

5 Work Placement

The Board of Studies has formally endorsed the following principles for HSC VET courses.

5.1 Principles Underpinning Work Placement in the Higher School Certificate

Preamble

Industry curriculum frameworks have been developed to provide students with the opportunity to gain credit towards the NSW Higher School Certificate and credit towards national vocational qualifications under the Australian Qualifications Framework.

Industry curriculum frameworks are derived from national Training Packages. Courses within the frameworks specify the range of industry-developed units of competency from the relevant Training Packages that have been identified as suitable for the purposes of the Higher School Certificate. VET courses in industry curriculum frameworks are aligned to national vocational qualifications.

Although not all Training Packages mandate work placement it is a mandatory HSC requirement of each course within the frameworks. Indicative hours have been assigned to the work placement requirement for each course.

Learning in the workplace will enable students to:

- progress towards the achievement of industry competencies
- develop appropriate attitudes towards work
- learn a range of behaviours appropriate to the industry
- practise skills acquired in the classroom or workshop
- develop additional skills and knowledge, including the key competencies.

Under some circumstances, students' part-time work in an appropriate workplace may be used to fulfil work placement requirements. For further details, teachers and principals should consult the *Assessment, Certification and Examination (ACE) Manual* or relevant Board of Studies Official Notices.

The following principles should be read in conjunction with any system's documentation relating to work placement, for example the Industry Curriculum Frameworks Information Package (ICFIP).

Principle 1

Work placement must have a clearly articulated and documented purpose. The structure of the work-based learning experience needs to be planned and developmental.

A range of purposes are possible including, for example:

- learning about a particular industry, workplace culture and career opportunities
- practising skills learnt off the job
- developing new skills
- improving work-related skills
- developing skills including key competencies such as teamwork, using technology, problem-solving

- achieving entry-level competencies
- achieving workplace performance of particular competency standards
- assessing in a realistic environment or allowing for holistic assessment
- providing opportunities to build skills in a developmental manner from the simple to the complex
- providing opportunities for the learner to reflect on the workplace learning experience in the context of individual current knowledge and understanding
- encouraging students to undertake further education and training.

Principle 2

The scheduling of the work placement should reflect student readiness and should complement off-the-job learning programs.

The scheduling of the work placement should take account of:

- whether or not students are workplace-ready in terms of the competencies they will need to develop and demonstrate in the workplace
- how the timing of the work placement links to overall course planning
- the degree of flexibility available at both the workplace and the school
- how the alignment of both on-the-job and off-the-job competencies can be best achieved.

An individual work placement program focusing on a developmental approach should be negotiated with the workplace supervisor/employer. This approach should focus on students moving from simple to more complex tasks. Dependence on supervision should reduce over time as students move towards greater independence in the workplace. The ultimate goal of a work placement should be competence and autonomy in the range of tasks required for the job being undertaken.

Principle 3

Work placement should be relevant to the VET courses being undertaken.

The ‘real’ tasks being undertaken in the workplace should complement the tasks and learning being undertaken by the students in their VET courses at school. Work placement may also provide students with the opportunity of having learning outcomes/units of competency assessed in the workplace by accredited trainers and assessors.

Principle 4

Work placement can provide opportunities for work-based assessment.

Not all industry curriculum frameworks specify that it is mandatory for competencies to be assessed in the workplace. Assessment events should relate to overall course planning and the purpose of the work placement. In a competency-based course, assessment of competencies is criterion-referenced. This means that a participant’s performance is judged against a prescribed standard – not against the performance of other participants.

The purpose of assessment is to judge competence on the basis of performance against the performance criteria set out under each element of competency. A participant is judged either **competent** or **not yet competent**.

Competency-based assessment is based on the requirements of the workplace. Competence incorporates all aspects of work performance, including problem-solving and the capacity to apply skills and knowledge in both familiar and new situations. Assessment of competence involves the assessment of skills and knowledge combined.

Assessors should adopt an **integrated** or **holistic** approach to assessment. This means that a number of elements of competency or even several units of competency are assessed together. This method of assessment is encouraged in line with the concept of competence as the integration of a wide range of skills, knowledge and attitudes.

5.2 Work Placement for Information Technology Courses

HSC courses in Information Technology are designed to provide participants with the skills, knowledge and work-related attitudes required to perform the role of an entry-level employee in a range of information and communication technology enterprises.

Teachers should use their professional judgement in the selection of relevant work placements in related industry areas and the mix of information technology-specific and more general workplace experience undertaken by each student.

The scheduling of work placement should reflect student readiness and complement off-the-job learning programs. It is recommended that the learning experiences for the HSC in the following units of competency be addressed before students undertake work placement:

BSBCMN106A	Follow workplace safety procedures
ICAU30004A	Apply occupational health and safety procedures
ICAU1128A	Operate a personal computer.

5.2.1 Models of work placement for Information Technology courses

The following information (pp 159–166) is reproduced from the *Assessment Guidelines* of the *Information and Communications Technology Training Package (ICA05)*¹.

Work placements provide a valid means of both learning and demonstrating competence (subject to ‘quality aspects’) and are actively encouraged² by this Training Package as part of any institutional model of training delivery. Appropriately structured simulated environments may also provide a valid means of learning and assessment where a ‘real’ workplace environment is not available³.

Work Placements

One means of overcoming some of the competency assessment difficulties inherent in institutional training delivery and assessment models is through appropriately structured work placement programs. Some of the following information has been extracted from the project *ICT Work Placement Models and Tools for VET in Schools*. While this project particularly focused on *VET in Schools*, the general principles have much wider applicability and could be employed in any competency-based institutional delivery and assessment model.

¹ DEST, 2005, *Information and Communications Technology Training Package (ICA05)* Volume 1 Section 1.5, pp 1-158 – 1-171.

² Work placement is a **mandatory** HSC requirement within the Information Technology Curriculum Framework. Refer to Sections 8 and 10 in Part A of the Syllabus (www.boardofstudies.nsw.edu.au)

³ It is permissible for up to 50% of the mandatory HSC work placement requirement to be undertaken in a simulated work placement. Refer to Section 10 in Part A of the Syllabus (www.boardofstudies.nsw.edu.au)

The significance of this information is in the range and variety of work placement options which may be useful in introducing 'live' workplace activities into what might otherwise be a relatively static learning and assessment environment.

Introduction

Structured work placements, in the senior secondary school context require students to spend time in a workplace setting in a manner that is recognised and accredited as a part of their formal studies. Work placement usually involves students spending an extended period of time in a workplace, gaining experience, skills and undergoing an assessment process related to the attainment of a qualification in a specific occupational field. Workplace learning is different to classroom learning in a number of fundamental respects in that the former is usually focused on behaviour and the latter is usually focused on cognitive processes.

An Australian study by Smith (2000) identified the following major ways students learnt in the workplace:

- being trained in formal situations;
- asking questions;
- having a go – not being 'pushed aside';
- learning from mistakes;
- being shown how to do tasks while an explanation was given;
- carrying out simple tasks;
- watching and copying other workers, and
- copying a role model.

An essential feature of school–industry programs is that they involve students spending some time learning in a workplace.

VET in Schools

It is important to distinguish between structured workplace learning, contracted training and work experience. In a structured work placement, the time and activities spent in the workplace have been structured, through consultation between teachers, students and the host employer, to enable the student to develop and demonstrate some of the competencies that make up the training program otherwise being delivered off the job. Assessment of these competencies can be recorded to count towards completion of a qualification.

Issues in ICT Work Placements

During the development of the IT&T/ICT Work Placement project a number of practical issues were raised by work placement coordinators and teachers, these are outlined below and should be considered and resolved in any work placement program.

Privacy issues surround student access to employer client records

Privacy is a serious legal issue for all organisations. Students can be asked to sign a privacy statement, which requires them to maintain the privacy of a company and the integrity of data. If privacy is still an issue for a business then the student could work on a computer that is not part of a network and does not contain the relevant records.

Many firms use custom built software that is not suitable for students

Most customised software shares similarities with off the shelf applications. Students should be familiar with a range of software applications, as this will help them to readily transfer their skills to new products. Students should request an induction on customised applications. Identifying differences between applications will enhance their understanding of software applications generally.

Many enterprises, particularly small businesses often do not have spare computer resources to allocate to students

The student may have access to a laptop or the model of work placement may be changed to a model where the student can work off site.

Students that express a preference for networking and software applications are the most difficult to place

Many employers are nervous about letting students near their networks, as a crashed network can cost businesses a lot of time and money. It is important to work with the employer to identify what they will let the student do. The employer must have final say on what the student will be expected to do.

The skill level represented by the Certificate II is too low to attract employers to participate in a work placement program

ICT companies will find the Certificate II in Information Technology not relevant to their workplace but businesses that work in other industry sectors will find the skills gained through the Certificate II in Information Technology useful.

ICT employers identify systems security as an impediment to work placement

Security, like privacy, is a major concern for most businesses. Students should be made aware of the serious legal issues surrounding privacy and security before they commence any work placement. It is important to work with the employer to identify what they will let the student do. The employer must have final say on what the student will be expected to do.

Fluctuations in the fortunes of the ICT industry affect employer willingness to participate in work placement programs

Many industry sectors use ICT to do their work. Fluctuations in the 'specialist' ICT industry will not necessarily affect other industry sectors.

ICA05 position

The ICT Training Package strongly recommends that all students undertaking learning against an ICA05 qualification in an institutionalised setting, particularly schools, be provided with the opportunity to participate in work placement⁴ which is characterised by:

- clearly articulated and documented purpose
- relevance to the VET qualification being undertaken
- development of competence in designated industry skills
- regular and frequent use of ICT hardware and software
- development of appropriate attitudes towards work
- learning in a range of behaviours appropriate to the ICT industry
- facility for on-the-job practice of skills acquired in a classroom
- development of additional skills and knowledge including the key competencies
- recognition of student readiness
- activities that complement off-the-job learning programs
- opportunities for work-based assessment
- flexibility
- has the support of industry partners.

Beyond the above, a number of other provisions are necessary for a successful workplace program involving ICT competencies. The credibility of work placements and any resultant recognition of competency requires a degree of 'seriousness' if the outcomes are to be valued by individuals and industry clients of the VET system.

⁴ Work placement is a **mandatory** HSC requirement within the Information Technology Curriculum Framework. Refer to Sections 8 and 10 in Part A of the Syllabus (www.boardofstudies.nsw.edu.au)

It is suggested that stakeholders involved in the planning and management of work placements involving ICA05 qualifications or units carefully consider and implement the following general principles:

1. That the RTO⁵ assume responsibility for finding placements and validating the arrangements.
2. That the work place has the appropriate resources, tools and staff to conduct the placement with compliance to any legislative requirements.
3. That there be regular validation by the RTO that the student and assessor, where relevant, are operating according to RTO AQTF standards.
4. That a student on work placement must be covered by injury insurance.
5. That there is a formal contract setting out each party's responsibilities and obligations.
6. That the work place must have on site a qualified workplace trainer and assessor in 'direct line' control of the student (to avoid training and assessment by 'proxy').
7. That if the placement is for assessment only then there must be clearly documented assessment tasks specifically related to the performance criteria being assessed and evidence retained to support achievement of competence (for both best practice recording purposes and audit/appeal).
8. That if the placement also includes training then any 'academic pass' cannot be bestowed prior to the placement as clearly all of the learning components have not been undertaken nor can they be assessed in advance if they have not been learned.
9. That the training be directly related to achievement of ICT competence while recognising the likely acquisition of other skills and knowledge.
10. That where assessment occurs it be clearly related to a unit of competency (or possibly single performance criteria [PC]) relevant to the work placement.
11. That where more than one performance criteria (possibly over more than one unit) is being assessed there must be a clearly linked and documented relationship between the assessment and the PC.
12. That the qualifications level be appropriate in context i.e. if it is advanced programming OO there must be an advanced OO programming task observed and assessed.
13. That the actual variables of the PC be documented for audit purposes and for verification of appropriateness of the range in the work placement.

It is noted that in some state/territory school systems, students' part-time work in an appropriate workplace may be used to fulfill work placement requirements, while virtual/simulated ICT work placements are also seen as a legitimate source of work placement in some instances⁶.

Twelve Models of ICT Work Placement for VET in Schools

In the course of completing the project *ICT Work Placement Models and Tools for VET in Schools*, the IT&Titab developed a suite of 12 models of ICT work placement. Some of these models correspond to traditional notions of work placement, while others do not. However, each model is a worthwhile and meaningful solution to the current challenge of work placement in the Australian ICT industry. Additionally, they potentially have value and application beyond their initial target audience of VET in School students.

The models vary from structured work placements to school based simulation and have been grouped into three 'clusters' based on several differentiating characteristics. These include:

- location of the work placement experience (i.e. in an employer's premises or elsewhere)
- degree to which project work forms an integral part of the placement
- whether placement tasks involve businesses/individuals as direct clients in a limited way.

The 12 models have been grouped into the following clusters:

1. Direct Placement
2. Non-Direct Placement (Project based)

⁵ Local Community Partnerships (LCPs) organise structured workplace learning for school students in NSW. Further information about LCPs can be found at the Australian Government Department of Education, Science and Training website (www.dest.gov.au/sectors).

⁶ In some circumstances students' part-time work may be used to fulfil work placement requirements. Refer to the Board of Studies' *Assessment, Certification and Examination Manual* and Section 10 in Part A of the Syllabus (www.boardofstudies.nsw.edu.au)

3. Non-Direct Placement (Special)

Outlined below is a description of the clusters and the models that fall within each:

CLUSTER 1: DIRECT PLACEMENT

The Direct Placement cluster is characterised by work placement arrangements which require students to undertake their placements in employer premises alongside the existing workforce. The following models have been grouped into this cluster:

- Regional Coordination
 - Industry Coordination
 - Community Development
 - Business Incubator
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Regional Coordination Model

This model involves work placements for a number of schools being coordinated across a region by a broker/coordinator using case loaders to manage placements by industry sector.

This model usually involves the case loader working with businesses within a defined region to secure placements. The coordinator acts as a single point of contact for schools and employers, and liaising with employers, schools and students to administer the placement. The employer supervises the direct placement of the student. Students attend direct work placement during business hours and dress in business attire as required.

Industry Coordination Model

This model involves work placements for a number of schools being coordinated across a region by a broker/coordinator who is located with industry and focused solely on managing placements in that industry.

This model usually involves the case loader working with businesses within a defined region to secure placements. The coordinator works from a supporting business, and is seen to be part of industry. They report to an industry based management committee and act as a single point of contact for schools and employers. The coordinator specialises on one sector and is able to more effectively manage networks and relationships within that industry. The employer supervises the direct placement of the student. Students attend direct work placement during business hours and dress in business attire as required.

Community Development Model

The community development model sees education, public sector and business partners give priority to work placement as part of a broader regional development strategy involving technology based initiatives.

The community development model involves students working on real tasks as junior consultants with partner businesses. Schools work through a cluster or program coordinator to place students with businesses who are partners in a local ICT centre/regional technology hub. The employer acts as partner business with the local ICT centre/regional technology hub and integrates students with consultant teams undertaking work in the community. Students attend jobs during business hours and dress in business attire as required.

Business Incubator Model

This model involves work placements for a number of schools being coordinated in conjunction with a business incubator/R&D precinct and their client networks.

This model usually involves the cluster coordinator working with businesses in a specified precinct to facilitate project based placements. The students work in teams at the business incubator/R&D precinct and complete specific tasks and projects for the participating businesses. The employer briefs students on project details, accepts presentation of finished project and provides feedback to

students. Students attend work placement during business hours and dress in business attire as required.

CLUSTER 2: NON-DIRECT PLACEMENT (PROJECT BASED)

This Non-Direct Placement cluster (Project Based) is characterised by students undertaking work placement tasks which have a relatively defined project base and which are generally undertaken in locations other than an employer's premises. The following models have been grouped into this cluster:

- Community Enterprise
 - Regional RTO Partnership
 - Commercial Provider partnership
 - Virtual Work Placement
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Community Enterprise Model

The community enterprise model involves schools working with a local community organisation and its networks to run an enterprise as means of providing a realistic work placement experience for IT students.

This work placement model involves students working on real world tasks for a range of organisations under supervision within a community organisation that operates as a workplace. Students work in teams to deliver project outcomes.

The community organisation liaises with networks to identify relevant events, projects and tasks and then creates the workplace environment. The employer briefs students on project details, accepts presentation of finished project and provides feedback to students. Students attend work placement during business hours, dress in business attire as required and manage project work in teams.

Regional RTO Partnership Model

The model involves schools across a region working through their cluster/broker to collectively provide work placement experiences for IT students at TAFE campuses by doing project work relevant to a wide range of community organisations.

This work placement model involves students working on real world tasks for a range of community organisations. Students are placed in teams at a number of different TAFE campuses under supervision from TAFE staff. Community representatives act as employers and provide project briefs, contact and feedback to students during the placement. Students attend work placement during business hours, dress in business attire as required and manage project work in teams.

Commercial Provider Partnership Model

The commercial provider partnership model involves schools working with a commercial training or recruitment provider and its business partners to provide a realistic work placement experience for IT students.

This work placement model involves students working on real or simulated tasks under supervision in a commercial environment. Students work with provider staff to deliver task outcomes during the placement period. Supervisors from outside the school are ideally involved so that students undertake the work in an environment that functions as closely as possible to a real workplace.

Virtual Work Placement Model

The virtual work placement model involves students and employers interacting through a web portal to provide a realistic work placement experience for IT students.

This work placement model involves students working on real world tasks for a range of organisations. Students identify project tasks from the website and make contact with employers via email, bulletin boards, chat rooms and file sharing etc. Students work in teams to deliver project outcomes, and present their outcomes to employers where feasible.

A program manager/supervisor has key roles including promoting and marketing to involve business, facilitating the posting of tasks and projects and supervising students as required. Employers provide project briefs, feedback on work in progress and accept presentation of finished project. Students analyse the projects, scope out a proposal to solve the problem and manage project work in teams.

CLUSTER 3: NON-DIRECT PLACEMENT – SPECIAL

This Non-Direct Placement cluster (Special) covers models which are not generally project based or located in an employer's premises. A number of these models have a 'client' and advisory/service orientation to the placement activities. The following models have been grouped into this cluster:

- Computer Reuse
 - State Coordination
 - Practice Firm
 - Help Desk
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Computer Reuse Model

The model involves schools working with an organisation or program to provide a work placement program based on supporting the redeployment of redundant computer hardware.

This model of work placement involves students rebuilding computer hardware and reformatting them with software relevant to the needs of a third party. Students work in teams to task criteria supplied by third-party clients. They scope hardware requirements, research relevant software and present their recommendations to the client. If their proposal is accepted, the students prepare and install the PCs and provide basic instruction on computer use.

State Coordination Model

This model involves placements, simulations and other related initiatives being coordinated across a region by a government agency that manages activity for a specific industry sector(s).

This model involves agency staff working with businesses and other stakeholders to satisfy work placement demand for a specific industry sector(s). The agency acts as a catalyst, brokering and driving initiatives involving schools and other community stakeholders including other government agencies and industry. The agency role includes working with stakeholders to identify placements and develop placement activities, developing program guidelines and managing the submission process to allocate resources and providing administrative support. Employers supervise students/activities and provide feedback to students on work in progress as required. Students attend work placement or participate in activities to suit the placement.

Practice Firms Model

The Australian Network of Practice Firms (ANPF) is a network of training businesses that provide for students to manage and operate simulated businesses as part of their learning programs. Each of these simulated businesses (or 'practice firms' or 'training companies') follows real-world business practices and trades within a virtual economy.

Practice firms are formed from a partnership between a school, a real business that agrees to mentor the students, and the ANPF Central Office. Students work as business people, operating their own business and making decisions that lead the business into profitable (or not-so-profitable) outcomes. ANPF provides a safe and secure learning environment for students to work on a national basis with the 150 Australian firms and the 4,000 or more international firms.

Help desk model

This model provides a realistic work placement experience by using students to provide technical support to schools and other community organisations by running a help desk in a manner consistent with commercial practice.

Students use commercial help desk software to track jobs and provide support to callers as required. While a program coordinator provides technical assistance as required and is in contact with students on a daily basis, students deal with real clients and manage their own work and that of the team. The software used also enables the program coordinator to supervise the progress of jobs remotely. Students attend the help desk as required by work schedule and manage tasks and work in teams.

5.2.2 Work placement in a simulated information technology environment

Work placement is a mandatory HSC requirement for the Information Technology Industry Curriculum Framework and appropriate hours have been assigned to each course. Work placement is to be undertaken in an information and communications technology environment. It is permissible for up to 50% to be undertaken in a simulated work placement.⁷

Course	Minimum work placement requirements	Maximum amount that may be undertaken in a simulated environment
Information Technology (120 indicative hours)	35 hours in a workplace	17 hours
Information Technology (240 indicative hours)	70 hours in a workplace	35 hours
Information Technology Specialisation Study (60 indicative hours)	14 <i>additional</i> hours in a workplace	7 hours
Information Technology Specialisation Study (120 indicative hours)	35 <i>additional</i> hours in a workplace	17 hours
Information Technology Specialisation Study (180 indicative hours)	49 <i>additional</i> hours in a workplace	24 hours
Information Technology Specialisation Study (240 indicative hours)	70 <i>additional</i> hours in a workplace	35 hours

It is preferable that students undertake work placement in a real workplace environment but if it is difficult to source and place students then work placement may be undertaken in a simulated information and communications technology environment. If teachers take this option they should consider how they will ensure the equivalent valuable industry exposure for students and how they will differentiate between this type of work placement and project-based class teaching.

A simulated information and communications technology environment should provide activities that aim to reflect the complexity of the workplace. Simulation possibilities include:

- simulation activities that provide actual products or services but do not trade
- simulated businesses, trading in a simulated environment
- model workplaces
- technology-assisted simulations.

⁷ Refer to Sections 8 and 10 in Part A of the Syllabus (www.boardofstudies.nsw.edu.au)

The simulated environment should include:

- the use of facilities and equipment that meet current industry standards. This would include workstations with suitable computer hardware and software (as used in the information and communications technology industry) and other resources applicable to the unit of competency chosen
- the presence of a range of diverse types of customers (this may include students from other subject areas, teaching staff at the school or students from another school or TAFE college)
- integrated approaches to work performance (including the performance of multiple tasks, prioritising competing tasks and the application of service standards and OHS requirements). Students need to be provided with multiple tasks reflecting the IT environment being simulated
- realistic allocation of time to tasks and deadlines (to enterprise and industry standards)
- consistent performance over time. Students should be assessed over time performing multiple tasks
- working with others in teams and as a team leader. Students need to demonstrate the ability to work within a team situation.

The following points may be useful in considering approaches to be taken if setting up a simulated information and communications technology work placement environment:

- students should take on a substantial role or responsibility under supervision by professional information and communications technology facilitators
- students undertaking work placement at a school or TAFE institute will still need to make arrangements for release from regular school activities and classes in order to guarantee that everyone understands that the student is on work placement and not ‘at school’
- students’ experience must reflect the discipline required in a professional information and communications technology working environment, even when the work placement is undertaken within the school. For example, students’ schedules might have start and finish times that are different from the normal school hours, students might sign in and out rather than attend roll call, dress standards will vary from school uniform and special provisions might be needed so that students can get into venues or use resources outside the usual access allowed by the school.

This following information (pp 167–170) is reproduced from the *Assessment Guidelines of the Information and Communications Technology Training Package (ICA05)*⁸.

5.2.2.1 Learning and assessment of competencies in a simulated environment

Introduction

The following guidance around the use of simulation is most applicable to those school or institution-based programs where there is little or no opportunity presented or taken for real workplace contact (for the purposes of assessment).

The challenge for any institutional educator within a competency based training environment is to provide a variety of opportunities for students to demonstrate competence, and to accurately measure their performance in a real-life situation.

⁸ DEST, 2005, *Information and Communications Technology Training Package (ICA05)* Volume 1 Section 1.5, pp 1-158 – 1-171.

The focus of this section is to define the use of workplace simulation as an assessment strategy to meet ICT Training Package requirements. Within this context, simulation refers to activities that aim to reflect the complexity of the workplace, and are used to assess performance against units of competency.

Advice to Training Package developers and these Assessment Guidelines state that workplace simulations must provide opportunities for integrated assessment of competence that includes:

- performing the task (task skills)
- managing a number of tasks (task management skills)
- dealing with workplace irregularities such as unexpected problems, breakdowns and changes in routine (contingency management skills)
- fulfilling the responsibilities and expectations of the job and workplace, including working with others (job/role environment skills)
- transferring competencies to new contexts.

In many cases however, actual workplaces may remain the most valid and cost effective option for assessing against units of competency from this Training Package. Simulation activities may be integrated into programs using a range of strategies including; identifying and clustering units of competency that are most appropriately delivered and assessed using particular workplace simulation possibilities.

Simulations may also be used in conjunction with other learning and assessment activities including work placements, employment, log books and portfolios.

The eight simulation possibilities that have been identified as being relevant to this Training Package are:

1. Actual trading businesses operated by an RTO
2. Simulation activities that provide actual products or services but do not trade
3. Simulated businesses, trading in a simulated environment
4. Model workplaces
5. Technology assisted simulations
6. Case study scenarios, problem-based learning and project work
7. Structured role play of work situations
8. Practical tasks.

As far as possible, the workplace simulation possibilities have been presented hierarchically with the first three possibly being more likely to meet the requirements of this Training Package where assessment of competence may occur in the workplace or a simulated workplace environment. Some workplace simulation activities may also combine aspects of several simulation possibilities. Further information on each simulation possibility can be found in a range of reference material.

Workplace Simulation Checklist

The following items should be addressed when using workplace simulations in conjunction with the ICT Training Package.

Ensure the proposed simulation is sufficiently complex to assess ICT competencies

There are certain conditions that exist in the workplace which need to be present to make the workplace simulation realistic and cost effective. These conditions include requirements such as:

- the use of facilities and equipment that meet current industry standards
- the presence of customers (including difficult customers and diverse types of customers)
- integrated approaches to work performance (including the performance of multiple tasks, prioritisation of competing tasks, and the application of service standards and OH&S requirements)
- realistic allocations of time to tasks and deadlines
- consistent performance over time
- working with others in teams and as a team leader
- realistic considerations of budget constraints
- operational procedures and guidelines.

Amend assessment and learning documentation

To facilitate the use of simulation as an assessment method, learning and assessment documentation should:

- reflect the intent of the ICT Training Package Assessment Guidelines and address the performance standards specified in relevant units of competency
- identify realistic workplace simulation possibilities (including the context and purpose of the simulation) for delivery, assessment, and combinations of delivery and assessment, for each module and unit of competency
- incorporate the variables specified in the range of variables from the relevant units of competency
- identify the resources required to demonstrate the competence as detailed in the Evidence Guides in the relevant units of competency
- encourage flexibility, diversity and experimentation in assessment strategies, so that creative approaches to workplace simulation can be used
- provide advice on strategies for creating realistic work environments and collecting sufficient assessment evidence
- include opportunities for candidate briefing and self-assessment prior to simulated assessment events, together with debriefing opportunities.

Reflect authentic work environments

Simulated activities used to assess against industry standards must provide opportunities for integrated assessment of competence, which includes:

- performing the task (task skills)
- managing a number of tasks (task management skills)
- dealing with workplace irregularities such as unexpected problems, breakdowns and changes in routine (contingency management skills)
- fulfilling the responsibilities and expectations of the job and workplace, including working with others (job/role environment skills)
- transferring competencies to new contexts
- assessment of performance over time.

The workplace simulated environment must be as realistic and authentic as possible and reproduce workplace conditions as far as possible. A rethinking of teaching and learning processes may be necessary to replicate workplace processes and characteristics.

Collect sufficient assessment evidence

Holistic assessment events should be used to integrate problem solving skills and reproduce workplace conditions as closely as possible.

- simulations need to provide a context where candidates can undertake a number of roles. They also need to provide an opportunity for assessment of performance over time and in different situations as they arise
- the use of comprehensive assessment checklists assists in identifying critical performance criteria and informing holistic judgments is necessary. Use of self assessment, peer assessment and debriefing activities also contribute to valid and reliable assessment in workplace simulated environments.

Work with industry and the community

The reasons for using simulation should be discussed with local business representatives and agreement reached on the nature and scope of proposed simulations, especially where the simulation may be seen as competing unfairly with local enterprises. Ask local enterprises to sponsor practice firms or act as simulation partners. Enterprises may provide:

- a model, authentic business
- up-to-date information and authentic documentation (e.g. workplace roles, occupational health and safety regulations, salary advice, marketing information, procedural manuals, policies)
- advice or on-the-job training for RTO staff, to ensure industry currency
- feedback on the authenticity of the simulation

- work placements for students and/or a venue for workplace visits.

Develop resources and initiatives to support the use of workplace simulation

To support the use of valid and cost effective workplace simulation, learning and assessment resources should:

- provide information that explicitly links assessment advice and resources with the ICT Training Package requirements
- provide parameters and ideas, but also encourage flexibility and local ‘ownership’ of the assessment resources
- provide workplace templates, guidelines and policies that are available across different organisations
- provide practice firm documentation and support.

Evaluate options and create simulated workplace environments

Establishing simulated assessment environments will be easier where strong links exist with local industry and a tradition of industry involvement in training exists within the RTO, through work placements, practicums, field trips or other activities. In these environments, more integrated provision of on- and off-the- job training builds on existing practices.

Address staffing issues

Organisation, teamwork and goodwill are essential for effective simulated environments.

- It may be necessary for teachers, students and support staff to participate in the workplace simulation.
- Local enterprises to sponsor practice firms and/or act as simulation partners
- The presence of customers (including difficult customers and diverse types of customers)

Characteristics of workplace simulations

Consider the key success factors for an effective simulated environment. Workplace simulations generally comprise the following elements:

- complex environments
- current industry resources, customers, operational procedures, multiple task performance, prioritising of tasks, realistic timeframes and budgets, consistent performance, teamwork
- a reflection of authentic work environments
- opportunities to demonstrate task skills, task management skills and contingency management skills, fulfilling job/role expectations, transference of competency
- collection of sufficient evidence
- holistic assessment, self assessment, peer assessment
- involve industry
- business models, up-to-date information/documentation, advice on authenticity of the workplace simulation
- resources to support simulation
- local flexibility, practice firm documentation and support.
- includes additional people
- local business people, teachers, students, support staff, customers.