

Report by Dr Judith Kleine Staarman on the application of The Rochester Grammar School to be re-accredited as an Advanced Thinking School by Thinking Schools @Exeter, University of Exeter.

Evidence base

The criteria for accreditation as an 'Advanced Thinking School' starts from the assumption that all criteria for the first level of accreditation by Thinking Schools @Exeter continue to be met within the ongoing practices of the school community. The second level of evaluation further assumes that the original criteria for recognition as a 'Thinking School' have now become so embedded that staff and students have developed a deeper understanding of the principles of cognitive education and its impact on both their individual learning and its potential contribution to society. Much of the evidence referenced in this report reflects the significant and sustained progress The Rochester Grammar School has made in its on-going journey as thinking and learning community and follows on from the previous accreditation as an Advanced Accredited Thinking School.

The focus for this advanced level of evaluation turns towards the presentation of evidence as to how the school has moved forward in developing itself as an Advanced Thinking School. Evidence has been sought on teaching (and support) staff's developing skills as practitioners; their impact on the overall development of the students beyond their technical skills in the use of the tools; and their continuing impact on the community of the whole school and beyond. Five key areas for accreditation as an Advanced Thinking School have been assessed: Dissemination of Practice; Evaluative Research; Professional Development; Differentiation; and Whole School Assessment.

The University of Exeter received the school's submission for accreditation as Advanced Thinking School from The Rochester Grammar School in the form of a sizable proforma and a

wealth of evidence presented on the school's website, extensively evidencing the continuing work the school is undertaking as an Advanced Thinking School. The powerful evidence includes examples of displays and posters, lesson plans, student handbooks and guidance, staff training materials, research reports and data along with many other forms of evidence. From the wide range of evidence provided, it is clear that the school has continued to operate at an Advanced Thinking School Level since the previous Advanced Thinking School accreditation and is continuing to lead the way as an Advanced Thinking School.

The school context

The Rochester Grammar School is a slightly larger than average selective girls' school which admits male students in its Sixth Form. The school has 1240 pupils, with 300 in the Sixth Form and students enter the school with above average standards. The school is a founding member of the "Thinking Schools Academy Trust" and as such, leads professional learning based on the Thinking Schools ethos across the Trust. The school continues to have a strong role in supporting other schools, both within and outside the Trust. The Rochester Grammar School was established in 1888¹ and students come from a wide range of social and economic backgrounds. In 2008, OFSTED judged the school as 'outstanding', with high standards and students who, on leaving the school not only have "the qualifications they need to proceed to higher education but also the maturity and independent learning skills that serve them well in their chosen careers and futures".

The Rochester Grammar School was first accredited as a Thinking School in 2009, after which Advanced Thinking School Accreditation followed in 2011 and a re-accreditation in 2016. The aim for the school has been to further develop the school's holistic culture of, and focus on thinking and to share their extensive expertise and outstanding practice of thinking skills with other schools.

The school ethos is "Every child achieves" and this is underpinned by the aim to create an environment in which students can think independently and engage with their own learning. The school has continued to develop the Thinking School approach and, as an Advanced

¹ School Website

Thinking School, their ethos is carried out at every opportunity, for instance the school website, which very clearly displays information about the school being a Thinking School and what that means for the learning of students.

Dissemination of practice

For this area of accreditation, we assess the way in which the school can demonstrate evidence of sharing their Thinking Schools practice and experiences across subject areas with others. There is an impressive amount of evidence of sharing practice within the school, and across subject areas. There are regular staff development sessions and all staff develop performance management targets related to thinking. This is extended to departments, who also set targets within their curriculum area in relation to thinking and these targets are evaluated regularly. Staff are also encouraged to read research around Thinking Skills and readings are discussed in staff meetings, which ensures that staff not only develop technical skills around thinking tools, but conceptual knowledge and awareness of thinking and learning.

There is much evidence of sharing practice within the school, across all curriculum areas, with all sections of staff participating in regular formal development sessions and more informal staff training events. Staff are invited to share their best practice with colleagues, both in formal and informal staff development sessions; for instance, on how particular thinking tools are used within a department. At the same time, a lot of effort is put into ensuring that a common language and ethos is maintained throughout the school, and it is evident from the examples provided that the school is very successful in doing so. This shared ethos is similarly carried out to parents and the wider school community, as well as within the Academy Trust. The school is clearly a leading Thinking Schools Academy Trust school and they play an important role in the development of a wide range of schools at various points in their Thinking School journeys. The school's expertise around Thinking Skills and Thinking Ethos has also been disseminated at conferences and in publications, particularly by the lead practitioner for thinking, who has written a number of articles around thinking. The school also regularly receives visitors from other schools, both from the UK and further afield.

The Thinking ethos is similarly carried out by the students, who display sophisticated levels of understanding of Thinking Skills, both in terms of their ability to use the wide variety of thinking tools, but also in their awareness of the reasons behind Teaching Thinking. It is clear that the school's aim is to develop independent and reflective thinkers and from the work that has been presented in the portfolio of evidence it is clear that the school is very successful in doing so. Students are able to make independent choices for particular thinking tools, dependent on the task ahead and they are able to utilise their thinking skills in a wide variety of contexts. Students play key roles in mentoring and providing support to other students within the school and the wider community and from the materials provided, it is evident that students at all ages are regarded as vital members of the Thinking Community, not only as recipients of a Thinking curriculum, but as co-constructors of the Thinking School ethos. In similar vein, this ethos is shared with parents and the school is working hard to help bridge the gap between home and school. Parents are consistently informed, not only of the thinking tools used in the school, but more importantly, of the learning that takes place using these thinking tools and from parents' feedback it seems that they are very aware of the central role of thinking within the school. These activities clearly indicate the school's leadership role within the Thinking Schools movement and I have no doubt that the school will continue to be a shining example for the development of other Thinking Schools.

Evaluative research

This area of evaluation is particularly concerned with the ways in which staff is seeking evidence of positive outcomes of the Thinking Schools approach and how this evidence is used to develop whole-school learning. Based on the evidence of Level 1 criteria, there is a continuing and wide-ranging programme of evaluation within the school, from evaluation of tools and approaches in staff development to the evaluation of attainment data in relation to thinking skills. Staff engage in a range of research, both through formal qualifications at Master's level with several universities and in-school at departmental or class level and results from this research are shared widely, both within the school and outside.

A range of evidence is presented that demonstrates the ongoing collection of data related to Thinking Skills across the school, in particular with respect to how well Thinking Skills are embedded within the various departments, focusing on the links between content knowledge

and thinking skills and the impact on both students and staff. Data is used consistently to drive school improvement and teacher development, for instance through the use of MALS, which lead to several initiatives to develop student self-reflection, awareness and confidence and thinking tools are now used for pastoral care for students on the basis of research evidence collected by the school. SWIVL in conjunction with observation sheets based around thinking tools have been introduced as a tool for observing and sharing practice across the trust. It is clear that there are extremely effective strategies in place across subject areas that encourage and support evaluation and reflective practice of learning and teaching approaches related to Thinking and subsequent outcomes.

It is particularly impressive to see staff engaging critically in the exploration and evaluation of new ideas for teaching and learning, as well as with underlying educational and psychological mechanisms such as meta-cognition. Continuous and systematic evaluation of thinking tools along with a discussion around its underlying principles for learning is clearly helping to develop staff knowledge and awareness, which reflects on the ability of staff to make informed decisions about which thinking tools to use in their lessons.

Professional development

Evidence of professional development concerns two key issues: technical, in the practical application of a range of thinking tools; and qualitative, demonstrated by the quality of staff as mediators. In terms of technical development, there is an extensive and well-established programme of training for the appointment and induction of new staff, who are immediately introduced to thinking skills and the school's thinking ethos, even before they arrive at the school. New staff receive extensive training on the purpose and use of thinking tools and have access to drop-in training sessions throughout the year.

Staff development has been a key focus for The Rochester Grammar School and in addition to the training programme developed for new staff, there is an extensive programme of staff development throughout the year. All staff are kept up-to-date with regard to thinking skills via a range of channels, including presentations, discussions and a planned programme of lesson observations. It is very clear from the evidence that staff are extremely well-supported in their practice around Thinking Skills, and that the programme of support and development

has led to a high level of knowledge, expertise and skills around Teaching Thinking. It has also led to a common understanding and shared language around the use of thinking tools and is driving new approaches to use the tools in practice. The level of reflection of staff on both research and publications around Thinking Skills and on their actual use of Thinking Tools within the various curriculum areas is particularly impressive. It demonstrates an excellent understanding and awareness not only of the tools themselves, but of the underlying cognitive principles and concepts. There is strong evidence of the continued focus of staff on the development of their own knowledge and understanding of Thinking and Thinking Skills approaches in general, and Thinking Tools more specifically. There is also extensive evidence of innovative and creative uses of tools, which in turn demonstrates a sophisticated understanding of staff of the role of various Thinking Tools within wider classroom pedagogy, for instance by using Problem Based Learning. The ongoing development of thinking tools and strategies is ensured by including clear targets for development as objectives in the Performance Management process.

Differentiation

This area of accreditation includes the value of thinking tools in the education of specific individuals and groups. This includes a sensitivity to the individual needs of all the children in lessons, and a focus on developing autonomy and individuality in students' approaches to problem-solving. Developing students as independent learners has been one of the core aims for The Rochester Grammar School and the evidence provided demonstrates that the school is successful in doing so. Since students have an excellent understanding of the thinking tools and these tools are consistently modelled and used by staff, students are confident in self-selecting and adapting thinking tools to suit the task at hand and to organise their own revision. The evidence demonstrates this in Economy lessons, in which different students have chosen a wide variety of tools to suit their needs. This not only helps students to utilise tools that fit them best, but it also helps to extend their thinking and learning processes, as tools are flexibly adapted and combined. As a result of the MALS outcomes, students in Year 7 have started to use Thinking Logbooks that provide a journal of how the students are progressing and learning throughout the year. The aim of the logbooks is to develop self-awareness and meta-cognition in relation to developing particular skills, which demonstrates students' developing autonomy and helps students to progress given their individual needs.

Whole School assessment

This aspect of the accreditation relates to pupils' and teachers' reflections upon their own and others' and peer formative assessment procedures, as well as critical reflection on Thinking Tools. Evidence is sought for the reflective processes of staff on their own professional practice and development. Overall, it is clear that there are continuous formal and informal critical evaluations of Thinking Skills, Approaches and Tools taking place throughout the school, which include a large variety of stakeholders, including students. This is a clear indicator of the way in which a culture of thinking has developed within the school. It is particularly important to note that students have an important role in the critical evaluation, and are given a clear voice in evaluating and reflecting upon the use of thinking tools. In addition, students are also given the guidance and training in becoming reflecting about their own learning and progress. Similarly, staff have been working on assessment processes and feedback and they have been developing their understanding around thinking within an exam-oriented curriculum, in particular in relation to the move to offer the IB only from 2020. Embedding thinking skills within the exam revisions, as well as using tools to provide pastoral care for students has been challenging, but the evidence provided demonstrates exemplary reflection and understanding of thinking within an exam-oriented culture, both in relation to helping students revise for exams and in terms of developing a programme of support for students.

Points for further consideration

The submitted evidence has enabled the accreditor to identify the following areas for further consideration during the 3-year period of accreditation. Thinking Schools @Exeter would welcome your response to these points and whether they might provide the focus of the support visit from a member of our team at a time to be mutually agreed.

- To consider how a 'Thinking ethos' might be systematically studied and evaluated throughout the school, perhaps through a coordinated programme of school-based (action)research.

- There is some good use of Edmodo demonstrated, but the school might further consider how technology can help to develop Digital Thinking competencies across the school.
- To further develop staff's knowledge and awareness of neuroscience and psychology evidence (and myths!) to increase understanding of underlying cognitive principles and processes.
- In relation to the above point, to further consider the role of underlying cognitive processes and principles of the thinking tools that are used, for instance the role of metacognition, peer- and teacher-student dialogue, cognitive load and others, to continue to develop meta-awareness and in-depth understanding of teaching and learning processes of staff. This will help staff to move from being a thinking tool user to becoming a thinking tool creator and will further enhance their abilities to reflect on the use of thinking tools and make informed decisions about which tools to use in relation to context and purpose.

Outcome

The Rochester Grammar School was first accredited as an Advanced Thinking School in 2011, and it has gone from strength to strength in its strive for excellence. It is clear that the Drive Team and school leadership continue to support staff and students in developing and sustaining this ethos, which has led to very effective teaching, learning and pastoral practices. Through an extensive programme of staff development, self-reflection, evaluation and dissemination, the school has proven itself to continue to be a powerful example of the Thinking School ethos in practice and it is very evident that Thinking is at the heart of everything that is being done in the school.

In conclusion, the application has provided comprehensive and compelling evidence for accreditation as an Advanced Thinking School, until October 2022. Congratulations to The Rochester Grammar School for a truly outstanding achievement.

A handwritten signature in black ink, appearing to be 'J. H. M.', written in a cursive style.

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