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| **Catapults** | | | | |
| **Notes:**   * **Where a** [**CARA guideline**](https://education.qld.gov.au/curriculum/school-curriculum/CARA) **exists** and the activity requirements of the guideline cannot be met, this generic template should be used for support in determining modifications or alternative controls to ensure an equivalent level of safety. | | | | |
| **Activity scope** | | | This guideline relates to student participation in games that develop student skills in using balls and/or bats to practise skills, tactics and strategies as an activity to support curriculum delivery.  For activities conducted at a non-Department of Education venue, and/or when engaging external expertise, request written risk assessment advice and attach it to this CARA record.  For activities conducted off-site, schools must comply with the [school excursions and international school study tours](https://ppr.qed.qld.gov.au/pp/school-excursions-and-international-school-study-tours-procedure) procedure. | |
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| **Inherent**[[1]](#footnote-1) **risk level** | | | | **Action required** |
|  | **Low** | Little chance of incident or injury | | * Document the activity within the three levels of planning. |
|  | **Medium** | Some chance of an incident and injury requiring first aid | | * Document the activity within the three levels of planning. * A OneSchool CARA record may also be required in accordance with school-based decisions. |
|  | **High** | Likely chance of a significant incident and injury requiring medical treatment | | * Document the activity within the three levels of planning. * Complete a CARA record in OneSchool. * Obtain approval from the principal or school leader (i.e. DP, HOD, HOSES, HOC) prior to conducting this activity. This approval is automatically requested in OneSchool when the CARA record is completed. * Obtain and document [parent consent](http://ppr.det.qld.gov.au/education/management/Procedure%20Attachments/School%20Excursions/Permission%20form%20template.DOC) (highly recommended). |
|  | **Extreme** | High chance of a serious incident resulting in highly debilitating injury | | * An alternative activity must be considered. If the activity is essential for delivery of the curriculum, control measures must be implemented to reduce the risks to achieve comparable learning outcomes. * Document the activity within the three levels of planning. * Complete a CARA record in OneSchool. * Obtain approval from principal prior to conducting this activity. This approval is automatically requested in OneSchool when the CARA record is completed. * Obtain and document [parent consent](http://ppr.det.qld.gov.au/education/management/Procedure%20Attachments/School%20Excursions/Permission%20form%20template.DOC) (mandatory). |

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| **Activity Requirements** | If any requirement cannot be met, the activity must not occur.  If any other safety recommendation cannot be met, modify the activity (or elements of it) and/or identify and use the [hierarchy of controls](https://education.qld.gov.au/initiatives-and-strategies/health-and-wellbeing/workplaces/safety/hazards) to implement alternative control measures to meet or exceed the minimum safety standard.  Competition rules and procedures with additional or more stringent safety requirements must take precedence. |
| **Planning Considerations** | |
| *Incorporate the following factors when planning risk management strategies for this activity.* | |
| **Students** | Schools must consider age, maturity and skill level of students when planning curriculum activities. Adjustments are required for [students with disability](https://education.qld.gov.au/curriculum/stages-of-schooling/p-12) to support access and participation in the curriculum. Consult with the parents/carers of students with disability, or when appropriate the student, to ensure risks related to their child's participation in the activity are identified and managed.  Schools must consult current student medical information and/or health plans in accordance with the [managing students' health support needs at school procedure](https://ppr.qed.qld.gov.au/pp/managing-students-health-support-needs-at-school-procedure). Record information about any student condition (e.g. physical or medical) that may inhibit safe engagement in the activity and include specific support measures within emergency procedures. |
| **Emergency and First-Aid** | Emergency plans and injury management procedures must be established for foreseeable incidents (e.g. evacuation procedure, provision of [first aid](https://education.qld.gov.au/initiatives-and-strategies/health-and-wellbeing/workplaces/safety/hazards)).  Adult supervisors must have:   * emergency contact details of all participants * a medical alert list and a process for administering student medication; * communication equipment suitable to conditions (e.g. mobile phone) and a process for obtaining external assistance and/or receiving emergency advice.   Safety procedures must be determined for the location (e.g. out-of-bounds areas, location of first aid support and equipment).  Access is required to [first aid equipment (DOCX, 479KB)](https://education.qld.gov.au/initiativesstrategies/Documents/first-aid-kits-facilities.docx) and consumables suitable for foreseeable incidents.  An adult with current emergency qualifications is required to be quickly accessible to the activity area. Emergency qualifications include:   * [HLTAID009—provide cardiopulmonary resuscitation (CPR)](https://training.gov.au/Training/Details/HLTAID009) or equivalent * [HLTAID011—provide first aid](https://training.gov.au/Training/Details/HLTAID011) or [SISSS00118—sports trainer level 1](https://training.gov.au/Training/Details/SISSS00118) or equivalent. |
| **Induction and Instruction** | Induction is required for all adult supervisors on emergency procedures and safety procedures. If the activity is conducted at an off-site facility, induction is to be informed by advice provided in consultation with expertise at the venue.  Instruction is required for students and adult supervisors on correct techniques e.g. calls to begin play, safe batting/fielding techniques. |
| **Consent** | [Parent consent](https://ppr.qed.qld.gov.au/attachment/activity-consent-form.docx) is required for all activities conducted off-site |
|  | |
| **Supervision** | Principals make final supervision decisions for the activity. Sufficient adult supervision must be provided to manage the activity safely (including emergency situations).  For activities with students with a medical condition or disability that may impact on safety during the activity, consultation with parents is required prior to allocating supervision to determine the impact of student's medical condition or disability on safety during the activity.  The number of adult supervisors required to fulfil emergency and supervision roles must consider the nature of the activity, students' ages, abilities and specialised learning, access and/or health needs.  Before the activity, all adult supervisors:   * must be familiar with the contents of the CARA record.   During the activity, all adult supervisors:   * must be readily identifiable * must closely monitor students with health support needs * must comply with control measures from the CARA record and adapt as hazards arise * must suspend the activity if the conditions become unfavourable (e.g. extreme temperatures). |
| **Supervisor Qualifications** | Principals make final decisions in determining supervisor capability (competence, relevance and currency) and are responsible for encouraging and enabling school-based activity supervisors to raise their qualifications to improve safety standards.  All adult supervisors must comply with the [working with children authority—Blue Cards procedure](https://ppr.qed.qld.gov.au/pp/working-with-children-authority-procedure) and be able to identify, and respond to, risks or hazards that may emerge during the activity.  A registered teacher **must**be appointed to maintain overall responsibility for the activity.  For **medium risk** activities:   * At least one adult supervisor is required to be a registered teacher or * An adult supervisor, working under the direct supervision of a registered teacher, with competence (knowledge and skills) in teaching minor games. |
| **Facilities and Equipment** | Location must be suitable for the activity being undertaken, including sufficient space, adequate lighting and ventilation, to ensure safe participation and that safety rules and procedures can be followed.  Participants must wear [personal protective equipment (PDF, 234KB)](https://education.qld.gov.au/initiativesstrategies/Documents/fact-sheet-personal-protective-equipment.pdf) appropriate to the activity (e.g. enclosed footwear).  Equipment must be sized to match the ability and strength of students.  Consider using a whistle for command signalling.  All equipment must be in used in accordance with the manufacturer's instructions.  Bats must have non-slip grips and/or safety knobs on handles. |

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| **Who will be leading the activity?** | | |
| **Staff/Other Participants** | | |
| **Family Name** | **Given Name** | **Type** |
| Roberts | Zach | Teacher |
| Kleinschmidt | Rod | Teacher |
| Hodgson | Kevin | Teacher |
| Cinelli | Alex | Teacher |
| Nash | Liz | Teacher |

Risk Management Matrix – Catapults

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| **Likelihood** | **Consequence** | | | | | | |
|  | People | Injuries not requiring treatment  *E.g.* *Pinched finger shutting the tennis court fence gate* | Injury requiring 1st aid  *E.g. Splinter from wooden poles* | Serious injury requiring ambulance assistance  *E.g. Broken nose from backfiring tennis ball* | Injury requiring hospitalisation  *E.g. Heavy collision with another - Head injury* | Death or life-threatening injuries  *E.g. Extenuating medical condition leading to death* |
|  | Equipment | Replacement – no disruption to activity  *E.g. tennis ball shot over fence* | Small disruption to activity  *E.g. broken rope* | Minor disruption causing modification to activity  *E.g. incomplete sets of equipment* | Minor disruption to halt activity  *E.g. bungee snaps in students eye* | Major disruption stopping the whole activity |
|  | Environment | Change of daily temperature  *E.g. The heat of an afternoon activity* | Short term influence  *E.g. wallabies trapped in tennis court area* | Minor long-term damage  *E.g. Muddy area around edge of tennis court* | Extensive Environmental damage  *E.g. flooding of the surrounding area* | Widespread damage  *E.g. Cyclonic damage bringing down trees and damaging shelter* |
|  |  | **Insignificant** | **Minor** | **Moderate** | **Major** | **Catastrophic** |
|  | **Risk Matrix** | **1** | **2** | **3** | **4** | **5** |
| Almost Certain | **5** | medium | High | High | Extreme | Extreme |
| Likely | **4** | Low | medium | High | High | Extreme |
| Possible | **3** | Low | medium | medium | High | Extreme |
| Unlikely | **2** | Low | medium | medium | High | High |
| Rare | **1** | Low | Low | medium | medium | High |

**Kinchant Outdoor Education Centre**

**Risk Analysis and Management System**

**Activity/Situation:** Catapults **Last Updated:** 01/02/2022

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| **RISKS**  **Accident, injury**  **other forms loss** | No Involvement  Attitude  Instructor lack of knowledge  Appropriate Clothing e.g. hat  Lack skill, cognitive and ability to improvise  Collisions  Serious injuries  Large Groups  Injury to self and others  Medical conditions  Pre-existing injuries/medical conditions  Lack initiative  Asthma  Cut foot  Dangerous actions  Fingers getting jammed between poles & knots  Splinters in poles  Bruising by ball, water balloon, pole | Equipment loss or damage  Breaking of equipment  Incorrect use  Tripping over equipment e.g. poles  Equipment failure  Broken catapult target  Irrelevant equipment  Incorrectly positioned and lashed poles  Broken poles  Splinters, loose pieces of wood on poles.  Knots tied too loose  Knots tied incorrect  VB cord broken or frayed  Rope burn  Bungee loose on catapult frame  Bungee whip  Snapped Bungee | Close range collision with flying tennis ball  Close range collision with flying water balloon  Catapult frame not braced properly  Collapsed catapult  Weather conditions  Sunburn  Insects  Damage to ground due to equipment use  Pot Holes/Cow holes  Dehydration  Heat Exhaustion  Animals (Wallaby, plover)  Limited visibility  Climate conditions making area wet |

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| **People** | | | | | | | |
| **CAUSAL FACTORS**  Hazards, perils, dangers | Consequences | Likelihood | Rating | **RISK MANAGEMENT STRATEGIES**  Strategies to reduce perceived risk rating to acceptable & manageable levels to maintain a safe, secure working environment | Consequences | Likelihood | Rating |
| Movement  Collision with others 4,3 Medium  No assigned responsibilities 1,3 Medium  Tripping over poles 3,3 Medium  Bruises from equipment 4,3 High  Unfocused 4,3 High  General camp community. 3,2 Medium  Manual handling 3,2 Medium  Sharp objects 3,2, Medium | 3 | 3 | Medium | * Clearly define areas of movement * Clearly defined activity groupings * Closely monitor all movement * Clearly defined behavioural expectations * Ensure a supportive learning environment * Visual inspection of activity area before students arrive * Demonstrate proper use of equipment handling when moving * Correct lifting, lowering, pushing, pulling, carrying processes * Remove jewellery before activity * Implement safe play protocols during briefing and during activity | 3 | 2 | Medium |
| Inappropriate behaviour  Misbehaviour. 3,3 Medium  Special needs students. 4,3 High  Students' poor cognitive ability. 4,3 High  Inattentive 3,3 Medium  Disobedience 4,3 High  Unfocused 4,3 High  Appropriateness  Children strength and mobility 3,3 Medium  Have enough strength and flexibility  to grasp and handle equipment 3,3 Medium  Group remain at the designated area 3,3 Medium  Group size 3,3 Medium  Lack of confidence of the group 3,3 Medium  Group to effectively communicate  and co-operate throughout the activities 3,3 Medium | 4  3 | 3  3 | High  Medium | * Set clear behaviour expectations. * Implement behaviour management strategies. * Ensure a supportive learning environment. * Establish a positive rapport. * Establish effective communication pathways between staff and participants. * Share common expectations with regard to participant performance, equipment use etc. * Reinforce the rule that participants who demonstrate or threaten to behave in a manner which has the potential to physically, emotionally or psychologically injure themselves or another may not participate in the session. * Negotiate clear role description for all staff and students. * Provision to modify or abort the activity as situation dictates. * Reinforce the focus of working groups to support and develop a trust within the group * Appropriate program sequencing e.g. to avoid participant and instructor fatigue. | 3 | 2 | Medium |
| Medical problems.  Pre-existing medical conditions 3,3 Medium  Fatigue & Exhaustion 3,3 Medium  Physical health & fitness 3,3 Medium  Loose clothing/jewellery/hair. 3,2 Medium  Emotional distress(anxiety, peer pressure) 3,3 Medium | 3 | 3 | Medium | * Provide physical aids appropriate to the needs of the participants. * Vigilant supervision. * Session to be appropriate/modified to medical needs. * Secure long hair appropriately. * Participants are to use their own cups or water bottles. * Detailed medical history for all participants to be held by Admin. * Leader to be familiar with and understand medical synopsis. * Ensure the individual's medication is carried/available. * Emergency equipment immediately available * Gloves and resuscitation mask to be available. * Ensure realistic personal goal setting, include real choice in terms of entry and exit options. | 2 | 2 | Medium |
| Staff Competencies  Insufficient supervisors. 3,2 Medium  Poor group control. 3,3 High  Poor instruction skills. 4,3 High  Lack of equipment knowledge. 4,3 High  Leader inexperience 4,3 High  Incorrect technique (construction) 4,3 High  Poor Knot knowledge/ skills 2,4 Medium | 4 | 3 | High | * Assess suitability of activity in consultation with Admin. Staff, and the students if required. * Assessing participants' ability with regard to maturity, cognitive ability, physical strength and emotional readiness. * Clear briefing and appropriate sequencing. * Consider working groups appropriate to size groupings. * Consider readiness to learn, level of skill acquisition, age, maturity, ability and experience in sequencing and briefing the activity. * Proven and demonstrated leader competence. * Groups are given clean instructions or a “situation story” * Teachers running the catapulting activity, briefed by a Kinchant OEC staff member o remind them of the safety procedures * Teachers running the catapulting activity, briefed by Kinchant OEC staff member | 3 | 2 | Medium |

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| Equipment | | | | | | | |
| **CAUSAL FACTORS**  Hazards, perils, dangers | Consequences | Likelihood | Rating | **RISK MANAGEMENT STRATEGIES**  Strategies to reduce perceived risk rating to acceptable & manageable levels to maintain a safe, secure working environment | Consequences | Likelihood | Rating |
| Equipment failure  Broken poles 3,3 Medium  Broken rope 2,3 Medium  Broken Bungy 4,3 High  Backfiring bungy 4,3 High  Broken pouch 3,3 Medium  Constructed catapult collapse 2,4 Medium  Targets fall from fence 2,3 Medium | 3 | 3 | Medium | * Assessment of participant ability to use equipment. * Briefing including an awareness of the hazards. * Briefing on correct use and awareness of consequences of incorrect use of equipment * Regular inspection and maintenance of all equipment. * Retire worn and unusable gear * Replace bungee cord as required * Staff ability to recognise worn or faulty equipment. * Use gear according Kinchant OEC SOPs * Vigilant supervision during the course of the activity * Visual inspection of ropes, poles and bungy cord during session. * Visual inspection of the area to be used prior to session. * Students given guidance as to acceptable use and handling of specific equipment * Monitor correct use of handled equipment during the activity * Have spare ropes on standby in case of ropes snap or lost * Ensure explicit briefing is conducted on use of PP including safety glasses * Have spare pouches on standby in case of worn or broken pouches * Have spare lengths of bungy cord on standby in case of snapped bungy * Allow students time to fix or reconstruct their catapults mid battle if required * Ensure targets are sufficiently secured to tennis court fence before commencement of activity | 2 | 2 | Medium |
| Equipment management  Splinters, loose pieces of wood 2,3 Medium  Poorly maintained equipment 4,3 High  Inadequate equipment for number of  students 3,3 Medium  Inappropriate attire. 3,2 Medium  Incorrect use of equipment 4,2 Medium  Accidents using equipment 4,3 High | 3 | 3 | Medium | * Ensure participants have adequate footwear, appropriate clothing, removed or taped jewellery and secured long hair. * Leader competence in use of equipment. * Briefing to avoid damage to environment & equipment. * reinforce understanding of team roles and responsibilities * Inspection of wooden poles before use * Regular inspection and maintenance of all equipment. * Ensure group activity size is 21 students or less * Explicit instruction on how to handle and move equipment safely * Explicit instruction on how to pack and store at the end of the session * Check equipment safety before and during activity. | 2 | 2 | Medium |
| Equipment security  Equipment loss. 2,1 Low  Security of equipment storage 4,3 High  (unsupervised usage) | 3 | 2 | Medium | * Leader to account for all equipment at the end of the session. * Equipment to be laid out prior to each session. * Correctly storing and maintaining gear. * Check prior to activity that tennis court lighting is working if activity is used during a night session | 2 | 1 | Low |

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| Environment | | | | | | | |
| **CAUSAL FACTORS**  Hazards, perils, dangers | Consequences | Likelihood | Rating | **RISK MANAGEMENT STRATEGIES**  Strategies to reduce perceived risk rating to acceptable & manageable levels to maintain a safe, secure working environment | Consequences | Likelihood | Rating |
| Environnemental danger  Exposure to Environnent  (Hyperthermia, Dehydration, Sunburn) 3,2 Medium  Insects, ants and wasps 3,2 Medium  Damage to the equipment 3,2 Medium | 3 | 2 | Medium | * Adequate briefing and sequencing. * Animals/insects removed. * Appropriate environmental briefing and sequencing. * Create an awareness of any environmental hazard (ants, and wasp nests). * Insect repellent within easy reach * Ensure equipment is returned and stored appropriately away from Environmental elements (sun, rain, direct UV rays) * Equipment not left out in the open for extended time. * Use equipment only under a group leader’s supervision. * Vigilant supervision. * Visual check of area prior to commencement of activity | 2 | 1 | Low |
| Weather conditions  Weather extremes 5,1 High  (Cyclone, lightning, high winds)  Moderate weather conditions 3,3 Medium  (gusty winds & rain)  Equipment damage (sun, rain & dirt) 3,2 Medium  Heat.  Limited visibility (rain, sun). 3,2 Medium Strong winds. 3,2 Medium  Sun and adverse weather conditions. 3,3 Medium | 4 | 4 | High | * Select another activity if the weather is too bad. * Leader competence - knowledge of local weather patterns and ongoing monitoring, first aid. * Exit the area if the weather becomes unsuitable. * Activities should not be used in electrical storms. * Encourage participants to drink water, ensure participants have water bottles and opportunities to drink. * Suitable medication, first aid readily accessible. * Implement sun safe strategies. * Modify activity/task to suit weather conditions or abort. | 2 | 2 | Medium |
| Environmental Footprint  Human impact. 4,2 High  Repetitive injuries (neck). 3,3 Medium Slippery concrete (tennis court) 3,3 Medium  Disturbance of flora and fauna 3.3 Medium | 3 | 3 | Medium | * Use environmental management strategies to reduce human impact e.g. use paths to minimise compaction. * Use minimal impact strategies. * Participants' medical history assessed. * Participant awareness of the potential hazard. * Participants instructed and supervised to walk carefully along the paths. * Modify course access to alleviate/address environmental factors. * Monitor participant behaviour and attitudes prior to and during the activity | 2 | 2 | Medium |
| Biological material  bodily fluids (sweat, saliva, blood) 3,2 Medium | 3 | 2 | Medium | * Follow appropriate cleaning and hygiene management practices * Manage bodily substances before, during and after activity. | 2 | 2 | Medium |

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| **EMERGENCY** | General  (a) First Aid kits.  (b) Instructors skilled at group management and medical situations.  (c) Qualified First Aid person on hand.  (d) Two-way radio network for immediate assistance.  Leader effecting emergency procedure  In responding to a participant in need of assistance the Leader must:  (a) Identify the student in difficulty.  (b) Communicate with the participant if possible.  (c) Brief other staff and students if required.  (d) Assist the participant in an effective and appropriate way. |
| **RELEVANT INDUSTRY STANDARDS APPLICABLE** | * Australian Adventure Activity Standards Low Challenge * Queensland Adventure Activity Standard Low Challenge (QORF) |
| **POLICIES AND GUIDELINES RECOMMENDED** | * EQ Workplace Health, Safety and Wellbeing - First Aid * EQ Health/ safety / management - Health & Safety recording and notification * EQ CARAS - Curriculum Activity Risk Management * KOEC specific Team Challenge SOPs * EQ Health and Wellbeing Policies - Sun Safety * Individual School Health & Safety Policies * Activity specific “Standard operational procedures” * Maximum group size of 16 (recommended 15) with one registered teacher in control of the group * Leaders have undergone training and observed activity carried out by a KOEC instructor * Appropriate spotting technique must be demonstrated prior to assisting in the session |
| **SKILLS REQUIRED BY STAFF** | * HLTAID009—provide cardiopulmonary resuscitation (CPR or equivalent; HLTAID011—provide first aid or SISSS00118—sports trainer level 1 or equivalent. * Group control and management in an outdoor setting. * Proficient in usage of equipment. * Instructor recently (within 2 years) inducted through KOEC in-house training/orientation day. * Instructor has reviewed aims and safety issues prior to undertaking the activity (KOEC staff or prepared booklet material) * Good interpersonal communication skills. * Effective processing skills. * Competence (demonstrated ability to undertake the activity) in recognised identify safety potential during course session. * Competence (demonstrated ability to undertake the activity) to facilitate the focus of support and developing trust within participate. * Competence (demonstrated ability to undertake the activity) as an instructor. |
| **FINAL DECISION ON IMPLEMENTING ACTIVITY** | Choose one |
| Accept √ Reject  After consideration of the probability of the risk occurring, how often the participants are exposed to the hazards associated with the risks and the possible consequences, all of the above risks are unacceptable and hence control/management strategies will be implemented. |

**Approval Details**

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| --- | --- |
| Submitted by: | |
| Name: Zach Roberts | Position: Principal |
| Email: zrobe47@eq.edu.au | |
| Signed: | Date: 01/02/2022 |

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| Approval *(only required for high or extreme risk activities)* | | |
|  | Approved as submitted | |
|  | Approved with the following conditions: | |
|  | Not approved for the following reasons: | |
| Visiting staff approved to facilitate activity: | | |
| Signed (visiting school principal): | | Date: |

1. *The inherent risk level is determined before any control measures are put in place. Refer to the* [CARA planner](https://education.qld.gov.au/curriculum/school-curriculum/CARA). [↑](#footnote-ref-1)