

Functional job requirements for the manual arts teacher aide

Department of Education

This document was developed for the following purposes: assisting in the development of rehabilitation programs for injured or ill employees, and providing 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:

- Does the worker spend greater than 33% of designated work time performing this activity?
- Is specialised training/experience required to complete this activity? Has this been completed by only a small proportion of staff in this geographical region?
- Is this activity performed in an environment where no other workers are readily available to assist with its completion?
- Does this activity occur without prior notice and require immediate attention leaving no time to seek assistance to complete it?
- Is this activity core to the development of stakeholder relationships, which are essential to achieving successful outcomes?
- 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 10 hours per week
Not present	0%	0 minutes
Rare	1% – 7%	6 minutes – 42 minutes
Occasional	8% – 33%	48 minutes – 3 hours 18 minutes
Frequent	34% – 66%	3 hours 24 minutes – 6 hours 36 minutes
Constant	67% - 100%	6 hours 42 minutes – 10 hours



Description of manual arts teacher aide

Manual Arts Teacher Aides provide assistance and support to the Manual Arts teachers by setting up equipment / tools / materials prior to classes; constructing project examples; completing maintenance of stock and equipment; general cleaning task and assisting students with their work during classes. Manual Arts Teacher Aides may work in a variety of departments depending on the school at which they work. Manual Arts Teacher Aides are generally required to have some experiencing in the building, construction or metalwork industry prior to gaining employment with DoE Queensland and should hold a construction blue card, and a working with children blue card.

Assessment details: assessment of the Manual Arts Teacher Aide position was conducted at Yeronga State High School (Villa Rd, Yeronga), which had one Manual Arts Teacher Aide at time of assessment. Primary contact was Ms Leonie Bailey, Subject Coordinator of Manual Arts, however Mr Shane Edwards who is employed as a Teacher Aide provided information throughout the assessment. Depending on the school, teacher aides may work in a variety of departments, i.e. Home Economics as well as Manual Arts.

Hours of work and scheduled breaks

Hours of work: The ordinary hours of work for a Manual Arts Teacher Aide vary depending on the school and its size. At time of assessment, the Manual Arts Teacher Aide was employed for 10 rostered hours per week. The ordinary spread of hours of work exclusive of meal times was between 8:30am and 2:45pm, two days per week at the discretion of the teacher aide and requirements of the manual arts department. At other schools, Teacher Aides can work between 5 - 25 hours per week depending on the size of the school and the contracted hours for each individual staff member. Manual Arts Teacher Aides do not have set uniform requirements however are required to wear clothing suitable to teaching in a workshop environment and are required to wear enclosed footwear at all times. Manual Arts Teacher Aides are required to utilise appropriate PPE including vision and hearing protection.

Meal breaks: Manual Arts Teacher Aides are entitled to a meal break of 30 minutes unpaid if in excess of 5 hours is worked on any day. It was further reported that organisational demands may inhibit taking of such breaks.

Rest pauses: Manual Arts Teacher Aides 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.

Bus and playground supervision: manual arts teacher aides may be required to undertake supervision duties with students.

The activity frequencies below have been calculated based on a week of 2 days comprising 5 hours per day, as per page one of this report. Job activities have been listed as critical only where they meet criteria for critical job demands, as outlined on page one of this report.



	Job activity	Average time	Critical job demand
1	Room/activity setup – teacher aides are required to set up the workshop/classroom prior to a demonstration of a lesson by a teacher or in preparation for students themselves to partake in a practical lesson. The Manual Arts Teacher and/or students may assist with this process. This may include setting out items required for a woodwork or metalwork class including planks of timber, hand tools, sheets of MDF, machinery such as saws, drills, welders and moving machinery and equipment between workshops.	Up to 2 hrs per week (e.g. 1 hr per day)	Yes
2	Assisting classes manual arts teacher aides are required to assist the manual arts teachers in conducting some of their classes or practical demonstrations. Generally the teacher will request the Teacher Aide's presence in classes that may be large in size, or when students are completing a difficult project. The Teacher Aide 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 Teacher Aide assists with can vary depending on the size of the school and the hours that the Teacher Aide is contracted to work.	Up to 70 min per week (generally 1-2 classes per week)	Yes
3	Stock Control Teacher Aides are required to monitor the quantities of equipment, materials and supplies in the Manual Arts Department and advise the Subject Coordinator to arrange purchase as required. The Teacher Aide conducts a stock take once every three months of items such as wood, metal, hand tools, electrical equipment etc. Staff are also required to unpack deliveries of equipment and materials into appropriate storage facilities requiring repetitive lifting / carrying of items. Additionally, the Teacher Aide is responsible for monitoring safety checks for all electrical and mechanical equipment to ensure they adhere to annual / bi-annual safety checks.	Up to 42 mins per week	Yes
4	Project Construction/ Material Preparation – Manual Arts Teacher Aides are required to complete preparation tasks for projects as requested by Manual Arts Teachers. This may involve constructing or building the end result of a class project e.g. a chair, table etc.; cutting materials to a designated length for students to use, and ensuring enough material is prepared for the class. Staff may spend extended periods of time building the project over a few days or weeks prior to the class commencing the project.	Up to 4 hrs per week	Yes
5	Maintenance – Teacher Aides are responsible for ensuring maintenance of equipment, tools, and machinery occurs at regular intervals. If an item breaks down during a class, or if it is flagged during a stock take as requiring preventative maintenance, the Teacher Aide will perform the required maintenance or engage the appropriate external party i.e. electrician. Maintenance may be conducted in conjunction with the Manual Arts Teacher if more than one person is required.	Up to 42 mins per week	No
6	Administration – Teacher Aides are required to provide administrative assistance to Manual Arts Teachers as requested. This may include photo-copying information sheets for classes, recording stock take and maintenance check forms, phoning trades people and assisting with quotes for repairs.	Up to 42 mins per week	Yes
7	Basic cleaning/tidying – staff are required to complete basic cleaning tasks in all manual arts department locations. This may involve emptying bins, collecting unused materials, putting away hand tools and equipment, replenishing supplies of wood/metal etc. from supply cupboards, and moving large mechanical equipment between workshops. Please note: cleaners are employed by the school to complete regular cleaning tasks including mopping of floors.	Up to 1 hr per week	Yes



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

Hand tools and machinery/equipment e.g. hammers, drills, saw, welders, nail guns, routers
Construction equipment and supplies e.g. planks of wood, MDF, steel rods
Computers, PDAs and data projectors – for use during information technology based learning activities with students and administrative tasks.
Pens/pencils/chalk/whiteboard markers, books and activity equipment.
Students' chairs and desks – up to approximately 20kg
Learning aids – charts, models, posters, overhead projectors and screens

Loads lifted and carried

	Not present	Rare (0-7%)	Occasional (8-33%)	Frequent (34-66%)	Constant (67-100%)
0-5kg				Floor to waist to shoulder e.g. hand tools	
6-10kg				Floor to waist to shoulder e.g. sheets of MDF, timber	
11-15kg				Floor to above shoulder e.g. bricks	
16-20kg		Floor to waist e.g. cement			



Risk based physical environmental considerations

- There may be clutter in the work area, increasing the risk of trip hazards, awkward bending and lifting, and poor storage practices.
- Items, furniture and fixtures may be poorly positioned or designed by staff members, requiring the adoption of awkward postures.
- There may be limited/confined space for movement during performance of some activities.
- There may be constant low-level ambient noise (from students, traffic, school activities e.g. music practice, etc.)
- There may be limited lighting and ventilation in some facilities.
- Some work may be performed outdoors or in an area exposed to the elements (e.g. activities on school ovals or projects completed in lunch areas, etc).
- Fine motor work may be performed in temperatures of 16 degrees or lower and above 24 degrees, due to local environmental conditions and capacity of school facilities to control ambient air temperatures.
- Work may be performed in temperatures above 24 degrees (occasionally in summer).
- Work areas may be slippery or wet.
- There is exposure to whole body or segmental vibration.
- There is exposure to chemicals (paints, sealants, etc.)
- There is noise at a level requiring hearing protection to be worn (when using machinery such as grinders, welders, saws, etc.)

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 teacher aides workload can be high due to multiple demands and a large number of unplanned interruptions occurring throughout the day.	<ul style="list-style-type: none"> • Communicating with persons outside the organisation – community members • Establishing and maintaining interpersonal relationships with students, staff. • Communicating with supervisors, peers or subordinates • Assisting and caring for others – students, staff (may include first aid) • Negotiating with others – staff • Coordinating or leading others – students when assisting in classes • Interpreting the meaning of information for others – students • Dealing with unpleasant or angry people – students • Dealing with physically aggressive people – students and parents • Working alone
Lack of control/autonomy – may exist as the teachers generally direct the tasks of the teacher aide.	
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 sessions.	
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. Although break times are stipulated, teachers do not always receive an uninterrupted break	
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.	
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.	



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 manipulate and control various heavy machinery and equipment (saws, jigsaws).
- Ability to sustain constant dynamic standing throughout the day with minimal sitting breaks.
- Capacity for grip patterns required for repetitive handling of various equipment.
- Assessment of fine motor dexterity or actual keyboard operation for typing activities (for non-contact duties).
- 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.

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.
- Knowledge of individual allergies and ability to work with a wide range of chemicals (e.g. glues).
- 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 straight back.
- Knowledge of vocal health and techniques to enable safe projection of voice.



Photographs of selected work activities and work environments

