CLEC) financial support for the physical and virtual trips</p>   | <p>School visits and observation</p>   | <p>Improved attainment in Mandarin hurdle tests in schools established on the programme</p> <p>Increase cultural capital</p> <p>Increased pupil confidence, resilience and self-esteem?</p>   |  |
| <ul style="list-style-type: none"> <li>- The primary aim of the programme is to ensure that England has a regular cohort of high-potential pupils that have access to a high-quality and intensive Mandarin education, including the opportunity to progress their Mandarin and gain awareness of China’s culture in order to benefit pupils and the UK at large.</li> <li>- Support, retain and where needed, recruit secondary schools or the secondary phase of all-through schools rated good or outstanding by Ofsted to maintain 75 schools in the programme and place intensive focus on these schools;</li> <li>- Involve the rigorous study of Mandarin by highly able and motivated pupils for eight hours a week, made up of a combination of class-time teaching, after school teaching and self-study, including forms of blended/online learning;</li> <li>- Ensure continued recruitment and training of UK-based Mandarin teachers to contribute to meeting the needs of schools in England;</li> <li>- Embed effective, sustainable teaching practices that will continue to increase the number of pupils studying Mandarin beyond the funding of this</li> </ul> | <p><b>Activities (turning inputs into outputs)</b></p> <ul style="list-style-type: none"> <li>- Hub and partner schools model</li> <li>- All schools to provide intensive blended study of 8 hours a week minimum (4 hours face to face and 4 hours self-study)</li> <li>- Retain a minimum of 75 MEP schools</li> <li>- Increase proportion of disadvantaged students studying Mandarin within current MEP schools</li> <li>- Intensive study visit to China (/or digital substitute) for most pupils in Year 9</li> <li>- Facilitate activities between hub and partner MEP schools</li> <li>- Pupils taking hurdle tests</li> <li>- Support the diverse geographical location of MEP schools</li> <li>- 4-day intensive language study for Year 10 – delivered online/in-person at a local university</li> <li>- MEP school visits</li> <li>- Teacher recruitment and training</li> <li>- Training and recruitment of UK-based Mandarin teachers</li> <li>- Annual recruitment of Mandarin Languages PGCE course at IOE</li> <li>- Maintain a communication platform and bank of online</li> </ul> | <p>(80%) of pupils across participating schools report that they enjoy being part of the programme and learning Mandarin.</p> <p>A higher proportion of disadvantaged pupils within MEP schools are engaged in the programme</p> <p><b>Long-term outcomes:</b></p> <p>Increased uptake in Mandarin at KS4 and attainment</p> <p>Increased uptake in Mandarin at KS5 and attainment</p> | <p><b>Assumptions</b></p> <p>Intensive nature of the programme is likely to result in both greater pupil engagement and higher attainment</p> <p>Schools will deliver the programme to a high standard in line with UCL guidance – implementation with fidelity</p> <p>Teacher training opportunities provided will result in increased teacher</p> |  |

|  |   |  |  |
|--|---|--|--|
| <p>project; and<br/>Provide pupils with an immersive experience of China through an intensive study visit to China for most pupils on the programme and/or through the use of digital media where travel is not permitted or possible; and achieve at least a further 5,000 pupils on track to a high level of fluency by AY 2023/24.</p> <p><b>...to help meet the following government policy commitments:</b></p> <ul style="list-style-type: none"> <li>- To ensure that there is a sufficient supply of fluent Mandarin speakers to meet the country's future business and economic needs</li> <li>- Improving language provision</li> <li>- 90% of GCSE pupils studying the EBacc combination of subjects by 2025 (languages is the one EBacc pillar where take-up rate is below 80%)</li> </ul> | <p>resources for teachers</p> <ul style="list-style-type: none"> <li>- Train and assist schools with recruitment where necessary</li> <li>- *Annual Chinese Teaching conference</li> <li>- *Mandarin Upskilling course at UCL</li> <li>- Workshops, seminars and collaborative events</li> <li>- MEP intensive study – teacher training in China IOE ITT and IOE CI experts</li> </ul> <p>Promotion of MEP</p> <ul style="list-style-type: none"> <li>- A communications and engagement strategy with significant web presence</li> <li>- Raise awareness and stimulate demand for Mandarin study, including to post-16 and HE level</li> <li>- Light-touch comms from DfE</li> </ul> <p>*Delivered as complementary activities by IOE CI that MEP teachers can attend free of charge</p> | <p>Increase teachers' understanding of how effective teaching can engender a positive attitude towards Mandarin, combating the 'Mandarin is too difficult' culture.</p> <p>A sufficient supply of Mandarin teachers (recruitment and retention)</p> <p>Evidence generated to inform roll out of MEP model for other languages</p> <p>Increase the number of schools teaching Mandarin</p> <p>Higher numbers of pupils go on to study Mandarin at HE level</p> <p>Maintain 75 schools on the programme</p> <p>Appropriate annual tests and a learning pathway for students from Y7 to Y11</p> | <p>confidence and higher quality Mandarin provision</p> <p>Teacher training opportunities motivate teachers to stay</p> <p>Engagement with the cultural learning aspect of the programme as well as the intensive study visit to China (/or digital substitute) will provide cultural capital for participating students</p> |
| <p><b>External factors:</b> Covid 19 impact, KS5 exam provision, political relationships between China and UK</p>  |   |  |  |
| <p><b>Underpinned by</b> a robust data and evaluation system that provides reliable insights on outputs, outcomes and impacts and on ways to improve implementation (process)</p>  |   |  |  |



## Appendix 2: Summary MEP Theory of Change

- UCL IOE requires schools enrolled in MEP to provide the first name, surname, and UPN (Unique Pupil Number) of the pupils participating in the programme. The pupil is assigned a cohort number according to the calendar year in which they are sitting their Chinese GCSE.
- Furthermore, UCL request to be informed whether the pupil has withdrawn from the programme. It is worth noting that these 'withdrawn' pupils will be included in the non-MEP group of pupils for the analysis. Therefore, some pupils that have benefited from the MEP for some (or all) of the years between Y7 and Y10, will be viewed as being the same as pupils who have never participated in the programme.
- This data that is collected by UCL IOE is shared with analysts at the DfE. It is then matched to the NPD (National Pupil Database) using the name variables, UPN, and academic year.
- When a pupil has not been matched it is usually because there is a discrepancy between their name in the UCL administrative data set and the pupil census. In these cases, an investigation was done, and the difference rectified.
- The final dataset includes all pupils at the end of KS4 in 2022 that have entered Chinese GCSE (coded as 'where APCHI91 is not null'). The variables of this dataset included a flag as to whether the pupil attended a state funded school, the grade they received in their Chinese GCSE, and information listed in Table 6 (summary list of independent variables). Matching to the UCL data allows for the creation of the active MEP pupil/first cohort school/second cohort school flags.
- When grouping first language data, pupils have been recorded as 'Chinese (any)' when they are recorded as any of the following: CHI, CHIA, CHIC, CHIH, CHIK, CHIM. When the first language is coded as ENG, these pupils have been grouped as 'English', and all other languages as 'Other language'. The description relating to these first language acronyms can be found in the NPD data tables.
- For ethnicity groupings, when the ethnicity is recorded as any of the following – CHKC, CHNE, CMAL, COCH, CSNG, CTWN, MCOE, MWCH, MACH, MBCH – these pupils have been grouped as 'Chinese (any)'. If ethnicity is recorded as any of the following – WOWB, WENG, WBRI, WCOR – then pupils have been grouped as 'White Brit/Eng'. All other pupils have been recorded 'Other ethnicity'. As above, the description of these ethnicities can be found in the NPD data tables.
- Pupils have been recorded as private entrants if they have attended a school with less than 3 entries into Chinese GCSE.
- It should be noted that there is considerable overlap with 'Chinese (any)' first language pupils, 'Chinese (any)' ethnicity pupils and private entrants.
- The variable 'eng\_mat\_sci\_avg' has been calculated using the following equation –  $(\text{slot1eng} + \text{slot2mat} + 2 * \text{ebptssciptqee}) / 6$ . The description of these variables can be found in the sheet 'KS4\_01-02\_to\_21-22' in the NPD data tables. The output of this equation provides a single grade which is the average of English (best of Literature and Language), Maths and Science.