

This resource has been developed for the purposes of assisting in the identification and development of rehabilitation programs for injured or ill employees, and to provide detailed information about **common** job demands. When supporting an injured employee in their return to work this document is used in conjunction with Workplace Specific Details to ensure information is customised.

Description of the role of the High School Science Teacher:

Teacher means a person employed permanently, temporarily or casually in a teaching position under the provisions of the Teaching Service Act 1980.

Teachers require a capacity to integrate technology in teaching and learning programs. They are required to have highly developed communication and interpersonal skills and the capacity to work collaboratively with students, employees and parents. Teachers should have the ability to translate the understanding of the Quality Teaching Framework in outstanding classroom practice and knowledge of and commitment to the policies and approaches applicable to the individual school community.

Science teachers are responsible for all aspects of the planning, preparation and delivery of effective learning and teaching programs across a range of science subjects including general science, biology, earth and environmental science, chemistry and physics. Science teachers spend approximately half of their lessons teaching theory and the other half doing practical experiments and demonstrations.

This document indicates the average time spent across a working day on common work activities/physical work demands that have been identified as essential to the successful performance of the role. The frequency of performance of work tasks is described by either the Descriptor, Percentage of Time, or Amount of Time based on the average working day of 7 hours as follows:

Descriptor	Percentage of Time	Amount of Time based on 7 hours per day
Not present	0%	0
Rare	1% - 7%	From 4 mins to 30 mins
Occasional	8% - 33%	35 mins to 2 ¼ hours
Frequent	34% - 66%	2 ½ hours to 4 ½ hours
Constant	67% - 100%	4 ¾ hours to 7 hours

This table is derived from the US Department of Labor Physical Demand Characteristics of Work, 1996

Hours of Work and Scheduled Breaks

Hours of Work: Employees work during the normal daily hours of operation of the school during which classes are conducted; this is commonly Monday to Friday. Generally teaching employees may be required to be present half an hour before school starts and half an hour after the dismissal in the afternoon. Where special circumstances arise which, in the interests of the school necessitate attendance beyond these hours, the attendance of the employees may be required.

Meal Breaks: Employees are entitled to a lunch break of not less than 30 minutes.

Non- Teaching Time: High school teachers weekly timetable includes both face to face teaching periods and non teaching periods. During the non teaching periods, time is spent on session planning, completion of administrative paperwork, correction of students’ work, reports, class preparation (e.g. photocopying, resource preparation) review of resources, purchasing of supplies, checking and responding to messages etc. It should be noted that teachers may also undertake these and other related tasks outside of the school’s operating hours.

Frequency of Physical Job demands (Average % of Full Time Work Day)

Demands	Not Present	Rare (1% - 7%)	Occasional (8% - 33%)	Frequent (34% - 66%)	Constant (67% - 100%)	Demands	Not Present	Rare (1% - 7%)	Occasional (8% - 33%)	Frequent (34% - 66%)	Constant (67% - 100%)
Sitting		X				Reaching				X	
Standing - Static					X	Handling			X		
Standing - Dynamic					X	Pushing		X			
Walking - Flat Terrain				X		Pulling		X			
Walking – Slippery/ Gravel Terrain		X				Lifting			X		
Climbing – Step Stools/ Ladders		X				Carrying		X			
Climbing – Stairs			X			Fine Motor			X		
Stooping				X		Tactility			X		
Kneeling	X					Driving		X			
Crouching – One Off		X				Visual Function					X
Crawling	X					Speech					X
Balancing – Above Ground	X					Auditory					X

Tools/ Equipment Handled

Students' chairs and desks – up to approximately 3kg and 8 kg respectively, classroom furniture and soft furnishings e.g. cushions/ rugs

Scientific equipment and materials: microscopes, Bunsen burners, chemical bottles, tongs, magnets, voltmeters.

Pens/pencils/chalk/smart screens and books

Learning Aids – charts, models, posters, overhead projectors and screens, electronic whiteboards

Use of trolleys to transfer items from prep room

Loads Lifted & Carried (Average % of Full Time Work Day)

Weight range	Not present	Rare (1-7%)	Occasional (8-33%)	Frequent (34 -66%)	Constant (67 – 100%)
0-5 kg			Floor to above shoulder level		
6-10kg		Floor to waist			
11-15kg	X				
15-20kg	X				
21-25kg+	X				

Note: - Loads are a guide of maximum required in a full time work day.

Common Job Activities (used in conjunction with Workplace Specific Details)		Average Time	Critical Job Demand
1	<p>Room/activity set-up Teachers are required to set up their classroom prior to each lesson. This is particularly necessary when teachers are conducting a practical demonstration or if students are participating in practical work. Depending on the subject being taught, this may require moving desks, chairs, projectors, computers and various scientific equipment and materials. Students usually assist with this process.</p>	Varies	No, students tend to complete task
2	<p>Teaching of students Involving standing or seated presentation of information to students, monitoring verbal and non-verbal responses of students to information, providing answers to questions, supervision of group and individual learning activities and encouraging participation by students.</p> <p>Depending on the class and subject being taught, the lesson may be taught in a classroom environment encompassing theoretical material, or it could be taught in a practical format in a laboratory, or outside in a playground</p>	Up to the equivalent of 28 x 40 minute periods per week, plus up to 3 periods for sport	Yes
3	<p>Parent liaison Teachers may contact the parents of their students via telephone or face to face as required to discuss specific issues (e.g. student performance). General high school teachers participate in teacher parent interview nights throughout the year and some teachers may also be involved in subject information nights providing additional information as needed to both students and parents.</p>	As required during non-teaching time and after school hours	Yes
4	<p>Student supervision Generally high school teachers are required to participate in playground supervision sessions each week. This may include supervising students' morning recess and lunch breaks. Supervision can include the playground and bus areas (depending on the school) and involves active supervision of a pre-determined area and completing visual and auditory monitoring of students' activities and school premises, providing assistance to students as required. In addition all teachers supervise one session of sport per week of up to 2 hours unless they negotiate to teach additional classes in lieu of sport.</p>	Refer to Workplace Specific Details	Yes
5	<p>School excursions and sporting visits Excursion based teaching of students; involving supervision of small or large groups of students outside the school premises, conducting site tours of destinations, monitoring student completion of excursion-related learning activities, constant surveillance of surroundings to ensure student safety.</p>	Varies according to school	No
6	<p>Specified non-teaching time Planning lessons, completion of administrative paperwork, correction of students' work, reports, class preparation (e.g. photocopying, resource preparation) review of resources, purchasing of supplies, checking and responding to messages etc. It should be noted that teachers may also undertake these and other related tasks outside of the school's operating hours.</p>	Refer to Workplace Specific Details	Yes

Common Job Activities (used in conjunction with Workplace Specific Details)		Average Time	Critical Job Demand
In support of the above activities performed during rostered duty time, the activities below are performed by most teachers.			
7	Staff meetings Staff meetings/ liaison with teaching employees: involving face to face or (depending upon distance) teleconferenced meetings at which day to day operational issues, short term and long term strategic planning for the school occur. High School teachers are required to participate in both general and department meetings as per school requirements.	Varies according to school	Yes
8	Committee meetings High school teachers may also be required to, or choose to, participate in certain school based committees (for example student council, P&C, sound and lighting).	As required	No
9	Extra curricula activities Teachers also participate in extra-curricular activities most of which are of a voluntary nature. These include: <ul style="list-style-type: none"> • Overnight camps; • Intra-school sport; and/or • After school student elective activities 		No

Job Profile – Functional Summary For the Position of a High School Science Teacher

Environmental Factors

The following environmental factors exist in the workplace.

- Moderate- level ambient noise (from students, sport activities e.g. basketballs bouncing) requiring considerable voice projection to be heard.
- Some work may be performed outdoors or exposed to the elements.
- Worker/ team relationships – the work environment may require the employee to adjust to and manage different working styles, and demonstrate an ability to work cooperatively.
- Shortened work breaks may be taken on a voluntary basis.
- While deadlines exist for many tasks, the level of demand is dependent upon the school environment and staffing level. Teachers may also be required to address multiple demands and a large number of un planned interruptions may occur throughout the working day.
- Due to use of chemicals, Bunsen burners and other laboratory equipment, science teachers must demonstrate safe practices and vigilance when supervising students
- The employee is required to wear Common Protective or Safety Equipment such as Safety Shoes, Glasses, Gloves, Hearing Protection
- The employee may handle substances, including contaminants which require the implementation of safe work methods for hazardous substances
- The employee will use and store chemicals in a safe manner, control the risk from chemicals, and implement long term strategy for the safe use and storage of chemicals

Core Workplace Expectations (Organisational, Interpersonal, and Psychosocial).

The following major workplace expectations have been identified with reference to DEC Policies and Guidelines, the NSW Institute of Teachers website and O*NET (the Occupational Information Network, a comprehensive database of worker attributes and job characteristics).

- All employees have a responsibility to comply with legislation, departmental policy, procedures and the DEC Code of Conduct, perform their duties effectively, provide impartial and accurate advice and act in a manner that promotes a productive and harmonious working environment.
- Negotiating with others - In dealing with other people, employees should be able to accommodate and tolerate different opinions and perspectives, and sort out their disagreements by rational discussion.
- Departmental employees have a duty to take reasonable care for the safety and welfare of the students in their charge.
- Establishing and maintaining effective communication – includes appropriate communication with supervisors, peers, subordinates, students, parents and community members
- Employees who work with students have a special responsibility in presenting themselves as appropriate role models for those students.
- Training and Teaching Others – Includes identifying the educational needs of others, developing formal educational or training programs or classes, and teaching or instructing ,and assessing and reporting for effective learning
- Teachers create and maintain safe and challenging learning environments through the use of classroom management skills. Effective strategies for the management of student behaviour and the maintenance of a safe working and learning environment include WHS procedures, student welfare procedures, curriculum and environmental management.
- 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.
- Being able to provide minor first aid and assistance to students if they sustain injuries through sport activities.

Job Profile – Functional Summary For the Position of a High School Science Teacher

The use of this terminology, referred to in Frequency of Physical Job demands table on page 2, helps to establish a common language for key stakeholders when describing job demands in terms of frequency of activity performance, type of posture or movement and the level of strength/ lifting required.

Definition of Physical Job Demands	
LIFTING	Raising or lowering an object from one level to another (includes upward pulling and/or exerting upward force to hold an object in static position).
CARRYING	Transporting an object, usually holding in the hands, arms or on the shoulder.
PUSHING	Exerting force upon an object so that the object moves away from the force (including stooping, striking, kicking, treading and exerting force to hold an object in static position).
PULLING	Exerting force upon an object so that the object moves toward the force (including jerking and exerting force to hold an object in static position).
SITTING	Remaining in a seated position.
STANDING	Remaining on one’s feet in an upright position without moving greater than three steps.
WALKING	Moving about on foot greater than 3 steps.
CLIMBING	Ascending or descending ladders, stairs, scaffolding, ramps, poles and the like, using feet and legs, or hands and arms.
BALANCING	Maintaining body equilibrium to prevent falling when walking, standing, crouching, or running on either elevated and unguarded, narrow, slippery or erratically moving surfaces.
STOOPING	Bending the body forward and downward by bending spine at waist, requiring full use of lower extremities and back muscles.
KNEELING	Bending legs at knees to come to rest on knees.
CROUCHING	Bending body forward and downward by bending legs and spine.
CRAWLING	Moving about on the hands and knees.
REACHING	Extending arms(s) in any direction.
HANDLING	Seizing or grasping, holding, turning or otherwise working with the hands. Fingers are only involved to the extent that they are extensions of the hand.
FINE MOTOR	Picking, pinching, or otherwise working with the fingers, other than with the whole hand or arm as in handling.
TACTILITY	Perceiving attributes of objects, such as: size, shape, temperature, or texture by touching with skin; particularly that of finger tips.

This table is derived from the Queensland Department of Education and Training Job Dictionary