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HOTcopy®

BENCHMARKING DESIGN OF SIMULATED PROFESSIONAL PRACTICE FOR AUTHENTIC LEARNER ENGAGEMENT

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Abstract

HOTcopy® offers a virtual practicum in print-media journalism, inviting immersion in a series of interactive, real-time simulations of workplace scenarios. Consistent with situated professional practice, work assignments are set and emerge while interventions from scenario characters add new challenges and deadline pressures. Taking on the roles of reporter or sub-editor, learners analyse information, make judgments, reflect on actions, receive feedback on decisions and try to finalise 'copy' on time.

Aiming to establish a genuine 'learning relationship' with students, HOTcopy invites engagement and situated knowledge-building rather than abstract content transfer. Learners use high order cognitive skills to solve the scenario-based problems while writing news stories in context. Legal, ethical and relationship issues also challenge each individual's knowledge, values and feelings. But as HOTcopy 'lightly' supports the learner's apprenticeship in news writing, is this mediated experience, engaging, as the moderating factors filter the 'messiness' of real-life? Do learners experience authentic engagement as they encounter designed ambiguity and complexity?

This paper benchmarks quality education design features in HOTcopy against principles and attributes of authentic engagement reported in Oliver (2001), Hedberg (2002), and Reeves, Herrington, & Oliver, (2002).

Keywords

authentic activity, engagement, interactivity, scenario, simulation

Introduction

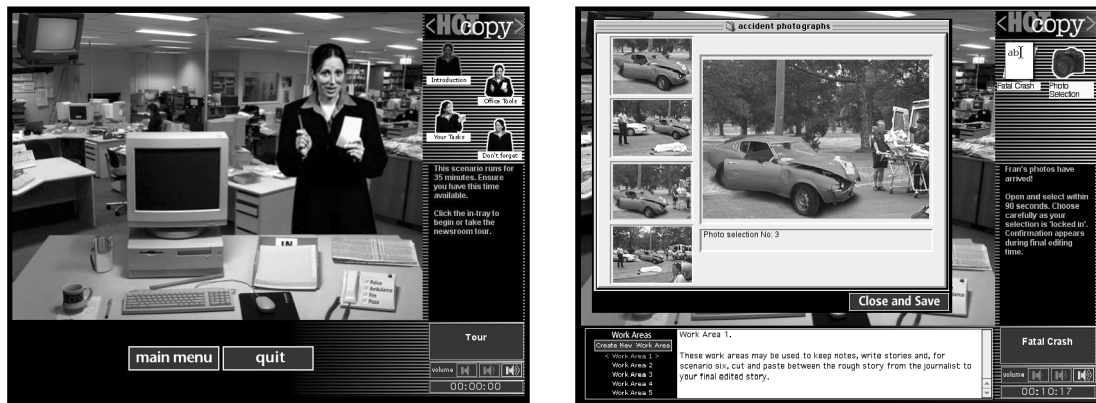
The term HOTcopy harks from the days of 'hot' metal press printing and 'copy' still refers to a journalist's crafted words in contemporary media about breaking news stories. Just as hot copy in the media mirrors real-life, HOTcopy simulations aim to mirror events in a journalist's working day. Each scenario is a 'hot' simulation, a pressured slice-of-life, in which novice journalists authentically make ethical, legal, and other professional decisions, under real time and other professional pressures as they try to meet their copy deadlines.

By design, HOTcopy responds to a decade of assertions about the potential constructivistic efficacy and authenticity of technology-enhanced, learning experiences. This is because HOTcopy scenarios are consciously modelled on 'goal-based scenarios' 'situated' in 'thick' and 'noisy' 'micro-contexts' (Petraglia, 1998, p.82). Scenarios challenge learners to determine the relevance of raw material in the uncertain events, discerning useful information to solve problems associated with crafting competitive

stories of real news value, while remaining legal and ethical. HOTcopy also represents a genuine effort to achieve learner engagement through sometimes surprisingly subtle interactivity. Learners ‘cognitively’ construct their individual experiences of what are deceptively simple goal-based scenarios, simulating an ambiguous but safe place to perform, fail, reflect, succeed and learn. The scenarios promote reflective practice, a critical ingredient of experiential learning in any practicum. This paper explores these claims through a benchmarking exercise involving contemporary best practices reported in key literature.

A Description of HOTcopy

HOTcopy is a virtual practicum in print-media journalism (internet and broadcast media may follow), inviting immersion in a series of interactive, computer-simulated, workplace scenarios of 20-40 minutes in real-time. A curriculum framework of six major themes, sixty identifiable syllabus elements, and workplace factors of varying difficulty, influence the complexity levels of expertise represented, ranging from that of a first year undergraduate to that of masters level. Consistent with situated professional practice, work assignments and deadlines are set or emerge while interventions from scenario characters add new distractions, challenges and pressures.



HOTcopy scenarios present as interactive movies containing multiple re-usable media elements (in formats: video, audio, photographs, graphics, text etc.), presented in an interface containing office resources, guidance and up to five editable text fields. Authored using a FileMaker™ database containing the media resources and events, scenarios may be adjusted for different educational purposes. HOTcopy uses various technologies e.g. XML, MacroMedia Director™, Apple® QuickTime™ and others, to provide the flexible model for preparing scenarios delivered (optionally) on CD, but linked to the website www.HOTcopy.info, from which certain additional flexibilities and enhancements may be provided.

HOTcopy applies contemporary technologies in a flexible design model for scenario authoring and revision. It allows time-line manipulation of elements in any newsroom scenario, and the ‘publishing’ of scenarios from the media object database, allowing variations such as:

- overall length of time allowed;
- time for acting without interruption;
- number & kinds of interruption events;
- number & kinds of resource materials;
- number & kinds of information media;
- number of decision events;
- number of tasks set/emerging;
- frequency & amount of guidance;
- facts & clues provided;
- advice & feedback provided.

Information arrives in the workplace from: office colleagues (in person or as a voice across the room), phone, fax, email, desk in-tray, computer-network, radio and television. Guidance and feedback are provided from: the green text box, decision event feedback, end-of-scenario reflections and the debriefing in the ‘pub’. During this debriefing different viewpoints are expressed by ‘colleagues’ about the nature of work completed and implications of decisions made or not made. In these first six scenarios, multiple perspectives and advice are expressed by ‘Legal Eagle’, Tacky Tabloidist and Naïve Novice. Characters may change with future scenarios.

Emotionally engaging roles

HOTcopy scenarios consciously operate on a personal level. The ‘hot’ in HOTcopy is intended to suggest a sometimes intense, unsettling experience, embracing the emotional dimension of learning. Ever since ‘emotional intelligence’ was coined around 1990 and Daniel Goleman’s book ‘EQ’ (Goleman, 1995.) popularised the concept, educators have renewed their attention to the emotional dimension of communication in learning environments. HOTcopy *relates* to students on an emotional level, inviting authentic engagement in *roles*. Prophetically, for learning environment creators, Marshall McLuhan (1967; p.157) concluded his famous book ‘The Medium is the Massage’ saying that *the environment we create becomes our medium for defining our role in it*, and he textually ‘shouted’ students want ‘ROLES’ and ‘TOTAL INVOLVEMENT’. That was 35 years ago, before interactive, networked, digital media and virtual learning environments.

‘Role-based learning’ as self-regulated reflection and authenticity is described in frameworks for learning designs (Oliver, Harper, Hedberg, Wills & Agostinho; and Luca & Oliver, 2002) as the fourth of four learning design foci: rule, incident, strategy and role. Our designing of learning environments remains challenged by such calls for *role creation*.

The real is simulated in a virtual and physical blend

The first published HOTcopy CD contains six scenarios of varying levels of challenge. Scenarios 1-5 offer students the role of a journalist while the most recent scenario, Fatal Crash, offers the role of Chief Sub-editor. HOTcopy enacts real journalism work in the following ways:

<i>Real Journalism Work</i>	<i>HOTcopy Simulations</i>
Workplace tasks are assigned by superiors or emerge during the unfolding events.	Documents and verbal requests arrive via virtual office communications: colleagues, in-tray source material, computer network, but also phone, radio and television.
Professional judgements are made on ethical, legal, etc. dilemmas.	‘Decision Events’ highlight the key dilemmas requiring a timed response, followed by feedback on possible consequences.
Workplace information, problems, distractions and interventions etc.	Communications from true-to-life characters in the newsroom arrive in person, and via the phone, radio and television.
Journalists craft real news stories, meeting copy deadlines for the scheduled and breaking stories.	Up to five text documents may be simultaneously authored in the interface, with another readable/editable document. Stories, copy and notes are finalised to timed deadlines for submission.
Individual and collegial reflection on the dilemmas and actions in daily newsroom life.	Reflective questions lead to a debriefing with colleagues ‘Legal Eagle’, Tacky Tabloidist’ and ‘Naive Novice’ without fear of failure - just multiple perspectives/advice about each scenario!

Table 1 Enacting workplace elements in HOTcopy scenarios

With the introduction to universities of Learning Management Systems and digital content repositories, a perception is emerging that such strategies in teaching might be a vehicle for asserting detached, instructivist practices, particularly when perceived simply as ‘delivery’ of digitised forms of pre-packaged resources. In creating and using HOTcopy, attention is drawn to its important ‘blended learning’ dimensions (Table 2). In-class debriefing and discussions provide a key ingredient in the *experiential learning* cycle of Kolb (1984) and the *practicum* described by Schon (1987). There are important advantages in conceptualising the HOTcopy workplace simulations as involving both physical and virtual learning experiences. The scenarios are open to varying learning purposes, emphases, interpretations and reflections, explored in physical teaching environments, perhaps in preparation for internships, rather than only being used as a completely stand-alone resource. This advice is conveyed to teachers in notes available separately.

HOTcopy Learning Environment	
Virtual	<ul style="list-style-type: none"> • The simulated workplace: an office environment; • Scenario stories/events grounded in curriculum priorities; • Integrated scenario characters as dynamic digital media elements; • Real chronological time with a staged scenario deadline; • Multiple written tasks simultaneously completed in the scenario; • E-notetaking in optional editable text fields; • A debriefing of scenario experiences (simulated in a pub); • Post-simulation, e-conferencing of issues and reflections by students.
Physical	<ul style="list-style-type: none"> • Actual Professional diary/notebook; • Set class activities and assignments, before and after using HOTcopy; • Brief work-placement experiences; • Internships following HOTcopy orientations/practice; • Use of a scenario or extracts in a physical classroom tutorial; • Scenarios used in ‘presentation’ mode; • Face-to-face reflections and debriefing in class; • Practice and exam preparation; • The actual computer environment and computer/human interfaces.

Table 2: Virtual and Physical Dimensions of the Blended Learning Environment

Tertiary teachers may recognise the terms Immersive Environment, Adaptive System, Microworld and even Massively-Multiplayer Online Role Playing Game (MMORPG) . . . well, perhaps not all . . . yet! In the methodological categories of exercise, role-play, simulation, and game, HOTcopy is a computer-simulation, but is considered part of a blended *experiential learning strategy*.

Context and Drivers of HOTcopy’s Design

To properly benchmark HOTcopy against the design advice provided by Oliver (2001), Hedberg (2002) and Reeves et. al. (2002), education design values in HOTcopy should be understood in the context of a broad initiative to improve the quality of teaching at Deakin University. The project was strategically driven by Deakin’s Teaching and Learning Management Plan; ‘The Competitive Edge’ (2000) as a centre-piece of the ‘Journalism Online’ initiative financed by DVC category ‘A’ funding during 2001/2. To satisfy the *Deakin Advantage (2001)*, two of Deakin’s stated aims are to have Faculties demonstrate that they:

- ‘use educational strategies that will develop Deakin’s specified set of graduate attributes during an undergraduate Bachelor’s level program of study (course or major); and
- provide opportunities for students to apply skills and knowledge acquired in the program of study in appropriate and relevant experiential learning environments.’

[The Deakin Advantage, p 1.]

HOTcopy is evidence of Journalism’s response to ‘The Deakin Advantage’ aims, by achieving a high correlation with the exemplary educational characteristics and strategies advocated in that policy document, particularly those related to graduate attributes.

HOTcopy is evidence of Deakin’s valuing of quality learning environments and resources using contemporary technologies. Policies mandate that students should receive active learning experiences that integrate the content of disciplines with real-world problem-solving and skill development. ‘The Competitive Edge’ (2000) refers directly to initiatives that, for example:

- ‘Demonstrate applications of theory to practice in real or simulated situations.’
- ‘Foster active learning and application of knowledge with projects, case studies, problem-solving exercises, problem-based learning and hypotheticals.’
- Give students insight into how knowledge is created in the field through computer-based modelling and knowledge construction processes.
- ‘Recognise the social justice issues, ethical practices and legal considerations pertinent to the field of study.’

- ‘Provide opportunities for experiential learning that are designed to develop specific understandings of external contexts.’
- ‘Interpret and solve problems appropriate for a beginning professional in a discipline.’
- ‘Demonstrate knowledge of typical problems met at initial levels of practice.’
- ‘Assign professionally relevant case studies, simulations and projects.’

HOTcopy is also born of strong curriculum frameworks and a commitment to innovative resource creation by the Journalism teaching team. In advancing quality teaching HOTcopy represents:

- a central curriculum approach for use program-wide;
- a commitment to resource creation and sharing between staff;
- a method for ‘moving students to action’ in completing written tasks;
- an environment valid for providing practice, feedback and assessment;
- a virtual practicum / internship used in association with a work placement;
- evidence of a commitment to students’ careers in learning the profession;
- a learning environment developed to attract, motivate and retain first year students;
- a website extending the CD-based scenarios and inviting students to engage in discussions and downloading resources;
- a generic technology for creating simulations based on re-usable media objects.

The practices and outcomes of the HOTcopy simulations project have also been shown to have a high correlation with Deakin University’s ‘Attributes of Excellent Teaching’ and in 2002 HOTcopy received the Vice-Chancellor’s award for *Excellence in Teaching*.

Learning expertise in the journalism profession

The intended learners using HOTcopy includes pre-service students, mid-career journalists in undergraduate and post-graduate university programs and trainees in professional work-places. To grow in the profession, learners need experiences in *how to be* professional, not only information about *what* to do (i.e. not only information ‘about’ the processes, tools, techniques and activities in journalism). Learning to make complex, expert judgments requires reflective practice, and HOTcopy provides that ‘practical’ learning for contemporary, professional development and university degree programs. The professional judgments - informed by legal, ethical and general community standards - are frequently made by journalists under great time pressure. Legal rulings and ethical values need to be weighed against news values, competition values, career values and economic values, while inevitably social, cultural and political sensitivities also exist.

Such expertise is recognised and valued but do we understand how to initiate and nurture it? An expert’s enormous volume of domain-related, tacit knowledge is rich, complex and appears to be accessed intuitively, sometimes appearing to not follow a procedure - which confuses a novice undergoing training. Learners need integrated, authentic, safe experiences of *how to be* a journalist in the real world making judgments in a rapid, reflexive manner. Procedural skills do not automatically lead to modes of expert behaviour, particularly when judgment involves ethical and legal values. HOTcopy intentionally treats these in an integrated manner and does not usually offer absolute answers to dilemmas.

The value of computer simulations for learning professional capabilities might be questioned for not representing the complexities in real life. However, traditional exercises, hypotheticals, games and role-plays also lack equivalence, yet a real life experience itself may not be generalisable. If students recognise the limitations of such educational strategies, they do learn from making judgments, taking actions and receiving feedback. Morrison (2003) suggests that ‘precisely because these fictional scenarios filter out much of the distraction and noise of real life, they allow for more focused thought or activity on the part of students. They do not perfectly replicate the “messiness” of life, but they approximate a particular situation in order to elicit a certain set of knowledge and skills (Morrison, 2003, p.5). Filtering is a key role of teacherly mediation and simulations foreground selected relationships and afford learners many opportunities to behave as in a real scenario. Educators need to take full advantage of this potential.

For any work requiring professional expertise, novices must develop the tacit, contextual knowledge to guide their actions. Knowledge is 'conditional'. (van Merriënboer, Jelsma & Paas, 1992). Unfortunately, work-placements that hopefully provide safe conditions to practice 'being' a journalist, are not always available. But rather than replace these experiences, HOTcopy aims to at least assist in preparing students via authentic engagement in simulated, complex problem frames. The HOTcopy virtual newsroom promotes 'reflection in action' on scenario dilemmas and does so in a supportive environment.

Research on Authentic Learning Activity

Most important in computer-simulated interactive events, as in other designed educational contexts for human interaction, is what the participants are thinking and doing (actions, skills, motives, thoughts, emotions and beliefs etc.), rather than materials and procedures that exist whether or not an interactive event occurs. Are learners complicit in the educational event?

Games tend to be defined as systems involving rules, and simulations defined as systems involving representations. Usually, a game is defined on the lines of "payoffs according to a set of rules" and a simulation as "a working representation of reality." The question, "What are the participants thinking and doing?" is only rarely answered, and the issue itself is seldom raised. (Jones, 1998 p.314)

Authentic learning experiences in simulations using the integrative powers of digital technologies, may yet prove as valuable as 'claimed' bonafide experiential learning. Hedberg (2002) reflects on 'some successes and failures' in developing multimedia and online learning environments during the 1990s, reporting that some tools may never address the desired educational outcomes for high quality learning. Significantly, HOTcopy exhibits many attributes that Hedberg and others advise have been successful. Its design is congruent with his generalised 'lessons that might be drawn from the decade of effort to ensure that the learning environments:

1. fostered judgment and learner responsibility;
2. supported critical inquiry and creative approaches to problem-solving;
3. created engagement through the effective combination of learning task, visual representation and authentic assessment of the product goals.'

(Hedberg, 2002, p.729)

Hedberg then moved to draw on Savery & Duffy (1995) describing four principles for applying to 'modern technology-based learning environments based on constructivist views':

1. Learning is **an active and engaged process**. "Learners are actively engaged in working at tasks and activities that are authentic to the environment in which they would be used." (Savery & Duffy, 1995, p.37).
2. Learning is **a process of constructing knowledge**. Learners need structures and challenges from which to develop their understanding of ideas and of the world.
3. Learners **function at a metacognitive level**. Learning is focused on thinking skills rather than working on the "right answer the teacher wants". Students generate their own strategies for defining the problem and working out a solution. Student can gain wisdom through reflection.
4. Learning involves "**social negotiation**". Students are able to challenge their thoughts, beliefs, perceptions and existing knowledge by collaborating with other students thus assisting their cognitive development process.

(Hedberg, 2002, p.730)

In reflecting on these design characteristics of activities described by Hedberg, and based on a ‘wide literature review of recent research and theory’, Reeves, Herrington, & Oliver (2002), and later Herrington, Oliver, & Reeves (2003) identify and define ten broad design characteristics of authentic activities. These are listed below to also benchmark the design of HOTcopy:

1. *Authentic activities have real world relevance:* Activities match as nearly as possible the real world tasks of professionals in practice rather than decontextualised or classroom based tasks.
Design Characteristics of HOTcopy: The real-world relevance of HOTcopy, as described earlier, has been confirmed by journalism professionals, the newspaper industry and tertiary educators.

2. *Authentic activities are ill-defined, requiring students to define the tasks and sub-tasks needed to complete the activity:* Problems inherent in the activities are ill-defined and open to multiple interpretations rather than easily solved by the application of existing algorithms. Learners must identify their own unique tasks and sub-tasks in order to complete the major task.
Design Characteristics of HOTcopy: Journalistic tasks in HOTcopy are set and emerge as running stories. Ambiguous and conflicting information is optionally available from multiple sources. To the best of their ability in the time, students will resolve the ethical, legal, news-worthiness and other measures of story quality to create finished ‘copy’. Multiple interpretations are initiated but not closed during the scenario debriefing.

3. *Authentic activities comprise complex tasks to be investigated by students over a sustained period of time:* Activities are completed in days, weeks and months rather than minutes or hours. They require significant investment of time and intellectual resources.
Design Characteristics of HOTcopy: HOTcopy scenarios are real time-limited experiences of about thirty minutes. Thus far however, these experiences are also ‘prepared for’ during classes and debriefing also occurs outside the virtual experience. Teaching staff also expect some scenarios to provide practice/preparation for exams, internships and growth through the scenarios during their program of study.

4. *Authentic activities provide the opportunity for students to examine the task from different perspectives, using a variety of resources:* The task affords learners the opportunity to examine the problem from a variety of theoretical and practical perspectives, rather than allowing a single perspective that learners must imitate to be successful. The use of a variety of resources rather than a limited number of pre-selected references requires students to detect relevant from irrelevant information.
Design Characteristics of HOTcopy: Professional judgment is a key learning goal and scenarios provide multiple media sources used in news-writing. Scenarios may be completed several times with varying, yet legitimate outcomes. The various embedded dilemmas provide the basis for value judgments and interpretations that may be defended. HOTcopy should be integrated in a blended learning model involving articulation with other strategies such as tutorials and work-placements.

5. *Authentic activities provide the opportunity to collaborate:* Collaboration is integral to the task, both within the course and the real world, rather than achievable by an individual learner.
Design Characteristics of HOTcopy: The community of peers and experts provide the network of practice, theory, and factual sources to problematise and discuss the scenario experiences. HOTcopy was conceived as a core curriculum resource for the Journalism program as part of the e-journalism project concurrent with the introduction of an LMS at Deakin.

6. *Authentic activities provide the opportunity to reflect:* Activities need to enable learners to make choices and reflect on their learning both individually and socially.
Design Characteristics of HOTcopy: Intermittently during the scenarios, students encounter interactive 'decision events' and after filing their 'copy', more comprehensive reflective questions ask students to stand back and critique decisions taken under pressure of time, before retiring to the 'pub' for the initial debriefing by virtual 'colleagues' who provide sometimes inconclusive, conflicting but usually defensible advice.
7. *Authentic activities can be integrated and applied across different subject areas and lead beyond domain specific outcomes:* Activities encourage interdisciplinary perspectives and enable students to play diverse roles thus building robust expertise rather than knowledge limited to a single well-defined field or domain.
Design Characteristics of HOTcopy: The collaborative planning of scenarios by, for example, staff offering programs in public relations, law, media studies, has been advocated. The conceptual and technical basis of HOTscenario authoring facilitates this. Public Relations and Journalism have already created video resources in such a collaborative manner.
8. *Authentic activities are seamlessly integrated with assessment:* Assessment of activities is seamlessly integrated with the major task in a manner that reflects real world assessment, rather than separate artificial assessment removed from the nature of the task.
Design Characteristics of HOTcopy: Assessment was one key driver of the HOTcopy design. Evaluations have confirmed student interest and encouragement that HOTcopy be used in supervised laboratory sessions to create authentic 'work' in place of traditional exams. In semester 2, 2003 HOTcopy will be used for assessment purposes. A secure output file (containing the text compiled from up to 5 text fields representing different stories and note-taking) is being investigated for implementation.
9. *Authentic activities create polished products valuable in their own right rather than as preparation for something else:* Activities culminate in the creation of a whole product rather than an exercise or sub-step in preparation for something else.
Design Characteristics of HOTcopy: The real news stories and other 'works' completed in HOTcopy are suitable for submission to staff for feedback, assessment or a professional portfolio. Rather than being viewed as only a 'set task' they may be 'works' completed under a virtual internship representing evidence of the integrated capabilities of a graduate.
10. *Authentic activities allow competing solutions and diversity of outcome:* Activities allow a range and diversity of outcomes open to multiple solutions of an original nature, rather than a single correct response obtained by the application of rules and procedures.
Design Characteristics of HOTcopy: This criterion is best exemplified by work completed by students with different capabilities, discipline/curriculum knowledge, values and emotional temperaments. This is confirmed by the 'pub' debriefing. Such work-place realities are balanced by HOTcopy's goal of improving the legal and ethical professional qualities of graduates.

The above characteristics described by Herrington et al. (2002) are variously corroborated by other researchers quoted by Hedberg, such as David Boud and Mike Prosser (2002) and David Jonassen (2000). Hedberg goes on to provide 'alternative techniques for reducing the cognitive load on a learner's working memory to enhance interaction design.' citing 'Use visual conventions borrowed from the real world', 'Apply consistent visual metaphors', and 'Recognize the role of the learner as actor', and advises that the

‘user is participating in a dialogue that is unfolding, often in real-time’ (Laurel, 1993; Hedberg & Sims, 2001). The explicit and implicit design features of HOTcopy address each of these recommendations.

Oliver (2001) reports on the Flexible Learning Toolbox Project for the VET sector by the Australian National Training Authority (ANTA). A fundamental requirement of Toolbox resources is the need to exhibit effective teaching and learning approaches. To support this requirement, proponents need to demonstrate their capacity to develop resources with the features, that are clearly exemplified by HOTcopy:

Toolbox learning designs	<i>HOTcopy</i> learning designs
<ul style="list-style-type: none"> a firm basis in an educational model which recognises an active, constructive role for learners; 	<p><i>HOTcopy</i> is a catalyst for active, reflective professional practice with scaffolding from experts. Constructivistic foundations of <i>HOTcopy</i>'s design is consistent with Cognitive Apprenticeship Theory, Engagement Theory, and Cognitive Flexibility Theory. The designed ambiguities and emerging work tasks and resources are also consistent with Problem-Based Learning.</p>
<ul style="list-style-type: none"> learning activities which engage the learner in active processing of the subject matter rather than mere knowledge acquisition; 	<p><i>HOTcopy</i> provides real world journalistic tasks in the face of both clear and ambiguous subject matter relevant to the identified curriculum. Students 'are encouraged and have reason to act in a self-directed fashion' (Oliver 2001 p.210) They actively create solutions to professional problems, preparing stories to real deadlines.</p>
<ul style="list-style-type: none"> learning settings and tasks that encourage meaningful online communication and interaction (between learners as well as between teachers and learners) 	<p><i>HOTcopy</i> is used by tutorial groups that engage in group debriefings after the individual experiences of the simulated work environment. Students studying at a distance may engage in online conferencing with other students regardless of location.</p>
<ul style="list-style-type: none"> content resources which are visually attractive, motivating to use and organised logically for ease of navigation; 	<p><i>HOTcopy</i> presents a meaningful and practical interface combining functionality, representations, metaphors and simulations that usability testing and student evaluations have confirmed meet requirements.</p>
<ul style="list-style-type: none"> representations of authentic and real life settings in preference to textual descriptions. 	<p><i>HOTcopy</i> has been validated by the journalism profession and newspaper industry as representing the key authentic real-life settings within the scope of the simulation goals.</p>

A key goal of the Toolbox Project is to create interactive media designs that facilitate ease of customisation and re-use. Oliver (2001, p.208) states that high quality products are ‘often designed for specific discipline needs and are difficult to use as generic exemplars and cases for others to follow.’ The approach taken for *HOTcopy* has been recognised by education designers and tertiary teachers from different disciplines, as having functions and a design framework of potential benefit in professional education of nurses, teachers, lawyers, social workers, police, and business consultants, for example. Technology transfer for re-usability remains the engaging challenge.

Conclusion

Authentic learning for professional capabilities in journalism, is possible via this simulated workplace. *HOTcopy* represents the effective realisation of a design task in higher education, featuring an environment grounded in a profession while addressing a program-wide curriculum in an emotionally engaging manner. This type of ‘local’ curriculum, resource development could prove immensely valuable as a pilot for larger-scale application, involving simulations across multiple professions. The model underpinning *HOTcopy*, benchmarks as a congruent response to the design advice in contemporary literature about achieving authentic learner engagement.

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