| ESPIRE Education Ltd:RISK ASSESSMENT | RA for the STEM On Track programme by ESPIRE Education – Generic for School’s UseBy conducting a thorough risk assessment and implementing appropriate safety measures, the STEM On Track programme can provide a valuable and enjoyable learning experience while minimising potential risks to participants and facilitating staff. |  |  |
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| **Establishment:**ESPIRE Education Ltd | **Assessment by:**Adam Sirett | **Date:** 16/01/24 |  |
| **Review Date:**01/08/25 | **Approved by:**James Foster | **Date:**17/01/24 |

| Hazard / Risk | **Who is at Risk?** | Initial Risk Rating | **Normal Control Measures***(Brief description and/or reference to source of information).* | **Are Control Measures** *Y/N/NA* | **Additional Control Measures***(to take account of local /individual circumstances).* | **Residual Risk Rating** |
| --- | --- | --- | --- | --- | --- | --- |
| **In Place** | **Adequate** |
| **General Situational:** |  |  |  |  |  |  |  |
| Security and safeguarding | Pupils | Medium | * A comprehensive safety and preparation video will be watched by all teachers/adult facilitators via the online portal/website at the beginning of the programme, outlining and emphasising the importance of following safety guidelines;
* Emergency procedures and evacuation routes will be clearly communicated by the facilitating adult within their initial briefing;
* Numbers limited in line with suitable supervision arrangements;
* Access and egress of visitors controlled and managed by authorised staff only;
* Enhanced DBS checks for all authorised staff, in line with the school’s policy;
* School/Organisation member of staff present at all times;
 | Y | Y |  | Low |
| Lone Working | Staff | High | * Enhanced DBS checks for all authorised staff, in line with the school’s policy;
* In the very rare event that is takes place, a checking procedure will be in place to support single staffed classroom activities.
 | Y | Y |  | Medium |
| Room layout | PupilsStaff | Medium | * Numbers limited in line with suitable supervision arrangements;
* Visual inspection by the facilitating staff during set-up period, but also prior to each build session;
* Good housekeeping maintained to reduce the risks of slips, trips and falls (partial responsibility of school/organisation outlines in Terms of Engagement doc);
* Clear rooming criteria guidelines set out in initial briefing video to schools ahead of time so a suitable room/location is chosen;
* Lighting maintained to suitable levels for the usage of this area;
* Checked and maintained emergency escape routes (responsibility of school/organisation);
* Walkways kept clear.
* Spillages cleared promptly.
 | Y | Y |  | Low |
| Notifiable Diseases (including Covid-19) (if required)  | StaffPupilsAttending adults | Medium | * Minimise contact with individuals that are unwell by ensuring those who do have symptoms do not attend the STEM On Track session;
* Pupils are encouraged to clean hands regularly;
* Good respiratory hygiene in place promoting catch it, bin it, kill it approach;
* Enhanced cleaning of tools and mutually used learning equipment with frequently touched surfaces; before, during and after the session;
* Minimising contact and maintaining social distancing where possible;
* If necessary and in the very rare occasion, PPE will be worn excluding treatment of first aid and intimate care;
* School staff will ensure the school engages with track and trace processes;
* Confirmed cases managed and contained following local HPT advice.
 | Y | Y |  | Low |
| Hazardous substances | Staff Pupils | High | * Eliminate the use of hazardous substances, and substitute for low risk alternative, where possible;
* Consider individual susceptibility of pupils and staff. These details should already be held by the school, and the facilitating member of staff should revise these ahead of time.
* The one liquid provided in the STEM On Track Kit is Brake Fluid. Immediately on delivery and unboxing the bottle of fluid will be removed and placed in a secure location. (Chemistry store cupboard recommended);
* Specific guidance issued to all pupils with consideration for age and potential use during sessions;
* Conduct individual Risk Assessments, for specific activities not covered in this RA;
* Secure storage when not in use:
* Store in minimal quantities;
* Consider Personal Protective Equipment as last resort protection.
 | Y | Y |  | Low |
| Hand tools | PupilsStaff | Medium | * Detailed video demonstration of how to use the tools at every stage;
* Close supervision of pupils throughout the course of the STEM On Track programme;
* Distribution of tools only when pupils are ready to use them;
* Distribution of the minimum number and type of tools needed for the build session;
* Immediate collection of all tools when they are finished with, or at the end of the session;
* Facilitating staff will lock away all tools at the end of the session to prevent unsupervised use.
 | Y | Y |  | Low |
| Use of Sharp Hand Tools | PupilsStaff | High | * Information and video instruction issued by video on the online platform, clear, concise and suitable for the age groups involved in the exercise;
* Only one sharp tool is provided and necessary in the kit. The large snips are rarely used and easily managed by the facilitating staff member;
* Instructed use is in direct accordance with manufacturer’s instructions;
* Kept secure in boxes or locked room when not in controlled use.
 | Y | Y |  | Medium |
| Breach of personal data leading to privacy violations or identity theft. | Pupils, Staff | Medium | * Espire’s digital partners to implement strict data protection policies, including encryption of sensitive information.
* Ensure that only authorised personnel have access to personal data.
* Regularly review and update privacy policies to comply with legal requirements, such as GDPR.
* Provide training to staff on handling personal data responsibly and securely.
 | Y | Y |  | Low |
| Lack of parental/guardian awareness or consent for activities, leading to legal issues or concerns. | Pupils, Organization | High | * Schools/organisations to obtain written consent from parents or guardians for all activities, especially those involving higher risks or off-site events.
* Schools and Espire to provide detailed information about the program, including potential risks, so parents can make informed decisions.
* Schools to maintain open communication channels with parents or guardians to address any concerns or provide updates during the program.
 | Y | Y |  | Low |
| **Physical Build Sessions (General):**(Ref.doc: Health and Safety Executive Guidelines for ‘Motor Vehicle Repair Shop’) |  |  |  |  |  |  |  |
| Slips and trips | Children, Staff and adult helpers attending. | LOW | All attending are familiar with the area. Area always visually checked and attendees advised of any new uneven surfaces, new steps or changes in levels. Gangways to be used are made clear and usable. Trailing cables are checked for, highlighted to attendees and protected if found. Spillages are cleared with absorbent materials or covered. | Yes | Yes | None required | LOW |
| Skin irritation from light oils | Children, Staff and adult helpers attending. | LOW | Minimal use of light cleaning oils may be used such as WD40. Cleaning materials including absorbent fabrics, specialist oil cleaning substances such as Swarfega and water may be used. Safe and sparing use of oils etc is trained and monitored by facilitating staff and attending adults. | Yes | Yes | None required | LOW |
| Minor cuts from use of basic tools eg, spanners/ screwdrivers | Children, Staff and adult helpers attending. | LOW | All facilitating staff will be first aid trained (in line with the school’s policy). Use of all tools is trained by the video tutorials and monitored by facilitating staff.Who also take responsibility (along with other attending adults) for having minor treatment materials eg, plasters and bandages. During the set-up process, facilitating staff will also ensure that they know where the nearest medical room is within the school. | Yes | Yes | None required | LOW |
| Muscle strain from lifting, tool boxes, tyres, karts etc. | Children, Staff and adult helpers attending. | LOW | Lifting of objects is trained by the video tutorials and monitored by facilitating staff and all attending adults. During the set-up process, facilitating staff will also ensure that they know where the nearest medical room is within the school. | Yes | Yes | None required | LOW |
| Bruising from tools, tyres or learning materials tipping from stands and tables | Children, Staff and adult helpers attending. | LOW | Stable placement of tools & learning equipment is trained by the introduction videos at the stage of every session and monitored by facilitating staff and attending adults. No running is allowed within the learning environment. During the set-up process, facilitating staff will also ensure that they know where the nearest medical room is within the school. | Yes | Yes | None required | LOW |
| Discomfort from cold, windy and/or wet weather | Children, Staff and adult helpers attending. | LOW | The activity will not run outside if any significant discomfort likely due to the weather conditions. The activity can be transferred inside or cancelled and agenda changed accordingly if weather changed during the activity.ALL of the STEM On Track programme is guided to be ran inside, with the option of taking some activities outside if the facilitating member of staff deems it appropriate. Whether these activities do take place outside is at the discretion of the facilitating staff. | Yes | Yes | None required | LOW |
| **Physical Build Sessions (Inside):**(Ref. doc: Health and Safety Executive Guidelines for Classroom activities) |  |  |  |  |  |  |  |
| Slips and trips from movement around the room | Children, Staff and adult helpers attending. | LOW | All attending are familiar with the room they are working in. Facilitating staff member will make themselves familiar during the preparation process. Area always visually checked and attendees advised of any new uneven surfaces, new steps or changes in levels. Gangways to be used are made clear and usable. Trailing cables are checked for, highlighted to attendees and protected if found. Spillages are cleared with absorbent materials or covered. | Yes | Yes | None required | LOW |
| Electrical shock from equipment in the room | Children, Staff and adult helpers attending. | LOW | Children will only use electrical equipment that they are familiar with or have been trained on. Electrical products such as the I-Pad will have been PAT tested. Equipment used will predominantly be I-Pads & laptops for presentations. Children will only use electrical gadgets that have been specifically designed to be handheld.Overloading of power-sockets due to access charging of tools will be closely monitored by facilitating staff and kept to within reasonable limits. | Yes | Yes | None required | LOW |
| Bruising, muscle strain or minor cuts from poor condition furniture in the room | Children, Staff and adult helpers attending. | LOW | Tables, chairs, desks to be used are visually checked each time the facilitating staff set-up. The facilitating staff will check for unusual stability, structure and rough or sharp edges. Proper use of furniture is trained and monitored by facilitating staff, attending adults and teachers. The suitability of room allocation will be covered in the rooming criteria discussed with schools in a video ahead of time.  | Yes | Yes | None required | LOW |
| Minor burn from hot surfaces (eg, radiators) | Children, Staff and adult helpers attending. | LOW | Any surfaces potentially hot during the activity are checked and highlighted by both the facilitating staff and attending adults/ Caution around such surfaces (eg, radiators) is trained and monitored by attending adults and facilitating staff.Under normal circumstances, no hot surfaces other than radiators are expected during the STEM On Track programme. | Yes | Yes | None required | LOW |
| Temperature | StaffPupilsVisitors | Medium | * A comfortable temperature will aim to be maintained at all times.
* Natural ventilation in place to provide clear and fresh air or mechanical ventilation if not sufficient. (in line with the school’s policy)
* Blinds in place to protect from glare and heat of sun. (in line with the school’s policy)
* In extremely hot weather fans and increased ventilation are considered. (in line with the school’s policy)
* Timetable changes to the day may be adopted to ensure time exposed to uncomfortable temperatures are limited.
 | Y | Y |  | Low |
| Lighting | StaffPupilsVisitors | Medium | * A comfortable lighting level will aim to be maintained at all times.
* Natural lighting will be utilised where possible with windows clear and blinds drawn accordingly.
* Blinds in place to protect from glare. Specified in rooming criteria.
* The STEM On Track programme will take place in the daytime. Mitigating the risk of low light levels caused in the evening hours.
 | Y | Y |  | Low |
| **STEM On Track – At Circuit Events** (*Test Day and Grand Finals*) |  |  |  |  |  |  |  |
| STEM On Track – At Circuit Events (*Test Day and Grand Finals*) | StaffPupilsVisitors | Medium | * An online briefing meeting will be held at least two-weeks prior to each event. Ran by ESPIRE Education with the purpose of informing all attending staff and students of the format and structure of the day.
* Both a Drivers’ Briefing document and Final Instructions document will be sent out to attending schools/organisations/participating teams at least two-weeks prior to each event.
* There will be a full comprehensive Safety Briefing for all people attending the event, held in the morning of the event.
* Full safety checks of the karts will be carried out by trained officials on the morning of each event.
* Each school/organisation/participating team will conduct their own RA and CIMP (critical incident management plan) in line with their “School trips/visits” policy prior to attend the events.
* The events will be ran under Motorsport UK permit and operated within their guidelines.
* An ambulance and paramedics will be present and available on-site at all times.
* Each event will be covered by Motorsport UK’s insurance.
* All safety equipment and race-ware will be of the correct up-to-date specification and will be available for loan and purchase on the day of each event.
* Event attendance will be controlled at the gate, so only relevant event stakeholders will be present on-site.
* Each school/organisation/participating team will have their own allocated space in the paddock area.
 | Y | Y |  | Medium |
| Mental strain or anxiety due to the intensity of the program or the pressure to perform. | Pupils, Staff | Medium | * Provide mental health awareness training to all school and Espire staff.
* Each school team to ensure a designated staff member is available to support pupils who may feel overwhelmed.
* Encourage regular breaks during intensive sessions to reduce stress.
* Promote a culture of openness where pupils can discuss any anxieties or pressures.
 | Y | Y |  |  Low |
| Accidents or delays while travelling to off-site events (e.g., circuit events). | Pupils, Staff, Drivers | Medium | * Schools to ensure that all vehicles used for transport are regularly maintained and inspected.
* Provide detailed travel plans and emergency contact information to all participants before departure.
* Arrange for a first-aid kit and a trained first-aid responder on every trip.
* Review the route for any known hazards and adjust travel times to avoid peak traffic periods or adverse weather.
 | Y | Y |  | Low |
| Physical strain or injury due to inadequate fitness levels of participants in more physically demanding activities (e.g., kart racing). | Pupils, Staff | Medium | * Schools to conduct a fitness assessment or seek medical clearance for participants in physically demanding activities.
* Offer a warm-up session before physical activities to reduce the risk of injury.
* Provide guidelines on proper hydration and nutrition to maintain energy levels.
 | Y | Y |  | Low |
| Adverse weather conditions affecting outdoor activities, leading to accidents or exposure. | Pupils, Staff | Medium | * Espire to Monitor weather forecasts closely in the days leading up to and during outdoor events.
* Espire to have contingency plans in place for extreme weather conditions, including moving activities indoors or rescheduling.
* Espire & Schools to ensure participants are dressed appropriately for the weather and have access to shelter if needed.
* Espire to provide hydration stations and sun protection during hot weather.
 | Y | Y |  | Medium |

| **REVIEWS: N/A –** RA Document written within the last 12 months. No review required. |
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| **DATE OF REVIEW:**01/08/25 | **REVIEWED BY:** James Foster | **COMMENTS:** Comprehensive and Clear. No further adjustment required until review period.  |

**Risk Assessment Matrix**



|  **Severity****Likelihood** | **Slightly harmful****(e.g. Superficial injury or temporary discomfort or distress)** | **Harmful****(e.g. Sprains, minor fractures, ill health leading to disability)** | **Extremely harmful****(e.g. Major fractures, amputations, fatality, life shortening illness)** |
| --- | --- | --- | --- |
| **Highly unlikely** | **LOW (L)** | **LOW (L)** | **MEDIUM (M)** |
| **Unlikely** | **LOW (L)** | **MEDIUM (M)** | **HIGH (H)** |
| **Likely** | **MEDIUM (M)** | **HIGH (H)** | **VERY HIGH (VH)** |

| **Risk Rating** | **Action Required** |  |
| --- | --- | --- |
|  | **Initial Risk Rating** | **Residual risk rating** |
| **VERY HIGH (VH)** | May only take place if good control measures can be implemented | Must not take place.You will need to identify further controls to reduce the risk rating |
| **HIGH (H)** | May only take place if good control measures can be implemented | Seek further advice |
| **MEDIUM (M)** | If it is not possible to lower risk further, you will need to consider the risk against the benefit. |  |
| **LOW (L)** | No further action required |  |