

# Sir Charles Kao UTC

Velizy Avenue, Harlow, Essex CM20 3EZ

**Inspection dates** 25–26 April 2017

Overall effectiveness	Requires improvement
Effectiveness of leadership and management	Requires improvement
Quality of teaching, learning and assessment	Requires improvement
Personal development, behaviour and welfare	Requires improvement
Outcomes for students	Requires improvement
16 to 19 study programmes	Requires improvement
Overall effectiveness at previous inspection	Not previously inspected

### Summary of key findings for parents and students

#### This is a school that requires improvement

- Leaders have not done enough to ensure that teaching, learning and assessment are good across all subjects. Therefore, students' progress is inconsistent.
- Teachers do not consistently plan learning that precisely meets the needs of students, particularly those who are least able.
- In lessons, some teachers do not always check that students understand the work, meaning that some students do not make the progress of which they are capable.
- Teachers have not developed students' basic literacy or numeracy skills sufficiently well. This hinders students' progress in other subjects.

- Leaders have not acted quickly enough to prevent outcomes being too low and below the government floor standards in 2016.
- Some teachers do not have high enough expectations of what students can achieve, and do not manage their behaviour consistently well. Consequently, some students disrupt the learning of others.
- Overall attendance is too low and persistent absence of some groups is high in key stage 4.
   Recent actions to improve attendance have not had time to have an impact.
- The good progress students make in their vocational learning in the sixth form is not matched in a range of other academic subjects.

#### The school has the following strengths

- The principal, well supported by governors, has worked hard to secure the long-term future of the school.
- Senior leaders have successfully established a new school in a short space of time.
- The principal and senior staff have a realistic view of the school's strengths and weaknesses. Their self-evaluation is candid and accurate.
- Students' conduct and attitudes to learning in the sixth form are universally positive.

- Teaching, learning and assessment in the vocational subjects, some areas of science and geography are a strength of the school.
- All Year 13 students progressed to meaningful destinations at the end of the last academic year, due to the opportunities provided and the support from staff, governors and sponsors.
- Students enjoy coming to school. They feel safe, well cared for and valued.
- Safeguarding is effective.



## **Full report**

### What does the school need to do to improve further?

- Improve the quality of teaching and learning by:
  - ensuring that teachers check students' understanding of the work covered in lessons more regularly so that students make the progress of which they are capable
  - ensuring that teachers apply behaviour management strategies consistently to eradicate the low-level disruption seen from a small minority of students
  - strengthening students' literacy and numeracy skills across the curriculum.
- Increase the rate of students' progress so that it is consistently good across all year groups and all subjects by:
  - ensuring that teachers make better use of assessment information to match learning activities precisely to meet students' needs
  - raising teachers' expectations of what all students, especially the least able, can achieve, thus diminishing the differences that currently exist across different subject areas.
- Improve the quality of leadership and management by:
  - sharpening the checks leaders make on teaching so that they can better identify and act upon any weaknesses they find
  - further developing recently introduced strategies to secure sustained improvement in attendance
  - ensuring that leaders and governors act quickly and measure the impact of their work, especially on students' achievement.



## **Inspection judgements**

#### **Effectiveness of leadership and management**

**Requires improvement** 

- Senior leaders and governors have faced a significant number of challenges since the school opened in September 2014. Nevertheless, leaders have remained positive and ambitious in their vision, and have successfully established a new school in a relatively short space of time.
- Leaders display honesty and candour in their evaluation of the school's strengths and do not seek to hide its weaknesses. Leaders evaluated the school as requiring improvement. Inspectors agree. The quality of teaching, learning and assessment is inconsistent and leads to students making variable progress across subjects. The low-level disruption that inspectors observed in some lessons hampers learning. Attendance in key stage 4 is low, and persistent absence rates are high.
- Leaders have not brought about improvements in the quality of teaching, learning and assessment quickly enough. They identify weaker literacy and numeracy skills as barriers to learning, and have started to address these issues. For example, they provide additional literacy and numeracy lessons, and give staff information about what students need, and what helps them learn best. However, not all teachers use the information well enough, so some students' lack of basic literacy and numeracy skills is still hindering their progress.
- Senior leaders appreciate the need to improve the quality of teaching, learning and assessment. However, while leaders' monitoring and evaluation help them to identify where most of the strengths and weaknesses are, some of the information leaders collect lacks sufficient detail. As a result, they are unable to provide in-depth guidance to teachers on how to improve, leading to inconsistencies across subject areas.
- Leaders and governors have invested a significant amount of their time on financial issues and joining a multi-academy trust. Leaders and governors have acted decisively and the long-term strategic future of the school is now on a far more secure footing. However, the focus on these areas has affected leaders' oversight of the day-to-day running of the school. Moving forward, the closer links the school has forged with the Burnt Mill Academy Trust (BMAT) provide useful support, while the recent secondment of a senior leader adds leadership capacity to secure further improvements.
- The principal and the inclusion manager work effectively to ensure that the students who have special educational needs and/or disabilities receive suitable provision. Appropriate assessments on entry identify students' particular needs and help leaders establish the support students require. Leaders use special educational needs funding effectively to improve the progress students make.
- Vocational learning in engineering, complemented by mathematics, science, technology and computer science, underpins the school's curriculum. Students say that the specialist curriculum was 'fundamental in their reasoning for choosing the school'. The excellent specialist facilities, including the 'Smart Flat', enable students to thrive in the vocational subjects. High-quality, individual careers guidance and advice, complemented by summer internships and regular visits to and visitors from industry



- sponsors, help students to understand the range of career opportunities available to them and secure positive destinations on leaving the school.
- Leaders' actions have led to improved outcomes for students in some areas. Leaders have changed the curriculum offer. They have successfully attracted new teachers in shortage subjects, including a new team for engineering. They have appointed a new head of science. A senior leader has taken responsibility for raising achievement in humanities. There are now obvious strengths in these departments and leaders' clear plans are improving standards. However, there is still too much variability across all subjects.
- Leaders use pupil premium funding effectively. They arrange one-to-one support sessions to build students' emotional resilience, provide additional tuition and purchase e-textbooks for students. This has a positive impact on the achievement of this group of students.
- There are extensive opportunities for students to experience activities beyond the curriculum. Leaders timetable additional lessons on three afternoons each week. These include revision, additional support for selected students and opportunities for students to attend activities such as debating club or crime scene investigation.
- School leaders develop students' spiritual, moral, social and cultural understanding well across the curriculum. A series of assemblies promote discussions about other religions and beliefs across the world. For example, students talked about the visits from Quakers, Sikhs, Muslims and Christian groups, which help to promote greater understanding and tolerance. This equips students with skills required for life beyond the UTC and in modern British society.

#### **Governance of the school**

- Following an external review, the school has changed its structure for governance and created three committees. These now provide a far greater focus on specific areas, such as teaching, learning and assessment, standards and finance and resources.
- Governors hold the principal to account. They work closely with the school improvement partner, BMAT, the education adviser at the Department for Education (DfE) and the local authority to seek guidance and provide quality assurance. A scrutiny of minutes endorses the increased level of challenge provided by the governing body.
- Governors work closely with senior leaders to identify weaknesses and they have received additional support from BMAT and local schools to improve the quality of teaching, learning and assessment.
- The governing body and the principal have worked effectively with the Education Funding Agency and the DfE to clarify the long-term strategic direction of the school.
- Governors bring a wide range of high-level experience of industry that complements the UTC's specialisms. Governors have received external training, often through BMAT, which has empowered them to hold leaders more effectively to account for the educational standards in the school.
- Governors are realistic about the UTC's strengths and staff are rewarded appropriately.



Performance management is used effectively to ensure that teaching continues to improve.

#### **Safeguarding**

- The arrangements for safeguarding are effective. There is a strong culture of safeguarding at every level throughout the school. Staff and governors are mindful of their duties and responsibilities regarding safeguarding.
- Governors ensure that all the required safeguarding checks are carried out when recruiting new staff to work at the school.
- Staff training is effective and up to date. Staff understand the latest government guidance on keeping children safe and are aware of the requirements of the 'Prevent' duty to spot those at risk of radicalisation or extremism.
- The designated lead has a good understanding of the school's caseload and the actions needed to protect students. Child protection records are thorough and well maintained.
- Students feel safe. Staff and visitors to the school are appropriately vetted. Students spoke positively about how the school discusses current issues like sexual exploitation, children missing from education, cyber bullying and how to stay safe online. When asked if they felt safe, they were unequivocal they do.

#### Quality of teaching, learning and assessment

**Requires improvement** 

- Since opening, leaders have faced significant difficulties linked to staffing changes and recruitment issues. Students have not always received effective teaching that leads to good progress. Currently, the quality of teaching, learning and assessment is inconsistent, as is the progress students make.
- Teachers do not always plan learning that takes into account what students can do. The tasks set do not precisely meet the different needs and abilities of students sufficiently well. This was particularly evident in larger groups, and for the least able students. As a result, the progress some students make slows and a small minority then disrupt the learning of others.
- The expectations that teachers have of what students can achieve are not always high enough. Inspectors noted the variable quality of work in students' books. Teachers do not consistently challenge poor-quality work in students' books that lacks detail and is often unfinished.
- Some teachers do not challenge students' poor attitudes strongly enough. In some lessons, teachers do not check that students understand the work systematically, leading to small groups of students who do not work hard enough. Teachers do not take sufficient action in these cases to foster a more positive work ethic.
- Teachers do not always ensure that students' literacy and numeracy skills are sufficiently well developed. This hampers students' progress across the curriculum. For example, some students struggle to complete examination papers because they cannot interpret the questions accurately enough to know what they are required to do.
- Teachers' high-quality planning in science challenges all students, especially those who



- are most able, effectively. Students make good progress because teachers carefully consider and plan activities that help them learn.
- In biology, geography and chemistry, teachers are highly organised and provide a range of activities that capture students' interests. Their expectations of what students can achieve are universally high. As a result, no learning time is wasted and students make good progress.
- Where learning is most effective, for example in a Spanish lesson, the typical strengths of effective teaching were the teacher's strong subject knowledge, the effective level of challenge and the positive relationships with students, leading to successful outcomes.
- Teachers use questioning well to help students develop their knowledge, understanding and skills. In geography, skilful questioning was used to gauge students' understanding of key terms such as abrasion, saturation and hydraulic action, while pushing students to achieve more. This systematic questioning ensures careful tracking of each student's progress, and allows staff to provide individual support to those who are struggling. Consequently, students make good progress.

#### Personal development, behaviour and welfare

**Requires improvement** 

#### Personal development and welfare

- The school's work to promote students' personal development and welfare requires improvement.
- The school's pastoral support programmes help students to develop positive attitudes to learning. However, some are still not showing the motivation or self-direction required to become effective learners.
- Daily tutorials provide additional impetus to help students to adjust to the school's expectations of them. Teachers help students develop useful workplace skills by highlighting the importance of presenting themselves smartly.
- Students benefit from individual careers guidance sessions, mentoring, advice on how to write their curriculum vitae and practice sessions to prepare them for interviews. This helped all of last year's students to progress into either education, employment or training.
- The effective work experience programme, including the summer internship programme with sponsors and local industry, helps students relate their learning in vocational subjects more effectively to the world of work. Students say that this helps them to make links between different aspects of the work more easily.
- Inspectors noted that the vast majority of students were confident, approachable and polite. They willingly engaged unfamiliar adults in conversation. Students move around the site in an orderly and purposeful way.
- Students access a range of trips and visits from sponsors and local industry to help develop a clear picture of the career opportunities available to them. Students spoke positively about the summer internships. Students enthused about the trips to the House of Commons, the Hadron Collider at CERN and the European Organisation for

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Nuclear Research, as well as listening to a Holocaust survivor. All provided important and thought-provoking experiences.

#### **Behaviour**

- The behaviour of students requires improvement.
- A small minority of students disrupt the learning of others. Students in key stage 4 who met with the inspector say that some lessons are disrupted because staff do not always apply the school's behaviour policy consistently well. However, they also say that bullying is 'virtually non-existent' and, on the very rare occasions that it does occur, staff deal with it quickly and efficiently.
- Students' attendance in key stage 4 is below the national average, and persistent absence rates remain too high.
- Leaders' actions to raise overall attendance have led to improvements for some students. They work closely with the local authority, but their actions to date are having a limited impact on some students. A recent action plan involves moving more quickly to prosecutions in a bid to secure rapid improvements. However, it is too recent for any impact to be seen yet.
- This is an inclusive school, and leaders work hard to help students with previously negative experiences of education to do better in their learning. Inspection evidence, including case studies, confirms this. The inspector spoke to students who said that they had joined with a record of poor behaviour in their previous schools, but have been more successful at the UTC. Exclusions are only used in the most serious cases, when all other strategies have been exhausted. The proportions of students temporarily and permanently excluded from school are broadly in line with the national averages.

#### **Outcomes for students**

### **Requires improvement**

- External baseline information shows that students often join the school in Year 10 having made little progress since the end of key stage 2. The school's performance information shows that, on joining the school, students make better progress from their starting points. Inspection evidence, including scrutiny of students' work, confirmed this to be the case. However, students do not make consistently good progress across all subject areas and, therefore, this requires improvement.
- Last year, the number of students who attained basic qualifications in English and mathematics was below the national average. Leaders acknowledge this. Inspectors noted that students' progress measures are more positive now, and recent staffing changes are helping to build the momentum to secure improved outcomes for students.
- Students who are less able do not make consistently good progress. While some can demonstrate impressive gains, others are unable to access the work and do not make the progress of which they are capable.
- The attainment levels of all students, including disadvantaged students, are below national averages. However, students' progress is more encouraging. Information



- provided by the school shows that, last year, a high proportion of the students in English and mathematics made good progress from their starting points in Year 10.
- The progress of current students in some subjects, particularly biology, geography and chemistry, is good. However, high staff turnover in some subjects, like mathematics and physics, means that students' progress in these areas is not good enough.
- Leaders' effective spending of additional funding helps disadvantaged students and those who have special educational needs and/or disabilities to achieve good levels of progress from their individual starting points.
- Most-able students, including those who are disadvantaged, make good progress from their starting points. Teachers are far more adept at planning learning that meets the needs of these students. Consequently, students are challenged and motivated to succeed and make good gains in their learning.
- Students achieved impressive results in the key stage 5 vocational subjects last year that placed them above national averages. The high rates of progress of the current cohort have enabled all students to secure places at either university, on apprenticeships or in training.

#### 16 to 19 study programmes

**Requires improvement** 

- Although leaders ensure that all aspects of the 16 to 19 study programmes are met, students do not yet benefit from consistently high-quality teaching, learning and assessment. Therefore, this area requires improvement.
- In 2016, students' outcomes on academic A-level courses were variable. Although pass rates were high, students did not always make the progress they should have to achieve the higher grades of which they were capable.
- Teachers do not provide sufficient support to develop students' literacy and numeracy skills effectively enough. Students do not make as much progress as they could in other subjects because their lack of basic skills hampers their progress. Typically, in a Year 12 chemistry lesson, students' poor levels of numeracy meant that they struggled to draw graphs to show different rates of reaction.
- In some subjects, particularly vocational courses like engineering and computer science, teachers' effective planning ensures that students are well taught and make good progress. Students complete their portfolios and assignments either in line with, or in excess of, their target grades.
- Students are provided with opportunities to achieve good grades in English and mathematics GCSE qualifications and a high proportion of students improve to at least a grade C.
- The progress that students make on vocational courses is good and they attained results above national averages last year.
- Students benefit from good-quality careers advice and guidance that guide them well to make the next step in their education or training. Last year, all students progressed on to either apprenticeships, university or employment.
- Students feel safe at the school. They work harmoniously with students from different



- backgrounds and consistently demonstrate the British values of tolerance, respect and freedom of speech. They understand well how to keep themselves safe online and from the dangers of extremism and radicalisation.
- Students benefit from prestigious work experience placements that are closely related to their vocational specialisms of sports science, computing or engineering. They learn relevant skills that equip them well for the world of work, for example timekeeping, attendance and personal presentation. These are reinforced by the high standards and expectations of their teachers.



#### **School details**

Unique reference number 140570

Local authority Essex

Inspection number 10023351

This inspection of the school was carried out under section 5 of the Education Act 2005.

Type of school

University technical school

School category University technical school

Age range of students 14 to 19

Gender of students Mixed

Gender of students in 16 to 19 study

programmes

Mixed

Number of students on the school roll 140

Of which, number on roll in 16 to 19 study

programmes

53

Appropriate authority The academy trust

Chair Dr Paul Westlake

Principal Michael McKeaveney

Telephone number 01279 444 374

Website http://sircharleskaoutc.com/

Email address enquiries@sircharleskaoutc.com

Date of previous inspection Not previously inspected

#### Information about this school

- The school meets requirements on the publication of specified information on its website.
- The school complies with Department for Education guidance on what academies should publish.
- The UTC opened in September 2014. It has students in Years 10, 11, 12 and 13.
- The proportion of disadvantaged students, those from minority ethnic groups and those who have special educational needs and/or disabilities is broadly in line with the national averages.



- The UTC is much smaller than other secondary schools. It has more boys than girls.
- The UTC specialises in computing and science, technology, engineering and mathematics subjects. By combining academic study with practical assignments, the UTC aims to give students the skills and knowledge required to follow careers in a range of high-tech industries.
- The UTC is set to join the Burnt Mill Academy Trust in September 2017.
- The UTC is sponsored by Anglia Ruskin University and receives support from companies including GlaxoSmithKline, Pearson Education, Raytheon, Loxone and the Princess Alexandra Hospital.
- The UTC does not use any alternative provision.
- The UTC does not meet the current government floor standards.



## Information about this inspection

- The inspection was carried out by two of Her Majesty's Inspectors over two days.
- Inspectors observed 22 lessons, some jointly with senior leaders, during which they reviewed students' work in books and folders, and spoke to students about their learning.
- Inspectors also gathered a range of evidence from meetings with senior leaders, staff, students and trustees, from telephone conversations with the chief executive officer of the BMAT, the school improvement partner and a representative of the Department for Education, from reviews of the UTC's website, documents and assessment information and from general observations of the daily operations of the UTC, including social areas.
- There were insufficient responses to the online Parent View questionnaire for inspectors to analyse. However, they did consider the seven free-text responses to the same questionnaire. They also took into account the 12 responses to the staff questionnaire and 19 responses to the student questionnaire.

### **Inspection team**

John Randall, lead inspector	Her Majesty's Inspector
Richard Pemble	Her Majesty's Inspector



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