

林大輝中學 LAM TAI FAI COLLEGE



Annual School Report 2021-2022

School Vision & Mission

Our Mission

The College aims to contribute to the wholesome personal growth and intellectual development of youths through a comprehensive and challenging curriculum that enhances academic, aesthetic and physical development.

Our Vision

The College aspires to lead the local education by integrating academic, sports and innovative design activities to develop and nurture future community leaders, sports professionals, accomplished academics, upright citizens and cultured individuals in the 21st century.

School Motto

多元啟智 堅毅樂群

(To explore and develop students' multiple intelligences through a broad and diversified curriculum, fostering in them perseverance and nurturing them to become socially responsible individuals.)

Yearly Theme

Learn Together Together We Learn

聯袂廣學 見賢思齊



Major Areas of Concern

- 1. To strengthen school ethos and nurture virtues in students through a wholeschool approach.
- 2. To enhance teaching effectiveness to cultivate learning motivation and initiative.
- 3. To develop STEM Education to foster in students problem solving skills, critical thinking and creativity.

Achievements and Reflections on Major Concerns

1. To strengthen school ethos and nurture virtues in students through a whole-school approach

1.1 Everyone in the school shares the true spirit and attributes of LTFC.

- ➤ To enhance teachers' knowledge and skills in nurturing students' virtues through professional development, workshops on counselling skills and classroom management were held.
- ➤ For the new teacher orientation, all new teachers agreed the activity helped them understand the learning habits of students in LTFC. It is suggested that the school can organize activities to help the teachers to familiarize themselves with the school vision and mission.
- Online-training of SEN's Identification and Intervention: 100% of teaching staff participated, about ¹/₃ of teaching staff met the requirements (²/₃ accuracy of 3 parts training).
- Life education training: All members of MCLED joined at least one-two online training sessions related to Life Education, Positive Education and National Security Education. 100% of them agreed the training sessions helped them understand the department's major tasks as well.
- All Class teachers have tried their Life Education Lessons designed by Methodist Centre for Quality Life Education during the LWL period. Over 90% of teachers agreed that the course designs and the contents helped students to reflect on their life and inspired students after the lessons and students showed on their feedback worksheets.
- Introduced the 4 focused areas: 4 focused areas of discipline and guidance issues of students in this year are: Avoid mis-use of iPad, Good attitude in lesson, Be punctual, respectful and caring. All teachers understand and agree to focus on these areas to nurture our students.
- ➤ Form Meeting: Introduced classroom management skills to teachers to help them to prepare for class resumption. Discipline and guidance issue shared (eg. care for students' emotion and stress after school resumption, cyber bullying, Parent's day interview skills) to raise teachers' awareness about the behaviour or emotion of students and class management.
- ➤ For the SEN support, teachers are encouraged to take relevant courses for their professional development. The Life education teaching materials will be modified after collecting the opinions from the teachers.
- To enrich parents' understanding of school expectations of students' learning habits and daily behaviour such as homework submission, being respectful and responsible, and adherence to school rules, parent seminars (online/physical, including new parent orientation), parent-teacher interviews, courtesy calls, push messages and PTA meetings were held, and newsletters were published.
- S1 SEN Case Intake Parents' meeting: parents meet with EP, Counsellor, FM, CT. Parents of S1 SEN were familiar with people who would take care of their child.
- Case Interview with Parents of all S1 SEN and S2-6 students with significant needs by phone. Parents and students can adapt to the school and cope with learning difficulties by their own successful experience and using school resources. Parents of Coaching Case are contacted regularly by the counsellors.
- ➤ No missed cases and all cases in need were followed by EP, Counsellors and SEN Teachers. Positive feedback was received when calling parents.
- S1 and S2 Life Education lessons: The lessons included time management skills for students, it can help them to improve their HW management.
- Online Parents Talk: 50 parents joined and participated actively and raised questions about the changes of our children during adolescence/ storm period. They recognized and understood the changing role of parents, and how to adapt to the changes in the roles and responsibilities of parents. Parents' feedback was positive. It was good for parents to develop a closer relationship with their children, but the parents had to maintain the parental authorities which was also important for the growth of the teenagers.
- School counsellor/ Education Psychologists keep regular communication with the parents of the SEN students to support their growth and development. Some more generic skills should be conducted in the coming years in the Life education lessons.
- School ethos was strengthened and students' awareness was enhanced through opportunities of applications and reflections in different school programmes in a whole-school approach.
- Extra-curricular activities: The promotion was held in the LWL period and it led to the unprecedented overwhelming response. Students activity enrolled in different clubs and societies. Students strived for excellence and developed generic skills, such as communication skills, leadership skills, organisation skills and sense of responsibility through joining different societies.

- Reminders during online period: Reminders on school routines, behaviour during online period, etiquette and behaviour inside and outside school through weekly briefing. Positive behaviour is praised and misbehaviour is also stated out for attention. When face-to-face morning assembly cannot be held, online briefing session is an effective way to remind students school routine and enhance school ethos.
- ➤ The student leaders will be assigned with different important roles in the school events. Regular briefing and sharing sessions will also be held to enhance the students' positive attitude and behaviour.
- Elements of virtue and moral education were strengthened through the implementation of Life Education period in S1 and S2, with focus on self-management and resilience and social relationship development.
- Curriculum of HE: The whole curriculum of 3 years was refined to cover 5 topics which includes Physical, Mental and Social Health. T2 Personal hygiene and self-image and T3 Addiction in Youth focused on selfmanagement. T4 Mental health and stress focused on resilience. T5 Lifespan (conformity, peer influence, bullying) focused on social relationships. Students can understand the reasons behind their reactions and choices in their daily life and have higher awareness to their mental health (e.g. stress) and social health (e.g. cyber bullying). According to the subject teacher's observation, students are more alert to what cyber bullying is and they are willing to share their stress symptoms and become more alerted to their stress.
- ➤ S1 and S2 Life Education: Majors focus are self-management and resilience and social relationship development. We have designed different activities for students to let them understand more about themselves and try to establish virtue and moral value. Maintaining a stable manpower is good for the development of Life Education.
- ➤ To bring about elements of virtue and moral education through subject collaboration. Focused topics: Caring/empathy and Appreciation (peers, staff and family). HE: Different teaching topics and 2 group projects (design elderly voluntary services (S2) and stress release activities for teenagers (S3)) covered targeted virtues. T5 Lifespan includes discussion on bullying, elderly changes, dementia, relationship with teenagers which focused on caring/empathy. T2 personal hygiene and self-image includes discussion on selfesteem and self-evaluation which focuses on appreciation. Activity worksheet includes case study and personal reflection were done by students. This work showed that students start to learn the skills of reflection.
- Morning Assembly: over 20 teachers have been invited to share during Morning Assembly. All topics of the sharing related to our major focus. The teachers and students reflected that the sharing inspired them a lot and gave positive feedback to their presentation.
- Teachers from different subjects and areas share their positive values to the students to create an atmosphere of sharing and love.

1.2 A positive and healthy school ethos conducive to learning is fostered, with focus on Respect, Caring, Responsibility, Commitment, Perseverance, Integrity and National identity.

- ➤ A whole-school approach to discipline and guidance work to promote focused school ethos (Courtesy/Respect and Caring/ Empathy) was adopted and the positive attributes of students were recognized and reinforced.
- ➤ The Best Class Award Scheme aimed at enhancing the class spirit and form spirit through the process of completing the scheme and increasing their self-discipline through positive reinforcement. Class teachers and students try their best to achieve good performance in class together. The scheme was divided into two parts and awards will be given to the class which have the best performance and show improvement. FM will prepare small prizes to students for their achievement. The class which has the best performance in the whole school will be awarded 'Class of the Year'. Some activities can be designed to reinforce good behaviour and attitudes. It helps to promote a good atmosphere at school. More activities can be designed and carried out to promote good behaviour and attitudes.
- Different members and units were involved in the organisation of diversified activities and mechanisms to promote students' understanding of school expectations and to enhance their participation, with focus on improving learning habits and basic school routines were introduced. (Responsible use of Ipads, homework submission and punctuality to class).
- ➤ In coordination with the IT unit, the Discipline unit has developed a series of guidelines on collecting homework, attending online lessons and using the iPad properly.
- ➤ To organize by-level activities and training to enhance cohesion and participation, and students' needs at different stages of school life were identified.
- All FM and DU teachers have to be on-duty according to the duty schedule to support the subject teachers.

- ➤ Form Meetings were scheduled every two months to discuss class affairs and evaluate performance of each class through level meetings.
- ➤ Form based activities were arranged to enhance the class spirit and form spirit (Term 1: S6 day camp, S1 day camp; post exam: S4 and S5). Most of the students enjoyed the day camp very much. Students followed the instructions of the trainers and showed discipline. They learned to obey rules and give responses quickly. When doing team building activities, they showed great cooperation.
- ➤ Group training and activities for student leaders were held to promote frontline participation, to enhance the role of student leaders and to strengthen their commitment and recognition.
- ➤ Peer-Mentorship Scheme: The scheme was conducted in the Summer Bridging Programme and Weekly Homework-Dictation Class. More than 30 peer mentors participated. They built up connections with new S1 Students and taught them in Homework-Dictation Class. S2-3 lowachievers were also served by them. They found they were capable of helping peers in lower form and working as a team. They were also appreciated by parents of their peers.
- ➤ The training programme was hosted by SU and House advisors, with help from of teachers. Each of the training day starts with an ice-breaking game, followed by two to three team building games in the school gymnasium. After that, students were put in groups with mixed forms and houses, group discussions were carried out on given cases and the programme ends with reflection. Feedback was given by teachers along the programme to guide students into developing their skills and realising their strengths and weaknesses. Students were also given follow-up tasks to be completed before the next training day.
- Guidance prefect leadership training workshop: Guidance Prefect team organised it including planning activities, promoting positive value and mental awareness with Kai Chung Hospital by 'Health-in-mind' Project in May and June. 17 Guidance Prefects actively participated in the training workshop. They agreed that the workshop helped them to learn the skills about activity planning. Students were also given follow-up tasks to be completed before the next training day. They will hold a whole school activity to promote mental health.
- ➤ We can provide more chances for the leaders to have sharing in the coming years. It helps the buildup students' confidence.
- Learning opportunities were extended and perspectives were widened through enhanced collaboration with external agents and utilization of community resources (especially alumni and IMC network).
- Prefect leadership training program: Invites the Correctional Services Department to provide a leadership training program in which Prefects can play the role of correctional assistants and learn leadership and management skills.
- Tutorials in HE: Five tutorials about healthcare were offered by IMC member Professor Albert Lee for HMSC teachers and S6 students.
- LWL learning sharings: Several Talks and Sharings were organised for different levels in LWL periods. Sources from external agents were useful for class teachers to prepare the lessons with their sharing.
- ➤ 'Health in Mind' 「Teen 使行動」: The scheme co-worked with Kwai Chung Hospital aimed at increasing the understanding towards mental health, reducing the discrimination, and raising the awareness about the importance of mental health caring. Several talks and workshops organised to students, parents and teachers. A whole school activity that is organised by Guidance Prefects will be held in mid- June to promote mental health.
- Invite the alumni of the different elective subjects to share their experiences to accommodate the students' diversity.
- ➤ The National Identity of students was enhanced and National security education was introduced. National Security Day: We have arranged teachers sharing, video sharing, Google Form Quiz Competition on 4/12 National Constitution Day and 15/4 National Security Day during Morning Assembly. All students joined the competition, over 60% of students answered the questions correctly and got the gifts. Exhibitions will be arranged to enrich the content of the activities. Exhibition will be arranged after the activities for further introduction of the ideas and contents within the activities.

2. To enhance teaching effectiveness to cultivate learning motivation and initiative

2.1 Students take the initiative to learn and become effective learners.

- To foster the habit of pre-lesson preparation and self-directed learning in students, all subjects have designed pre-lesson booklets for a particular form. Due to the pandemic, some of the pre-lesson booklets have not been distributed and completed by students. Since the design is in the preliminary stage, the tasks are rather simple and cannot motivate students to do. During lesson observation, teachers seldom made use of the pre-lesson booklet as an introduction of the topic taught. Overall, the habit of pre-lesson preparation is not yet formulated, most subjects are developing pre-lesson materials and will implement in the next cycle. In the future, we suggest that the design of the pre-lesson booklet should be more interactive. Game-based activities and videos should be added to enrich students' prerequisite knowledge and provoke students' thoughts for discussion. Also, award scheme should be included such as daily mark calculation, prize and gift. Lastly, we should consider developing the pre-lesson tasks for all levels.
- For the teaching of different study skills, it is found that some students have developed quite a good study skill. For example, in English lessons, over 80% of the teachers require their students to set up an English notebook to take notes on grammar rules and vocabulary patterns. They compare easier version vocabulary to more advanced patterns. Also, a majority of students are willing to take part in group discussion (in face-to-face classes) to exchange their ideas. They can learn from each other through sharing. Also, in Business KLA and PE KLA, note-taking skills including summarizing key points of passage, drawing concept maps, drawing pictures etc. were taught. 70% of the students take the initiative to take notes by copying teacher's demonstration as they are weak in creating their own notes. We all agreed that study skills are very important to our students. Note-taking/ Learning skills seminar or workshop should be introduced to S1 students through Summer Bridging Course and Life Education lessons. For other forms, lessons or workshops about learning skills can also be arranged by some parties. Students who keep a well- organized notebook will be given praise cards before the First Term Exam in December, and CAD can help the coordination of praise card distribution. Lastly, subject teachers can share the good examples of notes during lessons.
- To provide useful assessment data and quantitative and qualitative feedback to learners in order that they can track their own learning progress to improve learning, 'Predicted grade' based on last years' Final Exam and S6 Mock Exam results were prepared. In the evaluation meeting, all KLA heads agreed that it helped teachers to have a better understanding on students' performance in HKDSE. Subject teachers used these statistics to give reinforcement and enhancement support to S6 students before the HKDSE. 19 S6 students were identified to have a need to receive support for a particular core subject for meeting the university 332222 entrance requirement.
- Teachers distributed good samples to students, e.g. booklet including artwork and SBA project of previous students who got 5* was compiled in VA subject so that students will have a better understanding of the requirements of HKDSE.
- Overall, the assessment data provide very useful feedback to students. It also gives a very powerful motivation for study. In the next cycle, KLA heads expressed that more data can be collected or analyzed.
- In the future, we suggest that students can be asked to set their own 'Target/ Expected Grade' at the beginning of S5 so that they will be encouraged to meet the goal set by themselves, such as designing their own study plan. Also, Statistics showing the progression or regression between two exams or tests should be prepared so that subject teaches can make use of these statistics to offer appropriate support to students. Teachers can drill students with a particular question type according to their ability.
- To provide authentic learning experience to increase learning motivation, cross-curricular activities were organized by I.S., English and IT departments. For S1 IS, as a part of LAC project, S1 students learnt the definition of living things in IS lessons, coding of a robot and a proposal of designing a robot to offer help to animal owners in Innovation and Technology lessons, and presentation skills in English lessons. S2 I.S. students learnt the properties and reactions of acids and bases. They were then taught by English teachers to write an experimental report.
- 17 students have participated in the 73rd Hong Kong Speech Festival. For Chinese section, 1 student won first runner up. 30 students got 80 marks or above and received certificate of merit. As for

English section, 33 students joined the competition, 2 students won the first prize, 1 student got second and 1 got third. 23 students received certificate of merit in total.

- 11 students from S3-S5 have participated in the JA Innovation Camp in October. It is a half-day JA experiential program that builds design thinking and soft skills (creativity, entrepreneurial mindset, teamwork and problem solving) of students, and inspire them to apply their learnings to develop a solution for a problem that they identify in their communities through team exercise, prototyping and presentation. Our school has won the Champion in this activity.
- Chinese History department has joined the Vote for historical personage 2021-2022 organized by Chinese History Education Centre. Our school has won the highest vote award and the highest participation award.
- An S4 student successfully applied for the summer research internship "Bright Future Engineering Talent Hub" organized by City U. The internship will start in August.
- VA students have won 26 awards. Artists from M+ museum was invited to deliver online seminars to our senior VA students. VA students also visited M+ museum.
- Overall, the school tried hard to organize outside class and inter-class activities and provided authentic learning experience to increase learning motivation.
- ➤ In the future, we think that students should be encouraged to participate in activities and competitions highly related to curriculum so that their subject knowledge can be enriched. Also, we can share the outstanding work in competitions with our students so that they can learn from the good practice. Lastly, weekly activities can be organized at school to promote the learning atmosphere and motivate students' interest in learning.
- To encourage students to do more self-reflection by implementation of assessment for learning, teachers assign short assessments during lessons and provide instant marking or feedback and comments. From lesson observation and homework inspection, there is an increase in using e-learning platform (e.g. Kahoot! Mentimeter, Nearpod, google classroom) to help students and teachers have a better understanding of students' learning progress.
- > 90% of the teachers designed a re-quiz or supplementary worksheets for their students to consolidate what they have learnt.
- In mathematics subject, benchmark quiz was introduced this year in all forms to make sure students really understand these foundation topics.
- Students were told to review and reflect on their lesson performance by doing corrections, which can be seen in book inspection.
- Similar questions will be used to assess students again if most students fail to give satisfactory results. By observation, students are able to handle the questions within 3 times.
- > Evaluation worksheets were used to help students to evaluate the progress of the VA SBA.
- Peer marking helped students have a better understanding about their strengths and weaknesses. Chi and LS teachers tried peer marking in their lesson. Students tried to mark other's work and point out the way for improvement. It helps them to have more understanding of the marking criteria and the requirement to get a higher mark. In Liberal Studies, around 40% students can gain higher marks in the same type of questions.
- In order to motivate lower achievers to actively participate in the short task, different levels of exercises (foundation, core and extended) can be designed to increase their sense of success. Also, small awards can be given to students to encourage them to reach the basic level and later to higher level. In this way, students can grasp the foundation topics of different subjects and are more eager to achieve the higher level.

2.2 An environment conducive to teaching and learning is provided.

- Every teacher has a Surface tablet or iPad which brings convenience for each one of the team to teach in the classroom.
- Stable WIFI facilitates the use of web resources during lessons.
- New Annex extension provides more capacity for teachers to arrange learning activities. Teachers and students used the self-study room in library before the test and exam.
- > Teachers use the grand stairs to conduct whole form activities, such as lecturing or film appreciation.
- Innovative and Technology Centre provides useful IT facilities and new technology to facilitate IT learning.

- > Overall, upgraded classroom setting facilitated teaching effectiveness.
- We think a large class size (37 students in a class) hinders the arrangement of group activities. In the future, it is suggested that classes can be split into smaller groups in different venues. Also, we can fully utilize New Annex to arrange learning activities. Lastly, ITSU can provide training to teachers on how to fully utilize the function of Surface.
- ➤ Common lesson time was provided to enable collaborative lesson planning (CLP). throughout the year. Most subjects spent time on monitoring the teaching progress. Discussion on sharing of good practice and difficulties in teaching was encouraged. Teacher Survey found that over 80% of the teachers agreed that they made good use of CLT to coordinate teaching with other teachers, conducted professional dialogues with other colleagues, and improved teaching effectiveness, and over 75% of the teachers agreed that with CLT, they have optimized the instructional design of the curriculum.
- ➢ In Health Education, regular meetings with the consultant were held every 2 weeks to share good practices and difficulties in teaching. Teachers contributed to provide solutions. Small group discussion of teaching strategies took place in S2 to S3 and S5 to S6 every 2 weeks.
- > We suggest that subject-based collaborative teaching could be implemented.

2.3 Teachers manage their students well, with proper classroom routines set up

- To provide training for teachers to strengthen classroom management skills, DPCD have consolidated the discipline guidelines on the appropriate use of iPad under the technical support by ITSU. But the misuse of iPad is still found in the classroom. Further action needs to be made. DPCD's student management support and Form master of each form can provide all-round back up to teachers.
- Teaching demonstration and collaborative lesson planning has been conducted to share teaching skills and classroom management skills. PE KLA Conveners has conducted frequent informal lesson observations for the two young PE teachers. Feedback and suggestions have been provided after lessons immediately.
- Based on the stakeholder's survey of teachers, the score on "My views on student learning" increased by 0.1 from 2.9 to 3. This showed that the performance of student learning was slightly better, even though "My views on student learning" has the lowest score among other aspects of the survey.
- Overall, classroom management training courses are very helpful to our teachers, SDD will provide more of this kind of training in the future.
- A mentorship scheme was arranged to provide guidance and support to new teachers. Level coordinators share pedagogies, task designs and good practices in CLT periods. For example, HE hired a consultant to come to school once a week. It is easier for teachers to adapt to the curriculum, learn more skills to set exam paper and design summary notes.
- Mentors also share personal experience and provide mental support to cope with possible challenges, which includes how to cater to learning diversity and the needs of SEN students, classroom management; disciplinary issues and answering parents' queries. A good rapport was built between mentees and mentors.
- Panel heads provided prompt support to novice and new teachers to the school. For example, PE paired up female teachers to facilitate better communication and the panel head provided guidance for paper setting (time, format, level of difficulty). English Panel Head helped with homework management, e.g. better follow up of students' work; improve effectiveness of marking, times of correction, marking mind maps before writing, design of post-writing worksheet.
- ➤ In the future, we suggest that apart from assigning Panel heads as the mentors, we can include experienced teachers as the buddies for new teachers, so that on-going guidance to avoid making mistakes and the team members' relationship can be further improved. Also, panel heads are advised to observe new teachers more closely (teaching and admin duties) e.g. lesson observations. Lastly, anonymous questionnaires could be designed and give out to new teachers in late September or early October to acquire new teachers' views about the school. The school could then address teachers' concern.
- > Clear guidelines for teachers were provided to help them set up proper classroom routines

The Principal, Deputy Principals and Discipline Master frequently shared the establishment of classroom routines and effective teaching skills to all teachers.

- Panel heads brief new teachers about classroom routines including setting up rewards and punishment scheme (e.g. PE KLA collects students' purses, filled out Google form to check understanding after lessons; IH KLA lists out the requirements for assignment inspection)
- To show appreciation for students' good performance and behaviors in class to nurture positive learning atmosphere, stickers, stamps, praise cards and small gifts were awarded. Students' good work was shared in lessons, google classroom and around campus.
- Overall, the appreciation for students' good performance and behaviors in class can nurture positive learning atmosphere, the school should find more ways to achieve this.
- In the future, habit of awarding stickers, stamps, praise cards and small gifts should be kept. Also, Class participation scores should be added in all subjects, particularly in S1-3, to encourage good learning habits. Good writing samples (e.g. Chinese/English writing, PSHE and VA essay, etc.) could be discussed in lessons. Lastly, students who have good academic performance should be highly appreciated so as to make them as the role models of the school, and then positively influence their schoolmates.

2.4 Teachers are able to employ effective teaching strategies to enhance learning motivation.

- To encourage professional interflow, all teachers participated in the peer lesson observation to learn to design interactive lessons. Some subjects grouped level teachers to discuss lesson plans together. They either opened their lessons or tried out the lesson plans. With the evaluation that followed, it was a valuable experience for subject teachers to realize the strengths and weaknesses of the lesson so as to further polish one's teaching skill. Lesson feedback from observers is useful for teachers to improve. Teachers' responses were positive.
- Through common lesson time, e-learning resource pools were developed in some subjects. Teachers can share and reuse the resources to increase the teaching effectiveness. A few subjects (e.g. HE, IH) brainstormed projects in common lessons and shared project guidelines. Common objectives, project outcomes and marking criteria were clarified.
- In the future, it is necessary to share learning materials systematically to students to facilitate selfdirected learning. CAD can further organize and assign all subjects to upload learning resources onto google classroom or teacher share drive. Also, sharing of good teaching practices across subjects should continue, like visits to other schools of similar banding to learn good/new teaching strategies (e.g. self-directed learning).
- Subject-initiated training programmes were initiated to equip teachers with the knowledge, skills and strategies to make learning meaningful, interesting and effective. Most of the subjects formed sharing circles to share teaching materials. This practice was considered effective because teachers could have more teaching ideas which helped students understand the topic more thoroughly, and more consolidation exercises were developed through sharing.
- Although the question bank of DSE past papers was available, the materials for explaining the tricky parts or common errors were insufficient. Subject teachers can be recommended to prepare explanation materials or videos together. With concerted efforts, a wider range of materials will be available in future.
- This year, two subjects (HE and VA) invited professional speakers. In future, more subjects can invite the experts in the field to provide training for teachers.
- Teachers were invited to participate in external learning circles, school-based support services and visits to enrich teachers' knowledge in materials design and pedagogy. All subjects sent representatives to attend seminars or workshops for professional development. It was an eye-opening experience for teachers who attended the workshops provided by university professors or professional speakers. This was a useful strategy for teacher training. Experienced teachers in most subjects participated in the DSE marking process. The experience was useful for teachers to know the strengths and weaknesses of candidates. More school visits can be organized if the social distancing restrictions are released. Also, we can seek external resources such as university research programme or EDB school-based support programme to further develop teaching skills.

3 To develop STEM education to foster in students' problem-solving skills, critical thinking and creativity.

3.1 Students talented in STEM are identified

- Our STEM development has been proactively promoted to the public through different ways, such as IT education sharing at International Coding Education Festival held by HKACE, and other school promotion occasions. In addition, our school is also a co-organizer of the Hong Kong Primary Schools Olympiad in Informatics (HKPSOI) and a venue provider for ITCA presentations. School is advised to maintain relationships with these professional STEM and IT organizations.
- More new students who are talented in STEM have been identified this year. According to the S1 IT questionnaire, 132/170 S1 students are willing to participate in IT/STEM related activities. In addition, there were 42 students who wanted to join the STEM Communication group and received event information. The STEM team involved 114 students and received regular online and offline training. It is recommended that ARSD should collect STEM/IT information from students during the admissions process. Students may be talented in STEM/IT fields, but they may not have the opportunity to participate in external events or competitions.
- Various STEM events were held by the Technology KLA and STEM school team to identify students who were talented in STEM. A Joint Schools Hackathon was held to raise the school's profile and attract new STEM members. All qualified students joined the STEM team. AI smart car workshop for S1-S3 STEM team members. About 30 members receive regular training each week to learn STEM skills. Also, cross curricular activity has been held in S1, STEM and English subjects coorganised a LaC Activity. Students can study animal-themed English, Science and IT knowledge. It is recommended that Joint Schools Hackathon should be retained in the STEM member selection.

3.2 Teachers' knowledge and skills in STEM are enhanced

- Teachers have been encouraged to attend seminars and workshops in STEM. Due to school suspension and COVID-19, most STEM workshops and development programmes were conducted in online mode and no physical STEM Development Days this school year. Teachers have attended online seminars related to STEM education such as IT in Education, International Coding Education Festival, etc.
- To promote STEM education to teachers, the STEM Education team organized an online coding challenge for teachers to participate. 20 teachers participated in the online coding challenge. Most teachers in STEM-related subjects completed assignments and earned certificates. Some teachers reported that they had difficulty completing tasks because they did not have a background in Python programming. They recommend a short online tutorial before the coding challenge. To improve the STEM skills to all teachers, SDD and STEM education teams should coordinate to organize at least one STEM workshop for all teachers.
- A professional coding education company was invited to organize coding events. STEM teachers (IT, maths, science) were invited to join the program and organized STEM events. STEM teachers also learned to code in Python. According to interviews with teachers, some teachers find that the activities can provide a great experience for them to learn how to organize STEM activities.
- There should be more STEM and IT training for teachers. At least one school-based STEM-related training or onsite visit by professional organizations (even online or blended mode) is suggested for each year.

3.3 Facilities and equipment for the development of STEM are installed

- STEM equipment was upgraded for the implementation of STEM education. ITSU purchased 40 high-performance Windows laptops and 40 MacBook Pros to install in the new computer rooms. Technology KLA can use these new devices to offer students a wide range of technology courses.
- CUHK provided our school with 40 AI cars equipped with AI sensors to promote AI education.
- Due to the COVID-19 and problems in the global chipset supply chain, it was unsuccessful to purchase some new Raspberry Pi for S1 students to assemble and experience the artificial intelligence system. Technology KLA conducts AI experiments using existing Raspberry Pi stocks and new computers with AI Chip (M1 MacBook Pro).

- To prevent procurement issues, Technology KLA can purchase 180 sets of Raspberry Pi and reuse them to ensure that each year S1 students can experience AI and IoT courses. Also, they should find some cheaper alternative hardware so that all students can have at least one AI/IoT hardware for self-study.
- **3.4** Students are equipped with STEM knowledge and skills, and their interests in STEM are aroused. Students 'problem-solving skills, critical thinking and creativity are enhanced through STEM education.
- The IT curriculum was refined to promote STEM education and complement existing IT curricula. A clear path has been set for students to have a complete experience in different IT/STEM fields (AI, Robotics, AR, VR, Programming, Design, etc.). A new theme "Smart City" was added this year. Since smart city is not a stand-alone topic, the idea is integrated into different IT topics. Technology KLA also invited professionals to hold talks and workshops for junior form students.
 - S1 Smart Environment (IoT and Energy)
 - S2 Smart People (Cyber Security)
 - S3 Smart Economy (Blockchain)
- Not just the Technology KLA, but also different subjects (especially STEM subjects) should incorporate "smart city" elements.
- To promote STEM education, a new theme Smart City was introduced in S1 and S2 STEM enhancement programme. Elements of STEM & IT have been infused into project learning, enabling students to integrate and apply STEM and IT knowledge and skills to solve daily problems.
- Regular training courses related to smart city have been held for elite STEM students. All S1 to S3 STEM team members participated in the AI smart car workshop, and some S1 and 2 students participated in the tram app design workshop.
- A Joint Schools Hackathon was held by STEM Education team. The event was so successful that all the invited schools participated in the competition. About 80 students from 6 schools participated in the competition, and our students achieved excellent results. Interschool STEM competitions should be organized to increase our students' opportunities to connect with other schools.
- ➢ More than 15 STEM-related events were held this school year. There are some events related to "Greater Bay Area" and "Greater China", such as "華夏杯" and "International Coding Challenge (Greater China)".
- A virtual tour was created to raise the profile of the school. The tour can be accessed from the Greater Bay Area". Some students currently studying in Shenzhen can learn more about our school environment. According to ARSD records, some students from Shenzhen have applied to our school.
- ▶ In summary, 100% of all junior form students had STEM-related learning experience.

Lam Tai Fai College DSS Schools' Annual Financial Position Financial Summary for 2020-2021 School Year

Items	Government Funds	Non-Government Funds
INCOME (in terms of	percentages of the annual ov	erall income)
DSS Subsidy	66.66%	N.A
School Fees	N.A	26.41%
Donations	N.A	N.A
Others Income	1.08%	5.85%
Government Capital Grant utilized	0.00%	N.A
TOTAL :	67.74%	32.26%

Staff Remuneration	75.25%
Operating Expenses	13.04%
Fee Remission & Scholarship *	4.66%
Repairs & Maintenances	1.97%
Depreciation	5.06%
Miscellaneous	0.02%
Government Capital Grant utilized	0.00%
TOTAL :	100%
arplus for the School Year #	1.26 months of the annual expenditure
plus for the School Fear #	Tizo montalo or ale annual elipenanale

in terms of equivalent months of annual overall expenditure

Accumulated Surplus in the Operating

Reserve as at the End of the School Year #

*The % of expenditure on fee remission/scholarship is calculated on the basis of the annual overall expenditure of the school. This % is different from that of the fee remission/scholarship provision calculated on the basis of the school fee income as required by the Education Bureau, which must be no less than 10%.

6.57 months of the annual expenditure

☑ It is confirmed that our school has set aside sufficient provision for the fee remission / scholarship scheme according to Education Bureau's requirements.