

## Functional Job Requirements For the Position of Science Operations Officer Department of Education and Training

This document was developed for the following purposes: assisting in the development of rehabilitation programs for injured or ill employees and to provide detailed information about job demands to medical practitioners and allied health professionals undertaking medical reviews of Departmental employees.

This report identifies those activities which are essential to successful performance in this role. In determining whether a work activity is a “critical activity” the following questions are considered;

1. Does the worker spend greater than 33% of designated work time performing this activity? and / or,
2. Is specialized training/experience required to complete this activity? Has this been completed by only a small proportion of staff in this geographical region? and/or,
3. Is this activity performed in an environment where no other workers are readily available to assist with its completion? and/or,
4. Does this activity occur without prior notice and require immediate attention leaving no time to seek assistance to complete it? and/or,
5. Is this activity core to the development of stakeholder relationships, which are essential to achieving successful outcomes? and/or
6. Would an inability to perform this activity result in an increased health and safety risk to co-workers, students and/or members of the public?

The development process included; site observation of work environments, staff interviews, staff feedback on draft documents and consideration of benchmark publications for the analysis and description of work activities and job demands specific to particular positions (the Revised Handbook for Analysing Jobs, the Occupational Information Network and the Australian Job Guide, 2006).

This report indicates the average time spent across a working week on each work activity and also on each physical demand of work. In order to make this information meaningful to the various users of this report, in some instances the time spent is expressed as a single word, as a percentage of total time or as an actual amount of time (i.e. hours and minutes). The timeframes used are based on the benchmark descriptions (from the publications above) for expressing frequency of performance of work tasks.

Descriptor	Percentage of Time	Amount of Time based on 35 hours per week
Not present	0%	0 mins
Rare	1%-7%	21 mins – 2 hour 27 mins
Occasional	8%-33%	2 hour 48 mins – 11 hours 33 mins
Frequent	34%-66%	11 hours 54 mins – 23 hours 6 mins
Constant	67%-100%	23 hours 27 mins – 35 hours

### **Description of the Science Operations Officer:**

It is the role of a Science Operations Officer to provide assistance to teachers by setting up equipment, preparing classrooms for lessons, providing assistance to teachers and students during classes, performing maintenance and general cleaning tasks, and monitoring/ordering of stock, equipment and supplies. Science Operations Officers are generally employed in the Science department and are required to have formal qualifications and/or training in a Science related field.

## Functional Job Requirements For the Position of Science Operations Officer

### **Assessment Details:**

Assessment of the Science Operations Officer position was conducted at Yeronga State High School (Villa Rd, Yeronga) which had one Science Operations Officer at the time of assessment who was employed in the Science Department. Primary contact was Ms Christina Bucur, who provided most information at time of assessment. Depending on the school, Science Operations Officers may work in different departments, however information obtained at the time of the assessment relates specifically to the tasks completed in the role of a Science Operations Officer.

### **Hours of Work:**

The ordinary hours of work for an Science Operations Officer is 36¼ rostered hours per week with the ordinary spread of hours of work, exclusive of meal times being between 7.30am and 4:00pm Monday to Friday. Hours of work can vary between each school and the number of contracted hours. Science Operations Officers do not have set uniform requirements however they are required to wear clothing and shoes suitable to performing practical experiments and physical tasks. Science Operations Officers are required to utilise PPE during some tasks including vision/hearing protection, aprons, gloves etc and they are required to ensure all students utilise PPE and safety equipment at required times.

### **Meal Breaks:**

Science Operations Officers are entitled to a meal break of 30 minutes unpaid if in excess of 5 hours is worked on any day, to be taken between 11.30am and 2pm or such other times as may be arranged by the Principal. It was further reported that organisational demands and scheduled playground supervision may inhibit taking of such breaks.

### **Rest Pauses:**

Science Operations Officers are entitled to a rest pause of 10 minutes duration to be taken mid-morning which will be considered as rostered duty time. It was reported that organisational demands may inhibit taking of such breaks.

### **Supervision:**

Science Operations Officers may be required to undertake bus and/ playground supervision duties once per week. At time of assessment it was reported that this was a new requirement, and Operations Officers perform a 30 minute supervision session, one day per week as arranged with the principal.

## Functional Job Requirements For the Position of Science Operations Officer

### **Activity Frequencies:**

The Activity Frequencies below have been calculated based on a week of 5 days comprising 7¼ hours per day, as per page one of this report.

### **Critical Job Demand:**

Job activities have been listed as critical only where they meet criteria for critical job demands, as outlined on page one of this report.

	<b>Job Activity</b>	<b>Average Time</b>	<b>Critical Job Demand</b>
1	<u>Activity set-up / Material preparation</u> Science Operations Officers are required to perform preparation tasks for teachers prior to lessons. This usually occurs by a teacher sending a written request for what they require and a timeframe for the Science Operations Officers to perform the tasks prior to the lesson. This may involve preparing equipment and materials and moving them to the classroom, preparing chemical solutions, setting up experiments / activities, or moving chairs / desks and learning equipment between classrooms.	Frequent: Up to 20 hours per week  (Generally up to four requests per day, taking 30 min - 2 hours to complete)	Yes
2	<u>Assisting Classes</u> Science Operations Officers are required to assist teachers in conducting some of their classes or practical demonstrations. Generally the teacher will request the Science Operations Officer's presence in classes that may be large in size, or when students are completing an in-depth project or experiment. The Science Operations Officer may assist the teacher by demonstrating how to perform a task, provide one-on-one assistance to students, answer questions and help the teacher to keep their students focused. The quantity of classes that the Science Operations Officer assists with can vary depending on the size of the school and the hours that the Science Operations Officer is contracted to work.	Occasional Up to 10 hours per week	Yes
3	<u>Stock Control</u> Science Operations Officers are required to monitor the quantities of equipment, materials and supplies in their respective department and to arrange purchase of materials and chemicals as required. The Science Operations Officer conducts a stock take once per year of equipment, materials and chemicals and are required to enter this data into computer software. Staff may also be required to unpack deliveries of equipment and materials into appropriate storage facilities requiring repetitive lifting / carrying of items. It was also reported that Science Operations Officers may be required to drive to a shop to purchase urgent supplies.	Occasional: Up to 4 hours per week	Yes
4	<u>Administration</u> Science Operations Officers are required to perform administrative tasks to assist teachers with lessons and for data entry. Administration tasks are predominantly computer based and may involve researching scientific information and experiments, entering data, ordering supplies via the internet, photocopying work sheets and lesson plans.	Occasional: Up to 5 hours per week	Yes

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	<b>Job Activity</b>	<b>Average Time</b>	<b>Critical Job Demand</b>
5	<p><u>Basic Cleaning / Tidying</u> Operations Officers are required to complete basic cleaning tasks in their department locations, including classrooms, laboratories and staffrooms. This may involve emptying bins, collecting unused materials, putting away equipment, washing out glassware i.e. test tubes / beakers and disposing of chemicals. Please note: cleaners are employed by the school to complete regular cleaning tasks including mopping of floors.</p>	<p>Occasional: Up to 3.5 hours per week</p>	Yes
6	<p><u>Staff Meetings</u> Operations Officers are required to participate in both general and department meetings as per school requirements. At the school where the assessment was conducted, the Operations Officer reported that they participated in approximately two - three meetings per semester. Length of meetings will generally be between 30 and 60 minutes, before or after normal school hours, however may be longer if a whole school meeting is required. It was also reported that the Operations Officer attends an in-service day once per semester with all Operations Officers and Scientific Assistants in the local area for Professional Development.</p>	<p>Rare: Up to 2 hours per week</p>	Yes

## Functional Job Requirements For the Position of Science Operations Officer

Frequency of Physical Job Demands (Average % of Shift)											
Demands	Not Present	Rare (0-7%)	Occasional (8-33%)	Frequent (34-66%)	Constant (67-100%)	Demands	Not Present	Rare (0-7%)	Occasional (8-33%)	Frequent (34-66%)	Constant (67-100%)
Sitting			√			Reaching				√	
Standing - Static			√			Handling					√
Standing - Dynamic				√		Pushing			√		
Walking - Flat Terrain				√		Pulling			√		
Walking - Slippery/ Gravel Terrain			√			Lifting			√		
Climbing - Step Stools/Ladders		√				Carrying				√	
Climbing - Stairs		√				Balancing - Above Ground			√		
Stooping			√			Fine Motor					√
Kneeling		√				Control Operation			√		
Crouching - One Off			√			Arm- Hand Steadiness			√		
Crawling		√				Driving		√			
Auditory Function					√	Visual Function					√

Tools / Equipment Handled
Scientific equipment and materials: microscopes, Bunsen burners, chemical bottles, tongs, magnets, voltmeters.
Students' chairs and desks- up to approximately 20kg
Pens/ pencils/ chalk/ whiteboard markers, books and activity equipment
Computers, PDAs and data projectors
Phone and email - for planning / liaison with different schools and staff.
Learning Aides– overhead projectors, screens, computers

Loads Lifted & Carried					
	Not Present	Rare (0-7%)	Occasional (8-33%)	Frequent (34-66%)	Constant (67-100%)
<b>0-5 kg</b>				Floor to Waist to Shoulder: E.g. Glassware, chemicals	
<b>6-10kg</b>			Floor to waist to shoulder E.g. Microscopes, voltmeters		
<b>11-15kg</b>					
<b>16-20kg</b>		Floor to waist E.g. moving tables			

## Functional Job Requirements For the Position of Science Operations Officer

### Risk Based Physical Environmental Considerations:

- There may be clutter in the work/storage area, increasing the risk of trip hazards, awkward bending and lifting, and poor storage practices
- Items, furniture and fixtures may have limited adjustability features requiring the adoption of awkward postures
- There may be limited space for movement during performance of some activities
- There may be constant low-level ambient noise (from students and potentially traffic)
- There may be limited classroom lighting and ventilation in some facilities
- Some work may be performed outdoors or in an area exposed to the elements (e.g. experiments on school ovals or on excursions)
- Terrain during community outings is variable e.g. parks, rivers for study of ecosystems
- Work may be performed in temperatures above 24 degrees (occasionally in summer)
- Work areas may be slippery or wet
- There is exposure to chemicals

Psychosocial Risks to be Considered	Social / Interpersonal Demands	
Time pressure/high workload- while deadlines exist for many tasks, the level of demand is dependent upon school environment and staffing level. The Science Operations Officers workload can be high due to multiple demands and requests from teachers, and a large number of unplanned interruptions occurring throughout the day.	Performing for or Working Directly with the Public – students	Coordinating or Leading Others - students
Responsible for others' health and safety: provide appropriate instruction and supervision of students when using equipment / materials (chemicals, scalpel, bunsen burner) and ensure appropriate PPE is worn and safety procedures are followed along with regular first aid treatment for major or minor accidents/injuries	Communicating with Persons Outside the Organisation - community members	Coaching and Developing Others - students
Environmental Stress– constant low level ambient noise from students, PA announcements, school bells etc requiring considerable projection of voice to be heard. Some temperature variation during winter and summer, constant environmental monitoring of student location during outdoor experiments.	Establishing and Maintaining Interpersonal Relationships - with students, staff and parents	Coordinating the Work of Others - students
Insufficient work breaks- shortened breaks may be taken on a voluntary basis due to high workload and time constraints. Breaks may be limited by meal and playground supervision duties, particularly if there is insufficient planning e.g. unplanned wet weather duties.	Resolving Conflicts - between students and Negotiating with Others - students/parents/ staff	Interpreting the Meaning of Information for Others - students
Investigations - participate in reporting, investigation and resolution processes, including mandatory reporting of suspected child abuse or neglect and participation as a witness or party to performance, discipline, grievance, WorkCover or other processes.	Communicating with Supervisors, Peers, or Subordinates	Dealing With Unpleasant or Angry People - students
Policies - comply with departmental policies, procedures, guidelines and the code of conduct, including undertaking risk management processes to ensure the health and safety of students and others under their supervision or direction.	Guiding, Directing, and Motivating - students	Dealing With Physically Aggressive People - students and parents
	Training and Teaching - students	Assisting and Caring for Others - students (may include first aid)

## Functional Job Requirements For the Position of Science Operations Officer

### Considerations for Assessment of Physical Job Fitness:

- Assessment of sustained standing capacity of 30 minutes including sufficient flexibility to allow adoption of awkward postures when working with students
- Ability to sustain constant dynamic standing throughout the day with minimal sitting breaks
- Capacity for grip patterns required for repetitive handling of scientific equipment.
- Assessment of fine motor dexterity or actual keyboard operation for typing activities
- Ability to lift and carry heavy and/or awkward loads with no assistance (up to 20kg)
- Symmetry, range and discomfort with movements of the spinal and peripheral joints, including hips, knees, ankles, shoulders and wrists
- Able to ascend and descend 2 x flights of stairs
- Sufficient visual and auditory function to enable interaction and response to students and interaction with teachers

### Other Considerations

- History of neck/shoulder discomfort associated with static and sustained repetitive neck flexion postures
- History of upper limb, lower limb or spinal pain with repetitious or static tasks
- History of lower back pain with sustained sitting or standing
- Knowledge of individual allergies and ability to work with a wide range chemicals
- Knowledge of ergonomic principles for clerical workstations and knowledge of / ability to learn safe crouching/stooping posture (with flexion occurring at the hips rather than in the lumbar spine)
- Knowledge of correct manual handling techniques i.e. ability to bend at hips, bend knees and squat with a neutral spine
- Knowledge of vocal health and techniques to enable safe projection of voice